# Summary File ONLY

# PLEASE BE AWARE THAT THIS PDF FILE CANNOT BE PRINTED

# IT IS BROWSABLE ON-SCREEN ONLY AND IS PROVIDED FOR YOUR INFORMATION TO DECIDE WHETHER TO BECOME A PROSPECTIVE TENDERER ONLY

Note: This file may contain a brief scope statement, or an extract from the RFT documents, or a full exhibited copy – depending on the specific circumstances.

To participate in this tender process you MUST first download or order a full copy of the Request for Tender (RFT) documents, including the respondable components, and any addenda issued to date.

To do this return to the RFT web page on this web site and copy the RFT documents to your own computer or network – the blue "DOWNLOAD A SOFT COPY" link at the bottom provides access to the page from which you can do this. Request for Tender Document for

# **NSW Parliament House – Lighting Upgrade**

# RFT / Contract No: 0701487

**Department of Commerce** 

NSW Parliament House - Lighting Upgrade

# **TABLE OF CONTENTS**

Page Number.

Ten	dering					
CON	DITIONS OF TENDERING	C-1 to C-12				
TENDER SCHEDULES T-1 to						
Specification						
1.	GENERAL CONDITIONS OF CONTRACT AND ANNEXURE	1-1 to 1-22				
2.	PRELIMINARIES	2-1 to 2-19				
3.	TECHNICAL REQUIREMENTS	3-1 to 3-16				
4.	NSW PARLIAMENT HOUSE LIGHTING SCHEDULE	4-1 to 4-12				

# TENDERING

# **CONDITIONS OF TENDERING**

This section includes notices to tenderers.

The Conditions of Tendering section does not form part of the Contract.

# 1 **GENERAL**

## 1.1 CONTACT PERSON

Refer requests for information about the Tender to:

Name: Christopher Wilson

Telephone number: (02) 9372 8105

Facsimile number: (02) 9372 8144

E-mail address: Christopher.Wilson@Commerce.nsw.gov.au

#### 1.2 NSW GOVERNMENT CODE OF PRACTICE FOR PROCUREMENT

Tenderers must comply with the NSW Government *Code of Practice for Procurement*, which is available at:

www.treasury.nsw.gov.au/procurement/cpfp\_ig.htm

Lodgement of a tender is evidence of the Tenderer's agreement to comply with the Code for the duration of any contract awarded as a result of the tender process. If a tenderer fails to comply with the Code, the Principal may take the failure into account when considering this or any subsequent tender from the tenderer, and may pass over such the tender.

# 2 TENDERER ELIGIBILITY

#### 2.1 ACCEPTABLE LEGAL ENTITIES

The Principal contracts only with recognised and acceptable legal entities. The Principal does not contract with firms under any form of external administration. Any tender submitted by an unincorporated business such as a sole trader, partnership, or business name must identify the legal entity that proposes to enter the contract.

If the Tenderer is a trustee, the Principal may require:

- an unconditional undertaking in accordance with Preliminaries Clause Additional security and obligations for trustees; and
- a signed statement from the Tenderer, provided before the Contract is awarded, making the following undertaking:

'If (insert the legal name of the Tenderer) is awarded Contract No (insert the contract number) for (insert the contract description) it will provide security in the amount of (insert the amount of security advised by the Principal) in accordance with Preliminaries clause - Additional security and obligations for trustees, and it undertakes to ensure that, for the duration of the Contract, the total value of the trust beneficiaries' loans to the trustee is always greater than the total value of trust beneficiaries' loans from the trustee.'

Failure to provide the signed statement may result in the Tender being passed over.

#### 2.2 QUALITY MANAGEMENT

The Principal may elect to pass over a tender from a tenderer that does not demonstrate the capacity to systematically plan and manage the quality of its work in accordance with the NSW Government *Quality Management Systems Guidelines*, which are available at:

www.managingprocurement.commerce.nsw.gov.au/system/index\_procurement\_guideline\_docu ments.doc

Submit with the Tender the information identified in Tender Schedules - Schedule of Quality Management Information.

#### 2.3 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

Tenderers must demonstrate their capacity to manage occupational health and safety in accordance with the NSW Government *Occupational Health and Safety Management Systems Guidelines* 4<sup>th</sup> Edition (OHSM Guidelines). The OHSM Guidelines are available at:

<u>www.managingprocurement.commerce.nsw.gov.au/system/index\_procurement\_guideline\_docu</u> <u>ments.doc</u>

Submit with the Tender the information identified in Tender Schedules - Schedule of Occupational Health and Safety Management Information.

#### 2.4 FINANCIAL ASSESSMENT CRITERIA

The main criteria considered in financial assessment of tenderers are:

- Net Worth (total assets, excluding any assets of company directors, less total liabilities less intangible assets);
- Current Ratio (ratio of current assets to current liabilities); and
- Working Capital (current assets less current liabilities).

The Principal considers tenders with the following financial capacity, and no other significant detrimental financial characteristics to be financially satisfactory in respect of tenders:

- Net Worth exceeds 5% of the Contract Sum or initial Contract Price;
- Current Ratio exceeds 1; and
- Working Capital exceeds 10% of the Contract Sum or initial Contract Price.
- Where a tenderer is a trustee the total value of trust beneficiaries' loans to the trustee must be greater than the total value of trust beneficiaries' loans from the trustee.

Deviations below these indicative criteria will not necessarily prevent the Principal from considering any tender.

# 3 CONTRACT DETAILS

#### 3.1 INSURANCE

#### Works and public liability insurance

The Principal has arranged insurance of the Works (and any temporary works) and public liability. The Contractor must maintain the policy by paying the insurance premiums.

#### *TENDER SCHEDULES* For the purpose of this tender, the following defined amounts are relevant:

Item	Amount
Contract Works cover	\$1 million any one occurrence
Public Liability Cover	\$20 million any one occurrence
Rate of Premium	0.4820%
Allowance for Principal Supplied Materials and Salvageable Materials	NIL

The insurance policy is at:

<u>www.managingprocurement.commerce.nsw.gov.au/system/index\_contract\_management\_insur</u> <u>ance\_policies.doc</u>.

The insurance broker is Marsh Pty Ltd.

#### **Other Insurance**

The Contractor must arrange and pay all premiums for all other insurance required under General Conditions of Contract clause – **Insurance**.

For professional indemnity insurance, a Certificate of Currency or evidence of the ability to obtain the required insurance, such as a letter from a broker or insurer, may be required as a condition of acceptance of tender.

# 4 CURRENT POLICIES

## 4.1 GOODS AND SERVICES TAX

The tendered lump sum and/or rates must include GST if it is payable.

## 4.2 NSW GOVERNMENT PREFERENCE SCHEME

#### Preference

The Principal will give a preference advantage to goods of Australian and New Zealand origin over imported goods supplied under the Contract. NSW country manufacturers may be eligible for an additional preference under the Country Industries Preference Scheme (CIPS). Details of these schemes may be obtained from the Department of State and Regional Development, telephone (02) 9338-6780; facsimile (02) 9338-6676.

The Industry Capability Network Office has been established to provide assistance in planning for, purchasing and using Australian and New Zealand made products. The office can provide professional advice on local industry capability and on the availability and efficiency of local supplies suited to Australian conditions, while retaining commercial confidentiality. The Industry Capability Network Office may be contacted on: telephone (02) 9819 7200; facsimile (02) 9181 3321; e-mail enquiry@icnnsw.org.au; internet www.icnnsw.org.au.

#### **Imported Goods**

Where imported goods are proposed, complete the Tender Schedules - Schedule of Imported Materials and Equipment. Provide details of alternatives to such goods which are of

Australian or New Zealand origin, or give reasons why such alternatives cannot be supplied by completing the Tender Schedules - Schedule of Alternatives to Imported Goods.

The Principal may, but is not bound to, negotiate a reduction in price to accept the imported goods, but the reduction will be not less than 20% of the Principal's estimate of the imported value of the goods.

Refer to Preliminaries clause - Australian and New Zealand Goods.

#### **NSW Country Manufactured Goods**

If the tenderer wishes to seek preference under the NSW Country Industries Preference Scheme, submit Tender Schedules – Schedule of NSW country manufactured goods with the tender.

## 4.3 DISCLOSURE OF TENDER AND CONTRACT INFORMATION

Details of this tender and contract awarded as a result of this tender process may be disclosed in accordance with the: Freedom of Information (Open Government – Disclosure of contracts) Act 2006, Premier's Memorandum 2007-01 and NSW Government Tendering Guidelines at:

https://tenders.nsw.gov.au/guidelines/

## 4.4 EXCHANGE OF INFORMATION BETWEEN GOVERNMENT AGENCIES

By submitting a tender, the Tenderer authorises the Principal to gather, monitor, assess, and communicate to other NSW Government agencies or local government authorities information about the Tenderer's financial position and its performance in respect of any contract awarded as a result of the tender process. Such information may be used by those agencies or authorities in considering whether to offer the Tenderer future opportunities for work.

#### 4.5 FINANCIAL ASSESSMENT

By tendering for this Contract, the Tenderer agrees that the Principal may engage private sector consultants to financially assess tenderers. Financial details of tenderers may be obtained by an external Financial Assessor for assessment. Financial Assessors have a contract with the Principal to safeguard the financial details obtained. Financial Assessors must not disclose such details, either in whole or in part to any party other than NSW Government departments or agencies without the express written permission of the tenderer.

The Financial Assessor is Kingsway Financial Assessments Pty Ltd

Submit, when requested by the Financial Assessor or Principal, the Financial Assessment information shown in Tender Schedules - **Schedule of Financial Assessment Information**.

#### 4.6 UNCONDITIONAL UNDERTAKINGS - APPROVED INSTITUTIONS

For the purpose of giving unconditional undertakings, the Principal has approved banks, building societies, credit unions and insurance companies listed by the Australian Prudential Regulation Authority (APRA) as being regulated by the APRA. Lists appear at the APRA website at:

#### www.apra.gov.au/

The Principal is prepared to consider proposals from tenderers for the approval of Unconditional Undertakings by substantial financial institutions, not registered by APRA, which lawfully carry on business in Australia. The Principal may require the submission of evidence demonstrating the substance and status of any proposed financial institution without cost to the Principal.

## 5 FURTHER INFORMATION

#### 5.1 ADDENDA TO TENDER DOCUMENTS

If, as a result of a request for clarification from a tenderer or for any other reason, the Principal issues an instruction amending the tender documents, the instruction will be issued in writing to all tenderers in the form of an Addendum, which becomes part of the tender documents. Written Addenda issued by the Principal are the only recognised explanations of, or amendments to, the tender documents.

#### 5.2 SITE ACCESS RESTRICTIONS

Tenderers and their agents or representatives must:

- obtain permission to inspect the Site from the Client's Representative at least 48 hours before access to the Site is required;
- upon arrival, at the pre-arranged time, introduce themselves at the Client Representative's office prior to undertaking their inspection of the Site.

The Client's Representative's details are:

Name:	Robert Nielsen
Telephone number:	(02) 9230 2257
Facsimile Number:	(02) 9230 2636
e-mail address:	Robert.Nielsen@parliament.nsw.gov.au

The Client's Representative may be contacted:

on the following days:	Mon – Fri
between the hours of:	9:00am –4:00pm

Tenderers should telephone the Contact Person if they experience difficulty in securing an appointment with the Client's Representative for a site inspection.

## 5.3 PRE-TENDER MEETING

A non-mandatory pre-tender meeting will be held on the date, at the time and at the place nominated in the advertisement or invitation.

The Contact Person will be available at that time to answer any tenderer's queries regarding the tender.

# 6 **PREPARATION OF TENDERS**

## 6.1 ALTERNATIVE TENDERS

The Principal may consider alternative tenders, provided the alternative tender meets the scope, functional intent and design concept expressed in the tender document. Where an alternative tender is proposed, submit a detailed description of the alternative stating clearly the manner in which it differs from the detailed requirements of the tender documents and including separate tender schedules applicable to the alternative.

Alternative tenders will not be considered unless the Tenderer has submitted a conforming tender.

# 

6.2

Submit, when requested, the details shown in Tender Schedules - Schedule of Technical Data.

## 7 SUBMISSION OF TENDERS

#### 7.1 DOCUMENTS TO BE SUBMITTED

The following documents must be completed and submitted by the Tenderer:

- Tender Schedule 1 Tender Form
- Tender Schedule 2 Schedule of Lump Sum Items
- Tender Schedule 3 Schedule of Contract Additions and Deductions
- Tender Schedule 4 Schedule of Imported Materials and Equipment
- Tender Schedule 5 Schedule of Alternatives to Imported Goods
- Tender Schedule 6 Schedule of NSW Counctry Manufactured Goods
- Tender Schedule 7 Schedule of Technical Data
- Tender Schedule 8 Schedule of Quality Management Information
- Tender Schedule 9 Schedule of Occupational Health and Safety Management
- Tender Schedule 10 Schedule of Financial Assessment Information
- Tender Schedule 11 Undertaking to Comply with the NSW Code of Practice for Procurement

Submit all information called for in the tender documents.

Where applicable, refer to each Addendum and state that the Tender allows for the instructions given in the Addendum.

#### 7.2 SUBMISSION PROCEDURE

Submit the Tender Form, Tender Schedules marked 'Submit with the Tender Form' and other required documents or information by the date and time given in the advertisement or invitation, in any of the following Tender Boxes:

- Electronic Tender Box
- Physical Tender Box
- Facsimile Tender Box

If more than one tender submission is made, mark each submission clearly as to whether it is a copy, an alternative tender, or whether the submission supersedes another submission.

Submit when requested, by the date, time and method stipulated in the request, Tender Schedules marked 'Submit when requested' and any other information required to allow further consideration of the Tender. Failure to meet this requirement may result in the Tender being passed over.

#### 7.3 ETENDERING

Tenderers are encouraged to obtain Request for Tenders (RFT) and submit tenders through NSW Government online eTendering at:

https://tenders.nsw.gov.au/commerce

#### Legal status

Tenders submitted electronically will be treated in accordance with the *Electronic Transactions Act 2000* (NSW), and given no lesser level of confidentiality, probity and attention than tenders submitted by other means.

Tenderers, by electronically submiting a tender, are taken to have accepted any conditions shown on the NSW Government eTendering web site.

The Principal may decline to consider for acceptance, tenders that cannot be effectively evaluated because they are incomplete or corrupt.

#### **Electronic Format for Submissions**

Tenders submitted electronically must be in a file format that can be read, formatted, displayed and printed by Microsoft Word 2000, or any specific format required by the RFT:

Any CAD files submitted with an electronically lodged tender must be in DGN, DWG, or DXF format. The Principal uses Microstation and Tenderers must ensure that any CAD files submitted that will correctly display and print in Microstation.

Others: Nil

#### **File Compression**

Tenderers may compress electronic tenders in any format that can be decompressed by WinZip. Tenderers must not submit self-extracting (\*.exe) zip files.

#### **Change of Tender Form Text**

Tenderers must not change existing text in electronic tender forms other than to insert required information.

#### 7.4 TENDER BOX

A tender must be lodged into a designated secure Tender Box. It may be lodged at one of the locations below:

**Electronic lodgement** to the Electronic Tender Box for this RFQ through the NSW Department of Commerce tenders web site at:

https://tenders.nsw.gov.au/commerce

Login as a user, locate the web page for the RFQ, then follow the on-screen instructions to lodge.

#### **Delivery into the Physical Tender Box at:**

Tender Box, NSW Department of Commerce, Level 3, McKell Building (ground floor west), 2-24 Rawson Place, Sydney NSW

Tenders must be clearly marked with the RFT number – "RFT 0701487 – Parliament House - Lighting"

The quotation must be able to be lodged into the physical tender box deposit slot of 400mm by 90mm, and must be lodged during McKell Building opening hours of 7:30am to 6:30pm Monday to Friday (excluding Public Holidays). No receipt can be given however written

acknowledgement of delivery of a container may be given by prior arrangement. Contact Tenders Office on (02) 9372 8900.

If the quotation is larger in physical size and cannot be broken down, or delivery personnel require a signature as evidence of delivery the quotation must be delivered between 8:30am and 4:30pm Monday to Friday (excluding Public Holidays) by prior arrangement. Contact Tenders Office on (02) 9372 8900. Commerce personnel will not take delivery of containers that present an OH&S risk in terms of size or weight.

#### Lodgement to the Facsimile Tender Box at Ph: (02) 9372 8974

Tenders which are sent by facsimile and which are not completely received at the specified location by the close of tenders may be excluded from consideration for acceptance even if transmission or receipt is delayed due to the receiving facsimile machine being engaged, faulty or otherwise inoperative.

Tenders must be clearly marked with the RFT number – "RFT 0701487 – Parliament House - Lighting"

If a tenderer intends to submit by facsimile or electronically, it must consider the following:

The facsimile machine and Commerce eTendering system are at their peak on the morning when tenders and quotations close. Due to the volume received on those closing dates, the State Contracts Control Board (SCCB) cannot guarantee the level or speed of access to these facilities at that time and tenderers should consider lodging in good time.

The facsimile machine and the Commerce eTendering website may experience difficulties in accepting large submissions. Therefore, tenderers may submit non-mandatory supporting documents such as statutory declarations, company brochures, and press clippings as hard copies. The complete response, including any designated supporting documents, must be submitted by closing date and time;

It is recommended that electronic files be kept as small as practical, and the total lodgement below an optimum size of 7mb.

## 7.5 LATE TENDERS

In accordance with the NSW Government Code of Practice for Procurement, available at:

www.treasury.nsw.gov.au/procurement/cpfp\_ig.htm

late tenders will not be accepted, except where the integrity and competitiveness of the tendering process will not be compromised.

# 8 PROCEDURES AFTER CLOSING OF TENDERS

## 8.1 EVALUATION OF TENDERS

In evaluating tenders, the Principal may take into consideration factors including, but not limited to: whole of life costs; ability to meet requirements of the NSW Government *Code of Practice for Procurement*; innovation; delivery time; quality offered; previous performance; experience; capability; occupational health and safety performance; industrial relations performance; environmental management performance; community relations; value adding including economic, social and environmental initiatives; and conformity.

The Principal may treat any detail required by the tender documents which is omitted, illegible or unintelligible as failing to fulfil the relevant requirement.

## 8.2 ACCEPTANCE OF TENDER

The Principal may accept tenders that do not conform strictly with all requirements of the tender documents.

The Principal is not bound to accept the lowest or any tender. Tenders which do not comply with any requirement of, or which contain conditions or qualifications not required or allowed by, the tender document may be passed over.

No tender, or qualification or departure from a contract condition or specification, is accepted unless the Principal gives an acceptance or formal agreement in writing.

## 8.3 **PROTECTION OF PRIVACY**

The Tenderer warrants, in respect of any personal information provided in this Tender or any contract arising from this Tender, that the information is accurate, up to date and complete, and that nominated individuals authorise its collection and are aware:

- that the information is being collected for the purpose of evaluating tenders and administering any contracts arising from those tenders and may be made available to other NSW government agencies or local government authorities for those purposes;
- whether the supply of the information by the individual is required by law or is voluntary, and any consequences for the individual if the information (or any part of it) is not provided; and
- of the existence of any right of access to, and correction of, the information.

#### END OF SECTION - CONDITIONS OF TENDERING

# **TENDER SCHEDULES**

# 1 TENDER FORM

Location Tender Closing Office:	e: Department of Commerce, Level 3, McKell Building, 2-24 Rawson, Place, Sydney NSW		
Tender box/es:	As designated in the RFT documents		
Name of Tenderer (in block letters):			
A.B.N. (if applicable):			
Address:			
Telephone number:			
Facsimile number:			
e-mail address:			
	hereby tender(s) to perform the work for		
	PARLIAMENT HOUSE		
	LIGHTING UPGRADE		
	(RFT / Contract No. 0701487)		
	in accordance with the following documents:		
	TENDER DOCUMENT VOL. 1 SPECIFICATION		
	and Addenda Numbers:		
	For the lump sum of:		
	(\$) including GST.		
	At the (GST inclusive) rates and lump sums in the attached Schedule		
	of Contract Additions and Deductions and Lump Sum Items,		

# 2 SCHEDULE OF LUMP SUM ITEMS

#### (SUBMIT WITH TENDER FORM)

Complete this Schedule by inserting the tendered lump sum under **Amount**. Where a rate is tendered, insert under **Amount** the amount arrived at by multiplying the tendered rate by the quantity. The lump sums tendered shall form part of the Contract. The correct extended amounts and total shall be used to assess tenders.

All lump sums must include GST.

Item No.	Description	Electrical Services	Building Levels	Quantity	Unit	Rate	Amount (\$)
2.	Schedule of Lump Sum items:	Section 3					
2.1	Retrofit or augment two thousand and ninety (2090) 1 x 65 watt recessed troffer low-brightness louvre luminaires with an estimated two thousand and ninety (2090) new or upgraded 1 x 35 watt recessed troffer low-brightness louvre luminaires across office and interior areas on floors 1-3 & 5-9.	1, 2 & 3	1-3 & 5-9	2082		Lump Sum	
2.2	Retrofit or augment forty-nine (49) 2 x 65 watt recessed troffer low- brightness louvre luminaires with an estimated forty-nine (49) new or upgraded 2 x 35 watt recessed troffer low-brightness louvre luminaires across office and interior areas on floors 1, 6 & 8.	1, 2 & 3	1, 6 & 8	49		Lump Sum	
2.3	Replace existing four hundred and ninety-eight (498) 1 x 65 watt bare batten fittings with an estimated four hundred and ninety-eight (498) new 1 x 35 watt bare batten fittings across car park, storage areas and plant room areas on floors 1-7 & 13.	1, 2 & 3	1-7 & 13	518		Lump Sum	
2.4	Replace existing eighty (80) 2 x 65 watt bare batten fittings with an estimated eighty (80) new 1 x 35 watt bare batten fittings across car park, storage areas and plant room areas on floors 1, 2, 5 & 6.	1, 2 & 3	1, 2, 5 & 6	80		Lump Sum	
2.5	Replace seventy-three (73) existing 1 x 65 watt surface mounted prismatic diffuser fittings with an estimated seventy-three (73) new 1 x 35 watt surface mounted prismatic diffuser fittings in all fire stair areas in Parliament House building.	1, 2 & 3	All fire stairs areas	73		Lump Sum	
2.6	Provide an estimated one hundred and fourteen (114) motion detectors to every toilet area in the Parliament House building on levels 5-12 to control lighting in those areas.	4.4	5-12	114		Lump Sum	

	12.10					
2.7	Provide motion detectors in rooms 734 & 734E on level 7 to control lighting in those rooms.	4.4	7	2	Lump Sum	
2.8	Supply of Spares for Storage	4.1			Lump Sum	
2.9	Defects Liability Period			52 wks	Lump Sum	
2.10	All work and obligations under the Contract NOT INCLUDED ELSEWHERE in this Schedule.				Lump Sum	
	TOTAL TENDER PRICE				8	6

All amounts to include GST.

# 

# 3 SCHEDULE OF CONTRACT ADDITIONS & DEDUCTIONS

#### (SUBMIT WITH TENDER FORM)

Complete the Schedule by inserting the "rate for additions" and "rate for deletions". These **rates shall be used for additional or deletion of items from the contract**. The two rates shall form part of the Contract and shall be used to assess tenders. The "rate for additions" are to include labour, materials, waste, transportation, overheads and profit.

ITEM NO.	DESCRIPTION	RATE FOR ADDITION	RATE FOR DELETION
3	Description of Work		
3.1	Retrofit or augment existing 1 x 65 watt recessed troffer low-brightness louvre luminaire with an upgraded 1 x 35 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	\$
3.2	Retrofit or augment existing 1 x 58 watt recessed troffer low-brightness louvre luminaire with an upgraded 1 x 35 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.3	Retrofit or augment existing 1 x 40 watt recessed troffer low-brightness louvre luminaire with an upgraded 1 x 28 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.4	Retrofit or augment existing 2 x 65 watt recessed troffer low-brightness louvre luminaire with an upgraded 2 x 35 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	\$
3.5	Retrofit or augment existing 2 x 58 watt recessed troffer low-brightness louvre luminaire with an upgraded 2 x 35 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.6	Retrofit or augment existing 2 x 40 watt recessed troffer low-brightness louvre luminaire with an upgraded 2 x 28 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.7	Replace existing 1 x 65 watt bare batten fitting with an upgraded 1 x 35 watt bare batten fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	\$

ITEM NO.	DESCRIPTION	RATE FOR ADDITION	RATE FOR DELETION
3.8	Replace existing 1 x 58 watt bare batten fitting with an upgraded 1 x 35 watt bare batten fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.9	Replace existing 1 x 40 watt bare batten fitting with an upgraded 1 x 28 watt bare batten fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.10	Replace existing 2 x 65 watt bare batten fitting with an upgraded 2 x 35 watt bare batten fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	\$
3.11	Replace existing 2 x 58 watt bare batten fitting with an upgraded 2 x 35 watt bare batten fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.12	Replace existing 2 x 40 watt bare batten fitting with an upgraded 2 x 28 watt bare batten fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.13	Replace existing 1 x 65 watt surface mounted prismatic diffuser fitting with an upgraded 1 x 35 watt surface mounted prismatic diffuser fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	\$
3.14	Replace existing 1 x 58 watt surface mounted prismatic diffuser fitting with an upgraded 1 x 35 watt surface mounted prismatic diffuser fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.15	Replace existing 1 x 40 watt surface mounted prismatic diffuser fitting with an upgraded 1 x 28 watt surface mounted prismatic diffuser fitting as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.16	Retrofit or augment existing 1 x 65 watt recessed troffer prismatic diffuser luminaire with an upgraded 1 x 35 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.17	Retrofit or augment existing 1 x 58 watt recessed troffer prismatic diffuser luminaire with an upgraded 1 x 35 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
ITEM NO.	DESCRIPTION	RATE FOR ADDITION	RATE FOR DELETION
3.18	Retrofit or augment existing 1 x 40 watt recessed troffer prismatic diffuser luminaire with an upgraded 1 x 28 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A

3.19	Retrofit or augment existing 2 x 65 watt recessed troffer prismatic diffuser luminaire with an upgraded 2 x 35 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.20	Retrofit or augment existing 2 x 58 watt recessed troffer prismatic diffuser luminaire with an upgraded 2 x 35 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.21	Retrofit or augment existing 2 x 40 watt recessed troffer prismatic diffuser luminaire with an upgraded 2 x 28 watt recessed troffer low-brightness louvre luminaire as per Section 3 TECHNICAL REQUIREMENTS.	\$	N/A
3.22	Provide a new motion detector as per CLAUSE 4.4 of Section 3 TECHNICAL REQUIREMENTS	6	6

All amounts to include GST.

# 4 SCHEDULE OF IMPORTED MATERIALS AND EQUIPMENT

#### (SUBMIT WHEN REQUESTED BY PRINCIPAL)

Provide brief details of all imported materials and equipment to be supplied or incorporated into the Works, and country of manufacture or origin. Do not include goods manufactured in New Zealand.

The value of the imported content must be the estimated duty paid value inclusive of the value of any services (eg. overseas freight and insurance, software in computer tenders, consultancy or engineering fees) or any charges of overseas origin, together with customs clearing charges.

This is not a Schedule of Rates within the meaning of the Construction Contract Conditions. See also Preliminaries Clause - Australian and New Zealand goods.

Description	Country of Origin	Value A\$
		\$
		\$
		\$
		\$
		\$
		\$¢
	•••••	φ

# 5 SCHEDULE OF ALTERNATIVES TO IMPORTED GOODS

#### (SUBMIT WHEN REQUESTED BY PRINCIPAL)

Provide brief details of materials and equipment of Australian and/or New Zealand manufacture as alternatives to imported materials and equipment as listed in the SCHEDULE OF IMPORTED MATERIALS AND EQUIPMENT, or give reasons why such alternatives cannot be provided.

The Principal may accept a tender specifying all or any of the items listed below, with an adjustment to the contract price based on the difference between the prices listed in this Schedule and the SCHEDULE OF IMPORTED MATERIALS AND EQUIPMENT.

Description of Australian and/or New Zealand manufactured Alternatives	Value A\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$

# 6 SCHEDULE OF NSW COUNTRY MANUFACTURED GOODS

#### (SUBMIT WHEN REQUESTED BY PRINCIPAL)

Complete the Schedule if you wish to seek preference under the NSW Country Industry Preference Scheme (CIPS.). The preference may be given only to a Tenderer who is a NSW manufacturer registered under the scheme.

State your CIPS. registration number. Give details of the materials and equipment to be supplied or incorporated into the Works, the place of manufacture, the percentage(s) applicable for preference purposes and the value added content at the Tenderer's works for the material or equipment manufactured by the Tenderer for incorporation in the Works.

This is not a Schedule of Rates within the meaning of the Construction Contract Conditions.

# C.I.P.S. Registration No.:

Description	Place of Manufacture	% Applicable Value Add Content \$	
			¢
		•••••	Φ Φ
	••••••		۵ م
		•••••	\$
			\$
			\$

# 7 SCHEDULE OF TECHNICAL DATA

#### (SUBMIT WITH TENDER)

List all information required by this Schedule, and attach details of manufactures product data together with illustrations as are necessary to fully describe the Tenderer's offer.

Replacement Luminaire or Retrofit Kit 1 x 35W T5 Recessed Troffer	Rating (Loss rating for Ballast)	Туре	Manufacturer	Catalogue No.
Luminaire Type				
Lamp				
Ballast				
Reflector finish				
Glare Control Device				
Estimated Glare Index				
Estimated Light Output Ratio (%)				

Replacement Luminaire or Retrofit Kit 2 x 35W T5 Recessed Troffer	Rating (Loss rating for Ballast)	Туре	Manufacturer	Catalogue No.
Luminaire Type				
Lamp				
Ballast				
Reflector finish				
Glare Control Device				
Estimated Glare Index				
Estimated Light Output Ratio (%)				

TENDER SCHEDULES					
Item	Туре	Manufacturer	Catalogue No.		
Replacement luminaire	Surface Mounted				
1 x 35W T5 Bare Batten					
Datten					
Replacement luminaire	Surface Mounted				
2 x 35W T5 Bare					
Batten					
Replacement luminaire	Surface Mounted				
1 x 28W T5 Bare					
Batten					
Replacement luminaire	Surface Mounted				
2 x 28W T5 Bare	Serves mounded				
Batten					
Donlo comont luminoire	Surface Mounted				
Replacement luminaire	Surface Mounted				
1 x 35W T5 Linear Diffused					
Replacement luminaire	Surface Mounted				
2 x 35W T5 Linear					
Diffused					
Replacement luminaire	Surface Mounted				
1 x 28W T5 Linear					
Diffused					
Replacement luminaire	Surface Mounted				
2 x 28W T5 Linear					
Diffused					
Replacement luminaire	Recessed Troffer				
1 x 35W T5 Prismatic					
Diffuser					
Replacement luminaire	Recessed Troffer				
2 x 35W T5 Prismatic					
Diffuser					
Item	Туре	Manufacturer	Catalogue No.		
	rype		Catalogue 110.		
Panlagament luminging	Recessed Troffer				
Replacement luminaire	Recessed fromer				
1 x 28W T5 Prismatic Diffuser					
Replacement luminaire	Recessed Troffer				
2 x 28W T5 Prismatic Diffuser					
Dillusei					

Motion Detector			

## 8 SCHEDULE OF QUALITY MANAGEMENT INFORMATION

#### (SUBMIT WITH TENDER FORM)

Submit one of the following, to demonstrate the capacity to plan and manage the quality of work:

- evidence of current full certification of the Tenderer's Quality Management System to AS/NZS ISO 9001:2000 by a certifying body registered with the Joint Accreditation System Australia and New Zealand (JAS-ANZ); or
- evidence that the Tenderer's Quality Management System complies with the NSW Government *Quality Management Systems Guidelines (QMS Guidelines);* or
- a minimum of three (3) completed examples of Inspection and Test Plans used on recent past projects and complying with the requirements of the *QMS Guidelines*.

# 9 SCHEDULE OF OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT INFORMATION

#### (SUBMIT WITH TENDER FORM)

Provide documents and information indicated below in accordance with Conditions of Tendering clause – Occupational health and safety management.

#### **Evidence of satisfactory OHS management**

Nominate at least three contracts/projects completed within the last two years that demonstrate successful management of occupational health and safety by the Tenderer:

Client	Name & location of contract Eg. Sutherland Hospital Carpark; Dubbo Water Treatment Plant; Tamworth Coles shopping Centre; 3 Storey Unit Block, Penrith.	Contract Price/ Project Value	Start Date	Completion Date

**WHEN REQUESTED**, submit the following additional information for each of three contracts/projects selected from the above list:

- a. a client referee report (which may be a NSW Government agency Contractor Performance Report) commenting on the Tenderer's performance in relation to occupational health and safety management, identifying the referee's name, position, organisation and telephone and email contact details; **or**
- b. a third party audit report or internal audit report; or
- c. a site safety inspection report; or
- d. a Safety Management Plan; or
- e. three Safe Work Method Statements; or
- f. minutes of three Toolbox meetings.

#### **Recent OHS prosecutions and fines**

#### Provide:

- a statement confirming that the Tenderer is not in default of any fine issued for a breach of the OHS legislation; **AND**
- details of every OHS prosecution and fine imposed on the Tenderer in Australia during the last two years, together with a description of actions taken by the Tenderer in response to each prosecution and fine; or
- a statement that the Tenderer incurred no prosecutions or fines during the last two years.

#### **Occupational Health and Safety Management Monthly Report**

The Tenderer undertakes, if awarded the Contract, to provide Monthly OHS Management Reports as described in Preliminaries clause – **Occupational Health and Safety Management**.

#### Independent certification of formwork

The Tenderer undertakes, if awarded the Contract, to provide evidence of independent certification of formwork as required by Preliminaries clause – **Occupational Health and Safety Management**.

# 10 SCHEDULE OF FINANCIAL ASSESSMENT INFORMATION

#### (SUBMIT WHEN REQUESTED BY PRINCIPAL OR FINANCIAL ASSESSOR)

Provide documents and information listed below in accordance with Clause Conditions of Tendering - **Financial assessment**.

- 1. Financial Statements for last three years for the entity under consideration, including:
  - i) Balance Sheets;
  - ii) Profit and Loss Statement;
  - iii) detailed Profit and Loss Statement;
  - iv) statement of Cash Flows;
  - v) notes to and Forming Part of the Accounts;
  - vi) an Accountant's Report; and
  - vii) where existing, Auditor's Reports.

Consolidated accounts of a parent organisation or group to which the entity belongs are not acceptable.

- 2. Where latest financial statement is more than 6 months old, the latest management report showing:
  - i) a trading statement;
  - ii) a profit and loss statement; and
  - iii) a trial balance.
- 3. Where the company is required to lodge audited financial statements with ASIC, copies of these statements for the last three years.
- 4. Where any financial statement supplied is not audited, copies of the entity's tax returns for last three years.
- 5. A letter from the Tenderer's banker providing details of overdraft and guarantee facilities including:
  - i) Bank, Branch, and Account Names,
  - ii) type and limit of bank overdraft facility,
  - iii) type and limit of bank guarantee facility,
  - iv) current bank overdraft balance,
  - v) number and amount of bank guarantees outstanding; and
  - vi) details of other bank funding facilities available to the Tenderer, such as term loans, lines of credit, commercial bills and other debt instruments.
- 6. Current and projected cash flows for all work on hand.
- 7. Forecast budget for forthcoming financial year including Revenue and Profit and Loss.
- 8. Names and contact numbers of:
  - i) major suppliers; and
  - ii) major subcontractors.
- 9. Details relating to the Tenderer's history and Directors Profiles.

# 11 UNDERTAKING TO COMPLY WITH THE NSW GOVERNMENT CODE OF PRACTICE FOR PROCUREMENT.

## (SUBMIT WHEN REQUESTED)

The Tenderer, if awarded the Contract, will comply with the NSW Government *Code of Practice for Procurement*.

## END OF SECTION -TENDER SCHEDULES

# SPECIFICATION

#### THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

# **1 GENERAL CONDITIONS OF CONTRACT AND ANNEXURE**

## THERE ARE 22 PAGES IN THIS SECTION

## **GENERAL CONDITIONS OF CONTRACT - MINOR WORKS**

#### 1 **DEFINITIONS**

- **1.1** The Principal is as stated in the Annexure.
- **1.2** The Principal's Representative is as stated in the Annexure and is the person appointed by the Principal to act with its full authority in all matters relating to the Contract.
- **1.3** The Principal's Agent is as stated in the Annexure.
- **1.4** The Works means the whole of the work to be carried out and materials and services to be provided under the Contract.
- **1.5** The Contract Sum means:
  - (a) where the Principal accepted a lump sum, the lump sum;
  - (b) where the Principal accepted rates, the amount calculated by firstly multiplying the rates by their respective quantities in the schedule of rates and then adding those products;

but excluding any additions or deductions which are made under the Contract.

- **1.6** day means calendar day.
- **1.7** Site means the lands and other places made available to the Contractor by the Principal for the purpose of the Contract.
- **1.8** Text within the following format denotes a definition:



# 2 CONTRACT

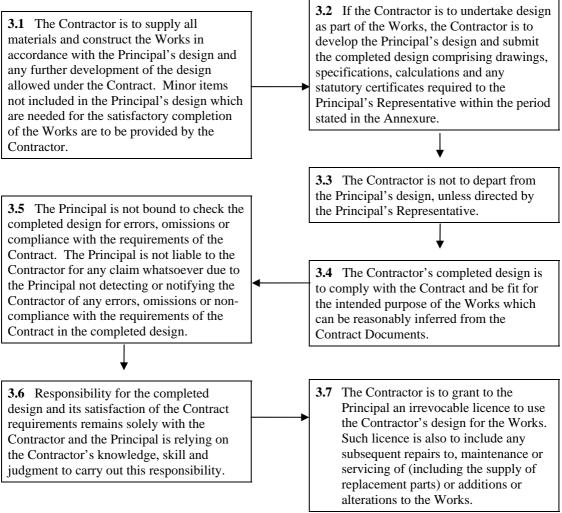
**2.1** The written agreement between the Principal and the Contractor for the performance of the Works, including all documents and parts of documents to which reference may properly be made to determine the rights and obligations of the parties (the Contract Documents) shall evidence the Contract.

**2.2** The Contract Documents shall be taken as mutually explanatory and anything contained in one but not in another shall be treated as if contained in all.

**2.3** If the Contractor finds any discrepancy, error or ambiguity in or between the Contract Documents, the Contractor is to inform the Principal's Representative before starting such work and follow the directions given by the Principal's Representative.

## DESIGN AND CONSTRUCTION

3



# 4. CARE OF THE WORKS AND OTHER PROPERTY

**4.1** From and including the date the Site is **4.2** The Contractor is to indemnify and made available to the Contractor to the date keep the Principal indemnified against any of Completion of the Works, the Contractor loss or damage to the property of the is responsible for the care of the Works, Principal (including existing property in, constructional plant and things entrusted to about or adjacent to the Works) and against the Contractor by the Principal for the any legal liability for injury, death or purpose of the Works. damage to property of others arising from the performance of the Works. The Contractor is to make good at the Contractor's expense any damage which occurs to the Works while responsible for their care. **4.3** Nothing in Clause 4 relieves the The Contractor is also liable for damage Principal from liability for the Principal's caused by the Contractor during the Defects own default and defaults of others for Liability Period. whom the Principal is liable.

**INSURANCE** 

5.

#### **5.1** On acceptance of the tender, the **5.3** If insurance of the Works and public Contractor is to hold or take out an liability is to be arranged by the Contractor, insurance policy covering Workers (see the Annexure) then, before Compensation in the State of NSW and commencing work on the Site, the shall also ensure that every subcontractor, Contractor is to hold or take out policies of who is not taken to be a worker employed insurance covering the Contractor, Principal by the Contractor in accordance with the and subcontractors for: Workplace Injury Management and public liability to an amount of not (a) Workers Compensation 1998 (NSW) less than \$5,000,000 for any single Schedule 1, must hold or take out insurance occurrence: and covering Workers Compensation. loss or damage to the Works, any (b)If insurance of the Works and public temporary works and all materials, liability is to be arranged by: constructional plant and other things that the Principal, go to 5.2 are brought onto the Site by or on behalf of the Contractor, go to 5.3 the Contractor or are entrusted to the Contractor by the Principal. The amount insured is not to be less than the Contract Sum. 5.2 If insurance of the Works and public liability is to be arranged by the Principal The Principal is to be named as an insured (see the Annexure) a policy for insurance of in the policies. the Works and public liability comes into The policies must include cross liability and effect on acceptance of the tender. waiver of subrogation clauses under which The Contractor is to pay all necessary the insurer, in respect of liability, agrees premiums within 14 days of the date of that the term 'insured' applies to each of the invoice from the insurance broker. persons covered as if a separate insurance Payment must be made in accordance with policy had been issued to each of them and the instructions on the invoice and must generally agrees to waive all rights of include a statement of the Contract Number. subrogation or action against any of the persons covered. Go to 5.4 Go to 5.4

**5.4** If the Works include work described in (a) or (b) below, the Contractor is to take out the following additional insurance policies before starting such work:

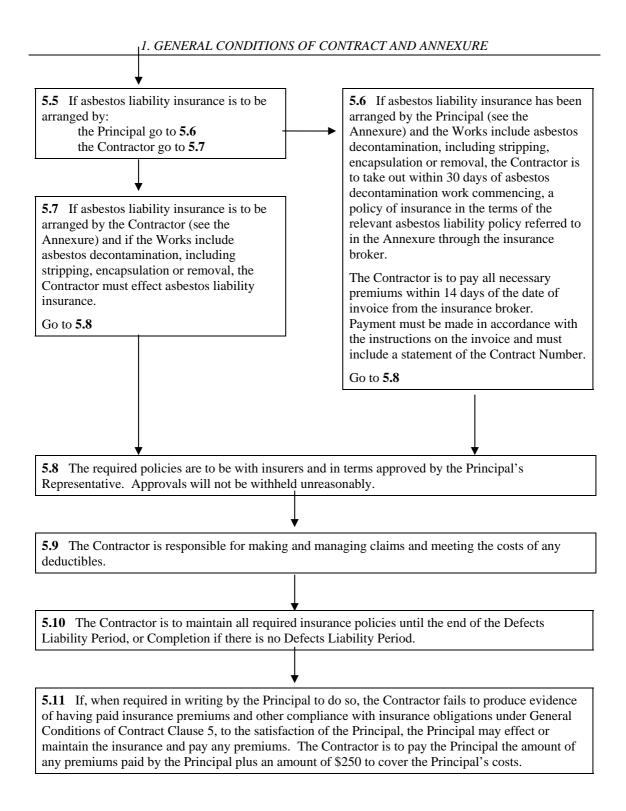
(a) For the use of water-borne craft in excess of 8 metres in length: marine liability insurance;

(b) For design of the Works undertaken by the Contractor: professional indemnity insurance.

The policy under (a) is to be in the name of the Contractor with the Principal as an additional name insured and is to cover the Contractor, the Principal, and all subcontractors employed from time to time in relation to the Works for their respective rights and interests and cover their liabilities to third parties. The policy is to be for an amount not less than \$5,000,000 for any one occurrence and shall include cross-liability and waiver of subrogation clauses under which the insurer, in respect of liability, agrees that the term 'insured' applies to each of the persons covered as if a separate insurance policy had been issued to each of them and generally agrees to waive all rights of subrogation or action against any of the persons covered.

The policy under (b) is to cover the Contractor for liability to the Principal for a minimum amount of \$500,000 or 20% of the Contract Sum, whichever is greater, to a maximum of \$5,000,000 for loss (whether economic loss only or other loss) in a single occurrence arising from errors or omissions in design of the Works carried out by the Contractor or any subcontractor.

Go to 5.5



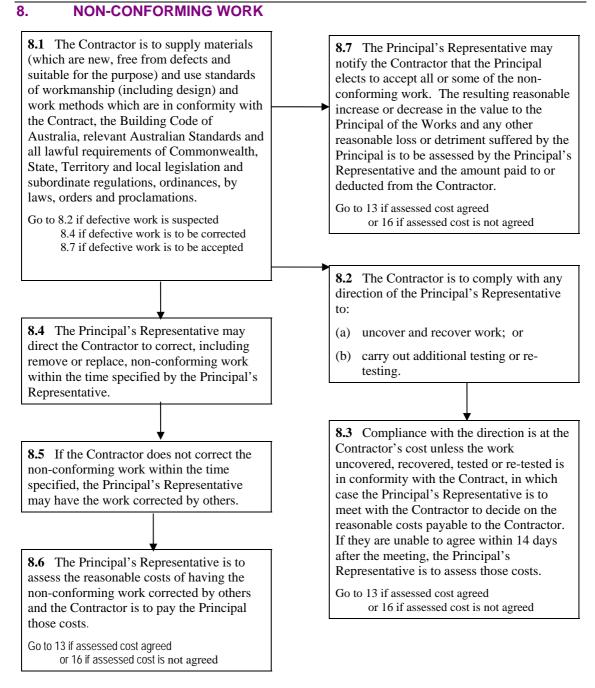
	I. GENERAL CONDITIONS C	IF CONTRACT AND ANNEXURE
6.	SITE AND POSSESSION	
6.1	The Principal is to give the Contractor posse	ssion of the Site by the time stated in the Annexure.
	Works but is not required to give the Contract	cient possession to allow the Contractor to perform tor sole or uninterrupted possession of or access to

6.3 The Contractor is to begin work on the Site as soon as practicable after being given possession of the Site by the Principal.

6.4 The Contractor is to give the Principal's Representative, agents and contractors reasonable access to the Site for any purpose.

#### 7. SITE CONDITIONS

7.1 If the Contractor discovers that the 7.2 The Contractor is not entitled to any conditions on, about or below the Site differ extra payment for the different Site from what ought to have reasonably been conditions. If the different conditions are anticipated at Tender time the Contractor is such that the Principal's Representative to inform the Principal's Representative directs the Contractor to carry out a immediately and, where possible, before the variation, the procedure in Clause 9 is then conditions are disturbed. to be followed.



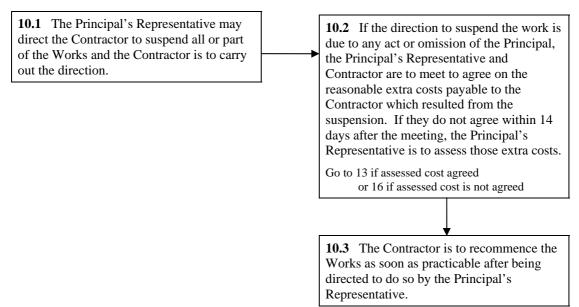
# 9. VARIATIONS

**9.1** The Principal's Representative may direct the Contractor to carry out a variation and the Contractor is to carry out the direction.

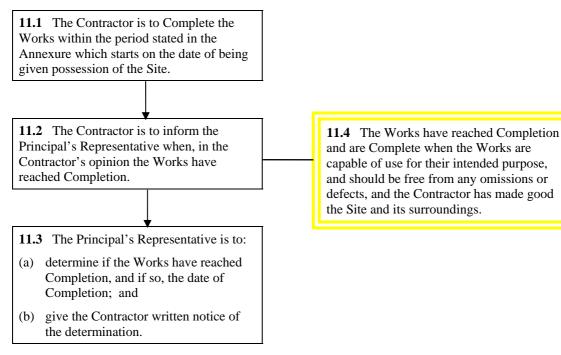
**9.2** The Principal's Representative and Contractor are to meet to agree on the reasonable amount payable to or deducted from the Contractor for the variation. If they do not agree within 14 days after the meeting, the Principal's Representative is to assess that amount.

Go to 13 if assessed amount agreed or 16 if assessed amount is not agreed **9.3** A variation is any change to the character, form, quality and extent of the Works directed in writing by the Principal's Representative. A variation shall not invalidate the Contract.

# 10. SUSPENSION



# 11. COMPLETION OF THE WORKS



# 12. DELAY IN COMPLETION

**12.1** If the Contractor is delayed in reaching Completion then the Contractor is to notify the Principal's Representative within 14 days after the commencement of the delay and to meet with the Principal's Representative to determine the cause of delay. Where such a delay is caused by:

- (a) a direction given by the Principal's Representative except under:
  - Clause 8; or
  - Clause 10 where the event giving rise to the direction was not beyond the control of the Contractor; or
- (b) a breach of the Contract by the Principal; or
- (c) any event beyond the control of the Contractor,

the period for Completion is to be extended.

**12.2** If the Principal's Representative and the Contractor do not agree on an extension to the period for Completion within 14 days of the meeting to determine the cause of delay, the Principal's Representative is to assess a reasonable extension of time. The Principal's Representative may for any reason and at any time extend the period for Completion.

Go to 16 if assessed extension of time is not agreed.

**12.3** If the Contractor does not Complete the Works by the last day of the period for Completion then the Contractor is to pay to the Principal liquidated damages from, but excluding that date, to and including the date the Works are Complete at the rate stated in the Annexure.

# 13. PAYMENT AND RETENTION

**13.1** If the Contract has substantial Demolition and the 'Amount of Security' in the Annexure is >\$0:

Before commencing any work on the Site, the Contractor is to provide security in the amount stated in the Annexure and in the form as detailed in Schedule - Unconditional Undertaking.

**13.2** *If the Contract requires the Contractor to pay the Contract Sum to the Principal:* 

Before commencing any work on the Site, the Contractor is to pay the Principal the Contract Sum.

**13.3** If the Contract requires the Principal to pay the Contract Sum to the Contractor:

The Contractor is to give the Principal's Representative a written claim for payment when a Milestone stated in the Annexure is reached. The claim is to identify the Milestone, the amount claimed, how the amount is calculated, deductions to which the Principal is entitled and, when additions are claimed, the legal and factual basis of the claim. Additions are extra costs or other amounts to which the Contractor is entitled under or in connection with the subject matter of the Contract.

When a Milestone is reached the amount which the Contractor is entitled to claim, and be paid, is the sum of:

- for work for which the Principal accepted rates, an amount calculated by applying the rates to the quantities of work carried out to that date;
- for work for which the Principal accepted a lump sum, the percentage stated in the Annexure for the Milestone;
- for any additions for which the Principal has approved an amount in writing or for which an amount has been finally determined by an Expert under Clause 16, the amount approved or determined;

less payments previously made (including under Clause 16), costs payable by the Contractor to the Principal and deductions to which the Principal is entitled under or in connection with the subject matter of the Contract, including but not limited to retention moneys, liquidated damages and other damages whether liquidated or unliquidated.

With each claim for payment, and at any other time as requested by the Principal's Representative, the Contractor is to give the Principal's Representative a completed statutory declaration, as detailed in Schedule - Statutory Declaration.

Within 10 business days after receipt of the Contractor's payment claim, the Principal is to provide to the Contractor a payment schedule identifying the progress claim to which it relates and stating the payment, if any, which the Principal will be making. If the payment is to be less than the amount claimed by the Contractor the payment schedule is to indicate why it is less. For the purposes of this clause a business day is any day other than a Saturday, Sunday, public holiday or 27, 28, 29, 30 or 31 December.

### 13.3 (Continued)

Payment is to be made:

- within 20 business days after receipt of the Contractor's written payment claim; or
- within 5 business days after the statutory declaration is received; or
- by the specified time after any action required prior to payment has been carried out,

whichever is the latest. If the Contractor breaches the requirement to submit a completed statutory declaration the Principal is not obliged to make any payment to the Contractor while the breach continues.

Any claim by the Contractor on the Principal is to be made within 28 days after the date of the Principal's Representative's written notice of Completion under Clause 11.3. All claims whatsoever by the Contractor against the Principal made after that time are barred. However, if the contract includes a Defects Liability Period, and the Contractor has a claim against the Principal under Clause 14.4 or because of an event which occurred during the Defects Liability Period, the Contractor may make that claim up to 28 days after the end of the Defects Liability Period. If the claim is made after that time it is barred.

Unless stated otherwise, all payments by the Principal to the Contractor are to be made by Electronic Funds Transfer to a bank, building society or credit union account nominated by the Contractor. No payment is due to the Contractor until details of the nominated account (name of financial institution, account name and account number) are notified in writing to the Principal's Representative. The Contractor is to promptly notify the Principal's Representative in writing of any changes to the nominated account and the Principal is not responsible for any payments made into a previously nominated account before notification of such change is received by the Principal's Representative.

Payment is not evidence of the value of work or an admission of liability or that the work is satisfactory but is a payment on account only.

13.4 When the Works are Complete and the Contract requires Security:

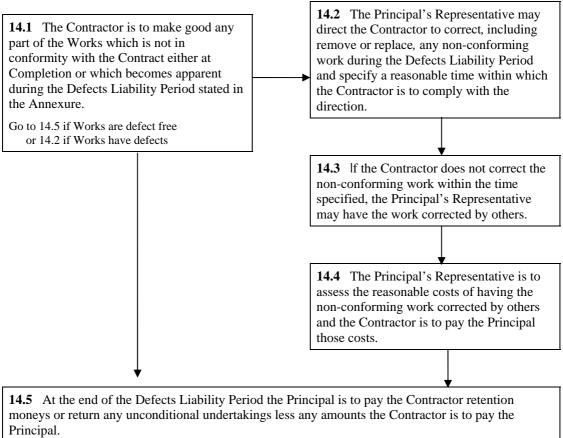
When the Contractor has provided an Unconditional Undertaking for Security (Annexure 13.1) the Principal is to return the Unconditional Undertaking, less any amounts the Contractor is to pay the Principal, within 14 days of Completion.

**13.5** *When the Works are Complete and the Contract has a Defects Liability Period:* An amount of 2.5% of the Contract Sum is to be retained by the Principal against the due and proper performance of the Contract, except when there is no Defects Liability Period.

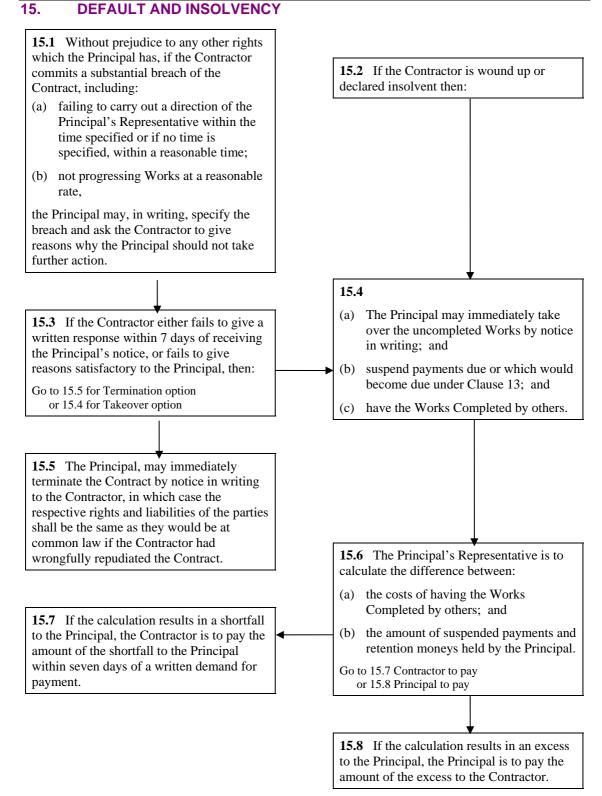
The Contractor may, instead of the retention, provide security in the amount of the retention in the form as detailed in Schedule – Unconditional Undertaking.

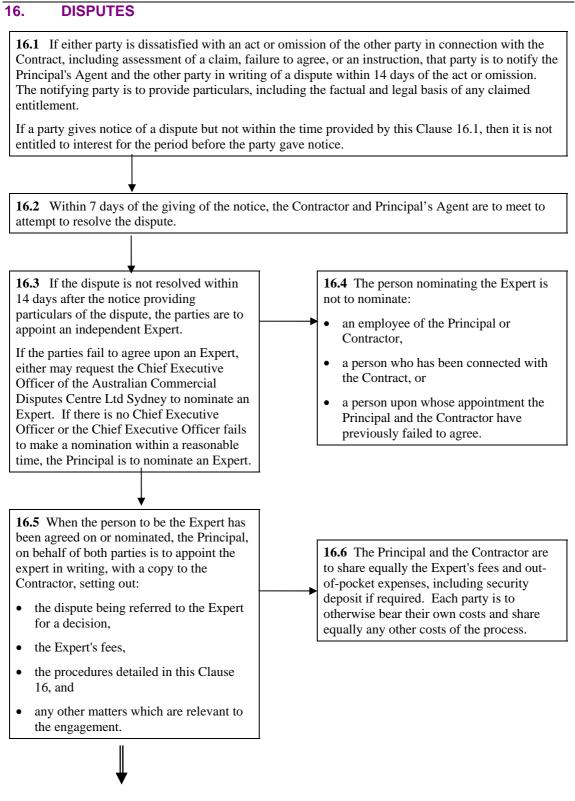
**13.6** *If an Unconditional Undertaking is required:* All Undertakings must be provided by a financial institution acceptable to the Principal.

# 14. DEFECTS LIABILITY PERIOD









**16.7** Each party is to make written submissions to the Expert and provide a copy to the other party as follows:

- (a) Within 7 days after the appointment of the Expert, the notifying party is to submit details of the claimed act or omission.
- (b) Within 14 days after receiving a copy of that submission, the other party is to submit a written response. That response can include cross-claims.

**16.8** The Expert is to decide whether the claimed event, act or omission did occur and, if so:

- when it occurred,
- what term of the Contract or other obligation in law, if any, requires the other party to pay the claimant money in respect of it, and
- the merits in law of any defence or cross-claim raised by the other party.

The Expert then decides the amount, if any, which one party is legally bound to pay the other on account of the event, act or omission.

The Expert is also to decide any other questions required by the parties, as set out in the dispute referred to the Expert at Clause 16.5. **16.9** In making the decision, the Expert acts as an expert and not as an arbitrator and is:

- (a) not liable for acts, omissions or negligence;
- (b) to make the decision on the basis of the written submissions from the parties and without formalities such as a hearing;
- (c) required within 35 days of appointment to give the decision in writing, with brief reasons, to each party; and
- (d) bound by the rules of natural justice.

**16.10** If the Expert decides that one party is to pay the other an amount exceeding \$250,000 (calculating the amount without including interest on it), and within 14 days of receiving the decision of the Expert, either party gives notice in writing to the other that the party is dissatisfied, the decision is of no effect and either party may then commence litigation.

**16.11** Unless a party has a right to commence litigation under Clause 16.10:

(a) The parties are to treat each determination of the Expert as final and binding and give effect to it.

(b) If the Expert decides that one party owes the other party money, that party is to pay the money within 14 days of the receiving the decision of the Expert.

#### 1. GENERAL CONDITIONS OF CONTRACT AND ANNEXURE

# 17. TERMINATION FOR THE PRINCIPAL'S CONVENIENCE

**17.1** The Principal may terminate the Contract by giving notice with effect from the date stated in the notice, for its convenience and without the need to give reasons. The Contractor must leave the Site by the date stated in the termination notice and remove all plant, equipment and amenities it has brought onto the Site for the construction of the Works.

If the Contract is terminated for the Principal's convenience, the Principal must pay the Contractor:

- the value of all work carried out (as determined in clause 13) up to the date of the termination notice takes effect; plus
- 2% of the difference between the Contract Sum, adjusted by any amounts agreed or assessed under clause 9.2 or finally determined under clause 16, and the total of all amounts paid and payable to the contractor for payment claims.

The payments referred to in this Clause are full compensation under this Clause, and the Contractor has no claim for damages or other entitlement whether under the Contract or otherwise.

The Contractor must, wherever possible, include in all subcontracts and supply agreements an equivalent provision to this Clause.

#### **SCHEDULE 1**

#### APPROVED FORM OF UNCONDITIONAL UNDERTAKING

[To be submitted on a Financial Institution's letterhead and show, at a minimum, the Financial Institution's name and address]

At the request of
and in consideration of ('the Principal')
accepting this undertaking in respect of the contract for
unconditionally undertakes to pay on demand any sum or sums which may from time to time be
demanded by the Principal to a maximum aggregate sum of

The undertaking is to continue until notification has been received from the Principal that the Sum is no longer required by the Principal or until this undertaking is returned to the Financial Institution or until payment to the Principal by the Financial Institution of the Sum or such part as the Principal may require. The Principal must not assign the unconditional undertaking without the prior written agreement of the Financial Institution, which must not be unreasonably withheld.

Should the Financial Institution be notified in writing, purporting to be signed by or for and on behalf of the Principal that the Principal requires payment to be made of the whole or any part or parts of the Sum, it is unconditionally agreed that the Financial Institution will make the payment or payments to the Principal forthwith without reference to the Contractor and notwithstanding any notice given by the Contractor not to pay same.

Provided always that the Financial Institution may at any time without being required so to do pay to the Principal the Sum less any amount or amounts it may previously have paid under this undertaking or such lesser sum as may be required and specified by the Principal and thereupon the liability of the Financial Institution hereunder shall immediately cease.

DATED at		this	day
of	20		
[Signature]			
[Print name of person signi	ing the Undertaking]		
[Position / Title]			

# **SCHEDULE 2**

# **Statutory Declaration**

		Definitions	Oaths Act 1900 (NSW)
The Principal is			
The Contractor is			
		ACN/ABN	
The Contract is		Contract No	
		Contract Title	
		dated(Date of Contract) between the party identified as the Principal and the party identified as the Contractor.	
		Declaration	
Full name	I,		
Address	of		
		do hereby solemnly declare and affirm that:	
Insert position title of the Declarant	1	I am the representative of the Contractor in the Office Bearer capacity of	
	2	I am in a position to make this statutory declaration about the facts attested to.	
		REMUNERATION OF CONTRACTOR'S EMPLOYEES ENGAGED TO CARRY OUT WORK IN CONNECTION WITH THE CONTRACT	
	3	All remuneration payable to the Contractor's relevant employees for work done in connection with the Contract to the date of this statutory declaration has been paid and the Contractor has made provision for all other benefits accrued in respect of the employees.	
		Relevant employees are those engaged in carrying out the work done in connection with the Contract.	
		Remuneration means remuneration or other amounts payable to relevant employees by legislation, or under an industrial instrument, in connection with work done by the employees [s127(6) of the <i>Industrial Relations Act 1996</i> (NSW)].	
		REMUNERATION OF THE EMPLOYEES OF SUBCONTRACTORS ENGAGED TO CARRY OUT WORK IN CONNECTION WITH THE CONTRACT	
	4	The Contractor <i>is/is not</i> a principal contractor for the work done in connection with the Contract, as defined in section 127 of the <i>Industrial Relations Act 1996</i> (NSW).	Delete the words <i>in italics</i> that are not applicable.
	5	Where the Contractor is also a principal contractor for work done in connection with the Contract, the Contractor has been given a written statement in its capacity of principal contractor under section 127(2) of the <i>Industrial Relations Act 1996</i> (NSW) by each subcontractor in connection with that work stating that all remuneration payable by each subcontractor to the subcontractor's relevant employees for work done in connection with the Contract to the date of this declaration has been paid, and each subcontractor has made provision for all other benefits accrued in respect of each subcontractor's employees.	
	6	I am aware that the <i>Industrial Relations Act 1996</i> (NSW) requires any written statement provided by subcontractors must be retained for at least 6 years after it was given and declare that the Contractor has accordingly made arrangements for the secure retention of the written statements.	

# WORKERS COMPENSATION INSURANCE OF THE CONTRACTOR'S WORKERS

7 All workers compensation insurance premiums payable by the Contractor to the date of this statutory declaration in respect of the work done in connection with the Contract have been paid. This statutory declaration is accompanied by a copy of any relevant certificate of currency in respect of that insurance.

# WORKERS COMPENSATION INSURANCE FOR WORKERS OF SUBCONTRACTORS

- 8 The Contractor *is / is not* a principal contractor for work done in connection with the Contract, as defined in section 175B of the *Workers Compensation Act 1987* (NSW).
- 9 Where the Contractor is also a principal contractor for work done in connection with the Contract, the Contractor has been given a written statement under section 175B of the *Workers Compensation Act 1987* (NSW) in the capacity of principal contractor in connection with that work to the intent that all workers compensation insurance premiums payable by each subcontractor in respect of that work done to the date of this statutory declaration have been paid, accompanied by a copy of any relevant certificate of currency in respect of that insurance.
- 10 I am aware that the *Workers Compensation Act 1987* (NSW) requires any written statement provided by subcontractors and any related certificate of currency must be retained for at least 7 years after it was given and declare that the Contractor has accordingly made arrangements for the secure retention of the written statements.

#### EMPLOYER UNDER THE PAY-ROLL TAX ACT

- 11 The Contractor *is registered as / is not required to be registered as* an employer under the *Pay-roll Tax Act 1971* (NSW).
- 12 All pay-roll tax payable by the Contractor in respect of wages paid or payable to the relevant employees for work done in connection with the Contract to the date of this statutory declaration has been paid.
- 13 The Contractor *is / is not* a principal contractor for work done in connection with the Contract, as defined in section 31G of the *Pay-roll Tax Act 1971* (NSW).
- 14 Where the Contractor is also a principal contractor for work done in connection with the Contract, the Contractor has been given a written statement under section 31H of the *Pay-roll Tax Act 1971* (NSW) in the capacity of principal contractor in connection with that work to the intent that all pay-roll tax payable by each subcontractor in respect of the wages paid or payable to the relevant employees for that work done to the date of this statutory declaration has been paid.
- 15 I am aware that the *Pay-roll Tax Act 1971* (NSW) requires any written statement provided by subcontractors must be retained for at least 5 years after it was given and declare that the Contractor has accordingly made arrangements for the secure retention of the written statements.

#### PAYMENTS TO SUBCONTRACTORS

- 16 The Contractor has paid every subcontractor, supplier and consultant all amounts payable to each of them by the Contractor as at the date of this statutory declaration with respect to engagement of each of them for the performance of work or the supply of materials for or in connection with the Contract.
- 17 The provisions of clause "SECURITY OF PAYMENT", if included in the Contract, have been complied with by the Contractor.
- 18 The Contractor has been informed by each subcontractor and consultant to the Contractor (except for subcontracts and agreements not exceeding \$25,000 at their commencement) by written statement in equivalent terms to this declaration (made no earlier than the date 14 days before the date of this declaration):

.1 that their subcontracts with their subcontractors, consultants and suppliers comply with the requirements of clause "SECURITY OF PAYMENT", if included in the Contract, as they apply to them; and

Delete the words *in italics* that are not applicable.

Delete the words *in italics* that are not applicable.

Delete the words *in italics* that are not applicable.

Revision Date: 24/09/07

		1. GENERAL CONDITIONS OF CONTRACT AND ANNEXURE
		.2 that all of their employees, subcontractors, consultants and suppliers, as at the date of the making of such a statement have been paid all remuneration and benefits due and payable to them by, and had accrued to their account all benefits to which they are entitled from, the subcontractor or consultant of the Contractor or from any other of their subcontractors or consultants (except for their subcontracts and agreements not exceeding \$25,000 at their commencement) in respect of any work for or in connection with the Contract.
	19	I am not aware of anything to the contrary of any statutory declaration referred to in paragraph 18 of this declaration and on the basis of the statements provided, I believe the matters set out in paragraph 18 to be true.
	20	And I make this solemn declaration, as to the matters aforesaid, according to the law in this behalf made, and subject to the punishment by law provided for any wilfully false statement in any such declaration.
Signature of Declarant		declared at
Place		
Date		on
		before me
Signature of lega authorised perso before whom the declaration is ma	n*	
Name and title of	f	
person* before whom the declard is made	ation	
Notes:		
	1. In this	declaration:
(a)		principal contractor", "employee", "employees" and "relevant employees" have the meanings under the relevant Acts;
(b)	the word "s Act; and	ubcontractor" in paragraphs 5, 6, 9, 10, 14 and 15 has the meaning applicable under the relevant
(c)		he words "Contractor", "subcontractor", "supplier" and "consultant" have the meanings given able under the Contract.
2. * The	declaration 1	nust be made before one of the following persons:
(a) w	here the decl	aration is sworn within the State of New South Wales:

(NSW); or

(b) where the declaration is sworn in a place outside the State of New South Wales:

a justice of the peace of the State of New South Wales;

(i) a notary public; or

a notary public; or

(i)

(ii)

(iii)

(iv)

(ii) any person having authority to administer an oath in that place.

NSW Parliament House - Lighting Upgrade

a solicitor of the Supreme Court of New South Wales with a current practising certificate;

another prescribed person legally authorised to administer an oath under the Oaths Act 1900

#### Clause

#### 1.1

The Principal is the Presiding Office.

#### Notices and Submissions to the Principal

Notices and Submissions to the Principal must go to the Principal's Representative.

#### 1.2

The Principal's Representative is : Alistair Leonard

and is located at: Parliament House of NSW, Macquarie Street, Sydney NSW 2000.

If no name is stated the Principal is to name the person in writing within 7 days after accepting the tender. The Principal may at any time change the person for any reason whatsoever by giving written notice.

#### 1.3

The Principal's Agent is : Robert Nielsen

and is located at: Parliament House of NSW, Macquarie Street, Sydney NSW 2000.

If no name is stated the Principal is to name the person in writing within 2 days of the Contractor giving written notice of a dispute under Clause 16. The Principal may at any time change the person for any reason whatsoever by giving written notice.

#### 3.2

The period to submit the completed design before its use for construction is: NOT APPLICABLE.

# 5.2

The Principal has arranged insurance of the Works and public liability through insurance broker Marsh Pty Ltd.

The insurance policy is at:

www.managingprocurement.commerce.nsw.gov.au/system/index\_contract\_manage ment\_insurance\_policies.doc

#### **6.1**

The time to give possession of Site is: 7 days after the Principal accepted the tender.

#### 11.1

The period for Completion is: 13 calendar weeks.

### 13.3

The Milestones and Percentages are as below:

Milestone	Percentage (%)
Program of Works	5%
Delivery of equipment (including motion detectors, luminaires, luminaire components, lamps, etc) to site	10%
Replace and retrofit all 1 x 65W and 2 x 65W recessed troffer luminaires as	30%

per Item No. 2.1 & 2.2 of the Schedule of Lump Sums	
Replace and retrofit all 1 x 65W and 2 x 65W bare batten luminaires as per Item No. 2.3 & 2.4 of the Schedule of Lump Sums	20%
Replace all 1 x 65W surface mounted prismatic diffuser luminaires as per Item No. 2.5 of the Schedule of Lump Sums	10%
Provide all motion detectors as per Item No. 2.6 & 2.7 of the Schedule of Lump Sums	10%
Delivery of supply of spares for storage as per Item No. 2.8 of the Schedule of Lump Sums	5%
Provision of Commissioning and Testing certification	5%
Defects Liability Period	5%

### **14.1**

The Defects Liability Period, which commences at Completion of the Works is: 52 weeks.

### END OF SECTION – GENERAL CONDITIONS OF CONTRACT AND ANNEXURE

# THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

# **2 PRELIMINARIES**

# THERE ARE 19 PAGES IN THIS SECTION

# 1 ADMINISTRATION AND CONTRACTING

## 1.1 ELECTRONIC COMMUNICATIONS

The parties agree and consent that notices and communications may be by electronic communication in accordance with the *Electronic Transactions Act 2000* (NSW).

# 1.2 LONG SERVICE LEVY

Before commencing the works, the Contractor must:

- pay to the Building and Construction Industry Long Service Payments Corporation or the Corporation's agent the amount of the long service levy payable under the *Building and Construction Industry Long Service Payments Act 1986* (NSW); and
- produce to the Principal the document evidencing payment of the levy.

Additional information and the Levy Payment Form are available at: www.lspc.nsw.gov.au

# 1.3 COLLUSIVE ARRANGEMENTS

The Contractor must comply with the NSW Government *Code of Practice for Procurement*, which is available at:

www.treasury.nsw.gov.au/procurement/cpfp\_ig.htm.

# 1.4 CONTRACTOR PERFORMANCE REPORTING

During the course of the Contract, the Contractor's performance may be monitored and assessed in accordance with the *Performance management system guidelines* at:

www.managingprocurement.commerce.nsw.gov.au/system/index\_performance\_management.d oc

# 1.5 EXCHANGE OF INFORMATION BETWEEN GOVERNMENT AGENCIES

The Contractor authorises the Principal and its employees and agents to make information concerning the Contractor and its performance available to other NSW government agencies and local government authorities, which may take such information into account in considering whether to offer the Contractor future opportunities for work.

The Principal regards the provision of information about the Contractor to any NSW government agency or local government authority as privileged under the *Defamation Act 2005*. The Contractor agrees that it will have no entitlement to make any claim against the Principal in respect of any matter arising out of the provision or receipt of such information.

# 1.6 NATSPEC SUBSCRIPTION

If any of the Contractor's Documents are based on NATSPEC, then the Contractor must provide to the Principal proof of the Contractor's current NATSPEC subscription.

File G:\Tenders\eRFT\1\_COMMERCE\0PWS\GA0\2007\0701487 - Parliament Hse Lighting\2. Working\0701487\_ParliamentHse\_LightingUpgrade\_MW\_A.doc

### 1.7 GOODS AND SERVICES TAX

All prices, rates and other amounts referred to under the Contract must include GST if it is payable.

The Principal will issue payment schedules in the form of Recipient Created Tax Invoices. The Contractor must not issue Tax Invoices in respect of the Contract.

The Principal will issue Adjustment Notes in respect of adjustment events known to the Principal. The Contractor must notify the Principal of details of any adjustment event not known to the Principal.

Each party warrants it is registered for GST at the time of entering into the Contract, and must notify the other party if it ceases to be registered for GST or to satisfy any requirements for the issue of Recipient Created Tax Invoices.

#### 1.8 PASSING OF PROPERTY AND RISK

Unless otherwise provided, items supplied by the Contractor become the property of the Principal when unloaded as required in the Contract. Such items remain at the risk of the Contractor until property therein passes to the Principal.

# 1.9 APPLICATION OF SCHEDULE OF CONTRACT ADDITIONS AND DEDUCTIONS

If the quantity stipulated in Item 2 of the Schedule of Lump Sum Items differs from the actual on-site quantity, amounts indicated in Item 3 of the Schedule of Contract Additions and Deductions shall be used for Contract Variations. The contractor must provide in writing to the Principal's Representative the actual on-site quantity of luminaires with each progress payment claim. Written approval from the Principal's Representative must be sought via a Site Instruction before the contractor carries out Contract Additions.

In addition, the cost amounts indicated in the Schedule of Contract Additions and Deductions shall be used in Principal's Representative requested Contract Adjustments.

# 1.10 QUALITY MANAGEMENT REQUIREMENTS

#### **Design Plan**

Prior to commencing design work, prepare and implement a Design Plan complying with the NSW Government *Quality Management Systems Guidelines (QMS Guidelines)*, covering each phase of design and addressing the key activities.

The QMS Guidelines are available at:

<u>www.managingprocurement.commerce.nsw.gov.au/system/index\_procurement\_guideline\_docu</u> <u>ments.doc</u>

#### **Inspection and Test Plans**

Prepare and implement Inspection and Test Plans, complying with the QMS Guidelines, incorporating the Hold and Witness points specified in the Contract.

Submit copies of Inspection and Test Plans and checklists not less than 7 days before commencing the work to which they apply. Also submit certification that the relevant Inspection and Test Plans of Subcontractors and Consultants meet the requirements of the *QMS Guidelines*. Do not start any work before this documentation is submitted.

Give at least 24 hours notice prior to reaching a Hold or Witness point.

The Contractor must not proceed beyond a Hold point without endorsement by the Principal or its authorised representative.

The Principal, at its discretion, may inspect the work at a Witness point, but work may proceed without endorsement.

Endorsement by the Principal at a Hold or Witness point does not release the Contractor from its obligations to achieve the specified requirements of the Contract.

Surveillance (monitoring) by the Principal will apply to all work associated with the Contract.

### **Inspection and Test Plan Schedule**

Prepare and use Inspection and Test Plans for the following particular activities. Incorporate the listed Hold and Witness points which require attendance by the Principal's Representative.

Activity requiring Inspection & Test Plan	Stage of Work requiring inspection of test	H or W point (for attendance by Principal's Representative)
Complete Inspection & Test Plan and associated checklist	With each payment claim for signed off documents and as otherwise required in this Clause	W
Quality or test records obtained from manufacturers and suppliers	Prior to equipment procurement	Н
Safe Work Method Statements and safety management Plan	In accordance with Clause <b>OHS</b> <b>Management</b>	Н
Luminaire functional tests including spot lux level measurements	Progressively	W
Notice of Electrical Work Form	At Completion	W
Acceptance testing and final inspection	Progressively and at Completion of the Works	W
As specified elsewhere in the Contract	As specified elsewhere in the Contract	As specified elsewhere in the Contract

### **Failure to Comply**

If the Contractor fails to comply with the requirements of this clause, the Principal may implement such inspections and tests as the Principal determines and the cost incurred by the Principal shall be a debt due from the Contractor.

#### 1.11 AUSTRALIAN AND NEW ZEALAND GOODS

Do not supply or incorporate into the Works any items imported into Australia except:

- items manufactured in New Zealand;
- items included in Tender Schedules Schedule of Imported Materials and Equipment lodged with the Tender and accepted by the Principal;
- a single item with an imported content valued at less than 2% of the Contract Sum or \$20,000, whichever is the lesser. If an item is one of a group of similar items, the group shall be considered as one single item.

The Principal will not pay for imported goods supplied or incorporated into the Works in breach of the provisions of this clause.

## 1.12 SECURITY OF PAYMENT

#### General

In this clause "subcontract" includes an agreement for supply of goods or services (including professional services and plant hire) or both and "subcontractor" includes a supplier of goods or services (including professional services and plant hire) or both.

The Contractor shall ensure that each subcontract, whether written or oral, entered into by the Contractor or any subcontractor in respect of the work under the Contract and which has a value of \$25,000 or more at the commencement of the subcontract, includes provisions in the form or to the effect of the form, as the case may be, of those contained in this clause, including the provisions of this subclause.

### **Options as to Form of Security**

Each subcontract which -

- requires the subcontractor to provide a cash security to its principal;
- allows the subcontractor's principal to deduct retention moneys from any payment made by it to the subcontractor; or
- provides for both of the above

shall allow the subcontractor the option at any time to provide an unconditional undertaking or unconditional undertakings in lieu of a cash security or retention moneys. To the extent that the subcontractor provides an unconditional undertaking or undertakings, the subcontractor's principal shall not deduct retention moneys and shall forthwith release to the subcontractor any retention moneys or cash security then held.

### **Trust for Cash Security and Retention Moneys**

Each subcontract shall include a provision having the effect that:

- When a party receives or retains security in cash or converts security to cash, that security is held in trust by the security holder from the time of receipt, retention or conversion, as the case may be, and the security holder must forthwith deposit the money into a trust account in a bank selected by that party;
- the moneys shall be held in trust for whichever party is entitled to receive them until they are paid in favour of that party and the security holder shall maintain proper records to account for such moneys; and
- any interest earned by the trust account shall not be held in trust, and shall be owned by the party holding the security.

If the party holding security has a policy of insurance protecting subcontract payments due to the other party which is equivalent to the HIA Security of Payment Bond, then compliance with the above of this subclause is not required.

Whenever requested by the Principal to provide evidence verifying that the Contractor is holding in trust an amount which the Contractor should be holding in trust, the Contractor shall provide evidence to the reasonable satisfaction of the Principal that the amount is held in trust. If the Contractor fails to do so then, in addition to any other remedy which the Principal may have against the Contractor, the Principal may withhold an equivalent amount from payments to the Contractor.

#### **Payments**

Each subcontract shall include:

- an obligation, which takes precedence over any inconsistent provision of the subcontract, for the subcontractor's principal to pay the subcontractor regular progress payments of 100% of the value of work, goods or services provided by the subcontractor less only retention moneys, if any, paid into the trust account referred to in subclause **Trust for cash security and retention moneys**;
- an entitlement to progress payments within the following periods after the date upon which a progress claim is lodged by the Contractor with the Principal's Representative:
  - in the case of the Contractor's subcontractors, 28 days;
  - in the case of all other subcontractors, 35 days,

Compliance with this subclause shall not prevent the Contractor from paying a subcontractor an amount in excess of that claimed from the Principal, or paying before the time stipulated in this subclause.

### **Alternative Dispute Resolution**

Each subcontract shall include provisions incorporating the dispute resolution procedures outlined in the Contract except that, in each case, it shall not be mandatory for the subcontractor to pursue the contractual dispute resolution mechanism if the only remedy sought by the subcontractor is an order that the subcontractor's principal pay to it an amount which is not disputed to be due and payable under the subcontract.

### **Documents to be Provided to Subcontractors**

Each subcontract shall include a provision which requires the subcontractor's principal to provide to the subcontractor, before the subcontractor commences work under the subcontract, a copy of the following provisions of the contract between the subcontractor's principal and its principal:

- the provision equivalent to this Preliminaries clause Security of Payment; and
- the clauses relating to proof of payment of subcontractors, times for payment claims and payment and alternative dispute resolution.

# **Register of Subcontracts**

Maintain a register of all subcontracts which have a value of \$25,000 or greater showing brief details of the subcontract work, the name, address and telephone number of the subcontractor, and provide an up to date copy of the register when requested by the Principal's Representative.

If further requested by the Principal's Representative, provide an unpriced copy of the subcontract agreement within 14 days of such request.

# 1.13 ADDITIONAL SECURITY AND OBLIGATIONS FOR TRUSTEES

If the Contractor is a trustee:

- before commencing the Works, the Contractor must give the Principal an unconditional undertaking as security for any amount previously agreed in writing by the parties. The unconditional undertaking must be in the form detailed in Schedule 1- **Approved Form of Unconditional Undertaking** and from a financial institution acceptable to the Principal.
- The security will be retained by the Principal against the due and proper performance of the Contract by the Contractor. Unless the Principal has made or intends to make a demand against the unconditional undertaking, the Principal will return the unconditional undertaking within 14 days after the date of Completion of the Works determined or agreed by the Principal.

- The Contractor must not prevent the Principal making any demand against the unconditional undertaking, or prevent the provider of an unconditional undertaking complying with the unconditional undertaking or any demand by the Principal, but the Contractor may seek damages if the Principal makes a demand in breach of the Contract.
- The Contractor must ensure that, for the duration of the Contract, the total value of the trust beneficiaries' loans to the trustee is always greater than the total value of trust beneficiaries' loans from the company.

# 1.14 INDUSTRIAL RELATIONS MANAGEMENT

#### Requirement

The Contractor must comply with the NSW Government Industrial Relations Management Guidelines .

Submit, before beginning work on the Site, confirmation that the Contractor will comply with the industrial relations aspects of the NSW Government *Code of Practice for Procurement* and the associated Implementation Guidelines.

#### Failure to comply

If at any time the Contractor has not carried out its obligations under this clause - **Industrial Relations Management**, then notwithstanding any other provision of the Contract, no payment is due to the Contractor until the 7<sup>th</sup> day after the required action has been carried out.

#### 1.15 PROTECTION OF CHILDREN AND OTHER VULNERABLE PEOPLE

#### Employees

The Contractor must not employ or permit to be employed on work under the Contract at the Site a person whom the Principal advises the Contractor poses unacceptable risks to children or other vulnerable people cared for at that site.

The Contractor must not employ or permit to be employed on work under the Contract at the Site a person who has been convicted of a serious sex offence and is a prohibited person under the *Child Protection (Prohibited Employment) Act 1998* (NSW).

#### **Code of behaviour**

The Contractor must ensure that all persons working on the Site, including but not limited to the Contractor's employees and managers, consultants, subcontractors and suppliers (Contractor Employees) understand and comply with the requirements shown below:

- All Contractor Employees must gain permission to enter the school or facility before commencing work and may only enter approved areas. The Contractor's representative or where a subcontractor is working without the supervision of the Contractor, the subcontractor's representative must report their presence to the person in charge of the school or facility on arrival each day and record, in the Site Visit Log, the details of all Contractor's or subcontractor's employees working at that site that day.
- Contractor Employees should avoid talking with, touching or interacting with any children or residents or other users of the school or facility except where the work requires it or in an emergency or safety situation.
- Contractor Employees must only use approved toilets and other facilities, unless the person in charge of the school or facility gives written authority to use alternative arrangements.
- The work area must not be able to be used or accessed by children, or residents or other users of the school or facility while work is in progress. Clear signs and barricades (where appropriate) must be used to prevent any inadvertent or unauthorised access.

- Appropriate privacy must be maintained when working on toilets and similar facilities. Contractor Employees must ensure that toilets and similar facilities are not occupied or in use by children, residents or other users before entering to perform work, and that work does not continue when use of the facilities is required. Where practicable male employees should perform work on male facilities and female employees on female facilities.
- Contractor Employees must wear clothing that is tidy and in good condition, including a shirt and shorts, trousers or a skirt at all times.
- Contractor Employees should report any concerns about children's behaviour or child abuse to the person in charge of the school or facility.
- Contractor Employees must wear or carry an identity card at all times when on the Site.

### 1.16 AUDIT AND REVIEW

Make available, on request, all records, including those of or relating to Subcontractors or suppliers, relevant to compliance with requirements of the Contract, for the purposes of audit, review or surveillance. Provide all reasonable assistance during the audits or reviews including attendance by the Contractor.

Promptly implement effective corrective action on matters disclosed by audit or review.

# 2 SITE AND WORKS

#### 2.1 WORKING HOURS AND WORKING DAYS

Unless the Contract provides otherwise the Site is available to the Contractor to perform the Works between 7 am and 5 pm Monday to Friday but excluding public holidays.

The Principal's Representative may approve additional working hours or working days, subject to conditions which may include, but are not limited to:

- restrictions on the performance of work which requires supervision; and
- a requirement that the Contractor meet the costs of supervision, by or on behalf of the Principal, of work performed during the additional working hours or working days.

# 2.2 EXISTING SERVICES

#### Locating Existing Services – Dial Before You Dig

The Contractor is responsible for locating services.

Before commencing excavation the Contractor must obtain, from the Dial Before You Dig information service or relevant public authorities or owners of underground services, written confirmation of the exact positions of all underground services at and around the Site, and verify and prominently mark the locations of the underground services on the Site.

#### **Dealing with Existing Services**

Existing services (such as drains, watercourses, public utilities, telecommunications and other services) obstructing the Works or if damaged in the course of the Contract, must be dealt with as follows:

- if the service is to be continued: repair, divert, relocate as required;
- if the service is to be abandoned: cut and seal or disconnect and make safe as required;

#### **Cost and Delay**

Where an existing service is damaged by the Contractor for any reason whatsoever, the Contractor shall bear all costs and any delays for repairing or disconnecting the service.

#### **Notification**

Notify the Principal's Representative immediately upon the discovery of services obstructing the Works not shown in the Contract documents.

### 2.3 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

#### **Specification and Statutory Requirements**

The Contractor must comply with the NSW Government Occupational Health and Safety Management Systems Guidelines 4<sup>th</sup> Edition (OHSM Guidelines) and all statutory requirements including, but not limited to, the Occupational Health and Safety Act 2000 (NSW) and Occupational Health and Safety Regulation 2001 (NSW). In the event of any inconsistency, the Contractor must comply with the statutory provisions.

#### Appointment as principal contractor

The Contractor, having responsibility for the construction work at all times until the work is completed under the Contract, is appointed principal contractor and controller of the premises for the construction work under Clause 210 of the *Occupational Health and Safety Regulation 2001* (NSW), and is authorised to exercise such authority of the owner as is necessary to enable it to discharge the responsibilities of principal contractor and controller of premises imposed by the *Occupational Health and Safety Act 2000* (NSW) and Chapter 8 of the *Occupational Health and Safety Regulation 2001* (NSW).

### Design

The Contractor must ensure that systematic assessments are undertaken in carrying out any design required, that:

- identify hazards and analyse the associated risks, probability and consequences of injury or illness;
- involve consultation with appropriate people on the safe construction, use and maintenance of the designed asset;
- establish a Design Hazard Register for the designed asset to record any hazards not eliminated in the design that may impose a risk to those constructing, using or maintaining the asset.

An up to date copy of the Design Hazard Register must be provided to the Principal at the date of Completion of the Works or the date the Works are occupied or taken over, whichever is earlier.

#### Site-specific Safety Management Plan

Develop and implement a Site-specific Safety Management Plan that complies with the OHSM Guidelines.

Submit the Site-specific Safety Management Plan no later than 14 days before construction work commences. Do not start construction work before a complying Site-specific Safety Management Plan has been submitted.

Ensure the following risks are covered in the Site-specific Management Plan:

- Electrocution
- Prevention of falls

- Slips, trips and falls
- Manual handling
- Prolonged exposure to noise
- Prolonged exposure to bright lights

This list of risks is not exhaustive and must not be relied upon by the Contractor. The Contractor must undertake its own detailed analysis of all occupational health and safety risks under the Contract.

#### **OHS Management Monthly Report**

Submit, no later than the seventh (7<sup>th</sup>) day of each month, an OHS Management Monthly Report, detailing *Inspection, testing and servicing* activities, *Internal reviews* and *Incident management and corrective action*, and including the information listed below, as evidence of the implementation of the Project OHS Management Plan during the previous month.

#### **Contract Details**

- Contract
- Contractor
- Contractor's representative
- Signature and Date
- Period Covered

Implementation of *Risk management* (OHSM Guidelines Section 5, element 1)

Summary of OHS inspections and reviews carried out to identify risks and hazards and ensure risk management controls are being implemented for:

- plant and equipment
- incoming products
- work site conditions
- adherence to and completeness of Risk Assessments, Safe Work Method Statements and Site Safety Rules
- work site access and exits
- personal protective equipment

**Implementation of OHS training** (OHSM Guidelines Section 5, element 3)

An up to date copy of the Induction Register and details of OHS training carried out.

Implementation of Incident management (OHSM Guidelines Section 5, element 4)

Details of:

- any OHS incidents or OHS issues, including non-compliance with OHS procedures and near misses
- implementation of incident management
- implementation of corrective action

• OHS statistics for entire the Contract including:

	This Month	Total Cumulative
Number of Lost Time Injuries		
Number of Hours Worked		
Number of Hours Lost Due to Injury		
Lost Time Injury Frequency Rate LTIFR		
Number of OHS Management Audits		
Number of OHS Inspections		

Implementation of Safe Work Method Statements (OHSM Guidelines Section 5, element 6)

An up to date copy of the register of Safe Work Method Statements, including confirmation that the principal contractor has ensured that all Safe Work Method Statements comply with the *OHS Regulation 2001* and that their implementation is being monitored.

#### **Incident Reports**

Ensure compliance with the notification and other requirements of *OHS Regulation 2001* Clauses 341 and 344 for accidents, incidents and non-disturbance occurrences, including immediate notification of WorkCover where required.

Immediately notify the Principal of any accident or incident defined in *OHS Regulation 2001* Clauses 341 and 344.

Provide a written report to the Principal within twenty-four hours of the incident, giving details of the incident and evidence that notification requirements have been met.

When requested, provide an incident investigation report, including identification of the cause of the incident and corrective actions taken, in the form directed.

#### Prohibition and Improvement Notices and On-The-Spot Fines

Immediately notify the Principal of any Prohibition and Improvement Notice (PIN) or on-thespot fine issued by WorkCover. Provide the Principal with a copy of the PIN or fine notice and written details of the corrective action taken by the Contractor and/or the applicable subcontractor to rectify the breach and to prevent recurrence.

#### **Electrical work on electrical installations**

In compliance with section 207 of the *OHS Regulation 2001*, ensure that electrical work on an electrical installation is not carried out while the circuits and apparatus of the part of the installation that is being worked on are energised, unless it is necessary to do so in the interests of safety and the risk of harm would be greater if the circuits and apparatus were de-energised before work commenced.

#### **Independent Certification of Formwork**

In this clause, the terms "qualified engineer" and "formwork" have the meanings given in Clause 209 of the *OHS Regulation 2001*. "Related Entities" means businesses, one of which is owned wholly or in part by the other or that have proprietors, directors, officers, shareholders or employees in common.

Inspection and certification of formwork, if required by Clause 233 of the *OHS Regulation* 2001, must be carried out by a qualified engineer who is not a proprietor, director, officer, or employee either of the entity carrying out the formwork erection or a Related Entity to that entity. In addition, if the Contractor carries out the design of the formwork, then the qualified engineer must not be a proprietor, director, officer or employee either of the Contractor or a Related Entity to the Contractor.

If such inspection and certification are required, the Contractor and any subcontractors involved must include the inspection and certification as actions in Safe Work Method Statements for the erection and use of formwork, and they must be hold points in the Contractor's and subcontractors' Inspection and Test Plans.

Submit formwork certification before commencing the use of the formwork. Do not use the formwork before this certification is submitted.

### Failure to Comply

If at any time the Contractor has not carried out its obligations under the Contract in relation to occupational health and safety management, then notwithstanding any other provisions of the Contract, no payment will be due to the Contractor until the 7<sup>th</sup> day after the required action has been carried out.

# 2.4 HAZARDOUS SUBSTANCES

#### Definition

Hazardous Substance means a substance that is listed in the document entitled *List of Designated Hazardous Substances* published by Worksafe Australia; or a substance that fits the criteria for a hazardous substance set out in the document entitled *Approved Criteria for Classifying Hazardous Substances* published by Worksafe Australia.

Asbestos, material containing asbestos, polychlorinated biphenyl (PCB) and lead based paints are recognised as hazardous substances. Other substances in certain situations are also considered hazardous and therefore require controlled handling. Examples are glues, solvents, cleaning agents, paints, and water treatment chemicals.

Work involving stone, rock, concrete, masonry and such materials containing silica, is work under the Contract whether explicitly identified in the Specification or not. The Contractor is responsible for the control of any hazard which may arise from the presence of silica.

# **Response to Unexpected Discovery**

If any hazardous substance not specified in work under the Contract is discovered on the Site the Contractor must suspend all work which may result in exposure to such hazardous substance and notify the Principal's Representative immediately of the type of substance and its location.

With the initial notification, or as soon as practicable thereafter, submit details, including:

- the additional work and additional resources the Contractor estimates to be necessary to deal with the substance so that work and subsequent use of the Works may proceed safely and without risk to health
- the time the Contractor anticipates will be required to deal with the substance and the expected delay in achieving Completion;
- the Contractor's estimate of the cost of the measures necessary to deal with the substance; and
- other details reasonably required by the Principal's Representative

The Contractor must, in planning and carrying out any work dealing with the substance take all reasonable steps:

- to carry out the work concurrently with other work wherever possible; and
- to otherwise minimise effects of the work on the Contractual Completion Date.

#### **Responsibility For Decontamination**

Control and decontamination of any hazardous substances is the responsibility of:

- the Principal, in respect of any such substances not identified in the Contract Documents, which are discovered on the Site; and
- the Contractor, in respect of any such substances identified in the Contract Documents.

### **Decontamination By Principal**

Where the Principal is responsible for the control and decontamination of any hazardous substances, the Principal's Representative may suspend the whole or any part of the Works until the hazardous substances are isolated or removed.

#### **Decontamination By Contractor**

Where the Contractor is responsible for the control and decontamination of the Site following the discovery of hazardous substances, handle, use, isolate, remove and dispose of such substances in accordance with statutory requirements.

The Environment Protection Authority or Waste Service NSW may advise of suitable disposal sites.

#### **Working Hours**

When the Contractor is required to decontaminate hazardous substances on occupied Sites, all such decontamination shall be carried out outside normal hours of occupation, unless otherwise approved in writing by the Principal's Representative. Normal hours of occupation are between 8:30am and 4:00pm and normal days of occupation are Monday to Friday inclusive.

### 2.5 ASBESTOS REMOVAL

#### Requirement

Where the Contractor is responsible for asbestos removal work, comply with the relevant statutory requirements, standards, codes and guidelines, including but not limited to the:

- Occupational Health and Safety Act 2000 (NSW)
- Occupational Health and Safety Regulation 2001 (NSW)
- WorkCover Authority of NSW requirements
- Australian Safety and Compensation Council Code of Practice for the Safe Removal of Asbestos 2<sup>nd</sup> Edition (2005)
- Australian Safety and Compensation Council Code of Practice for the Management and Control of Asbestos in Workplaces (2005)
- Australian Safety and Compensation Council *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres* 2<sup>nd</sup> Edition (2005)
- Environmentally Hazardous Chemicals Act 1985 (NSW)
- Waste Avoidance and Resource Recovery Act 2001 (NSW)

#### **Notification and Permit**

Not less than seven days prior to commencing any asbestos removal work, notify the local office of WorkCover and the Principal of the intention to carry out that work.

Where the regulations require a licence for asbestos removal work, before the work commences, submit a copy of the current licence held by the entity that will undertake the work and a copy of any WorkCover permit required for the work.

### Monitoring

Provide air monitoring by an independent testing authority on each day during asbestos removal and on completion of each area where removal has been undertaken.

#### **Clearance Certificate**

Submit to the Principal a clearance certificate from an independent testing authority at the completion of the asbestos removal work.

### 2.6 ENVIRONMENTAL MANAGEMENT SYSTEM

#### Requirement

The Contractor must comply with the NSW Government *Environmental Management Systems Guidelines*.

### **Project Environmental Management Plan**

Document and implement a Project Environmental Management Plan that complies with the NSW Government *Environmental Management Systems Guidelines*.

The Contractor may elect to complete Preliminaries Schedule – **Project Environmental Management Plan** as required to suit the project and implement the completed version as the Project Environmental Management Plan.

Submit the Project Environmental Management Plan no later than 7 days before construction work commences. Submit revisions to the Plan

#### **Incident Reports**

Ensure compliance with the notification and other requirements of the *Protection of the Environment Operations Act 1997* (NSW).

Immediately notify the Principal of any pollution incident that may cause material harm to the environment, providing evidence that notification requirements of the *Protection of the Environment Operations Act 1997* (NSW) have been met, if applicable.

When requested, provide an incident investigation report, including identification of the cause of the incident and corrective actions taken, in the form directed.

#### Failure to comply

If at any time the Contractor has not carried out its obligations under this clause - **Environmental management**, then notwithstanding any other provisions of the Contract, no payment will be due to the Contractor until the  $7^{th}$  day after the required action has been carried out.

# 2.7 ECOLOGICALLY SUSTAINABLE DEVELOPMENT

#### **Restricted Timbers**

Do not use the following timbers or their products for work under the Contract:

- rainforest timbers, unless certification is provided that they are plantation grown;
- timber from Australian high conservation forests.

### 2.8 WASTE MANAGEMENT

#### Requirement

Implement waste minimisation and management measures, including:

- recycling and diverting from landfill surplus soil, rock, and other excavated or demolition materials, wherever practical;
- separately collecting and streaming quantities of waste concrete, bricks, blocks, timber, metals, plasterboard, paper and packaging, glass and plastics, and offering them for recycling where practical.

Ensure that no waste from the site is conveyed to or deposited at any place that cannot lawfully be used as a waste facility for that waste.

#### **Monitoring**

Monitor and record the volumes of waste and the methods and locations of disposal.

Submit a progress report every two months, and a summary report before Completion, on the implementation of waste management measures, including the total quantity of material purchased, the quantity purchased with recycled content, the total quantity of waste generated, the total quantity recycled, the total quantity disposed of and the method and location of disposal in the form of a *Waste Recycling and Purchasing Report*, which is available at:

www.managingprocurement.commerce.nsw.gov.au/contract\_management/cm\_sf\_waste\_recycl ing\_and\_purchasing\_report.doc

With the *Waste Recycling and Purchasing Report*, submit waste disposal dockets and/or company certification confirming appropriate, lawful disposal of waste.

#### 2.9 PEST CONTROL

Do not use any chemical pesticides or termicides for new construction work. Use preventive treatment by physical means to minimise the risk of pest infestations.

Chemical treatments may be used in existing buildings only as a last resort for the eradication of pest and termite infestations. Chemical pesticides used for this purpose must be registered by the National Registration Authority for Agricultural and Veterinary Chemicals and applied by a Pest Control Operator licensed by WorkCover.

Pest preventive methods must comply with AS 3660.1-2000 Protection of Buildings from Subterranean Termites (except for references to chemical soil barriers), as well as supplementary standards for existing buildings.

#### 2.10 WORK METHOD

If the Contract prescribes a particular work method or the Principal or Principal's Representative directs that a particular work method must be used to the exclusion of the other work methods, then that work method is part of the Contract.

Otherwise, the work method is not part of the Contract and the Contractor is free to use any work method. This is so even though, before or after acceptance of the tender, the Contractor made known to the Principal the Contractor's proposed work method and the Principal accepted or approved it.

If the work method is not part of the Contract, the fact that the proposed work method is impractical or impossible or the Contractor, with or without the approval of the Principal's Representative, uses another work method will:

• not entitle the Contractor to make a claim on the Principal;

- not be grounds for an extension of time for Completion;
- not cause the Contract to be frustrated.

#### 2.11 STANDARDS

Where the Contract requires compliance with a standard or Code, unless otherwise specified that Standard or Code shall be the one current at the closing date for tenders, except for the Building Code of Australia, which shall be the one current at the Date of Completion.

Where the Contract refers to an Australian Standard it does not preclude the adoption of a relevant international standard.

#### 2.12 CLEANING UP

All visible external and internal surfaces, including fittings, fixtures and equipment, must be free of marks, dirt, dust, vermin and unwanted materials, at Completion.

#### 2.13 **PROPRIETARY ITEMS**

Identification by the Principal of a proprietary item does not necessarily imply exclusive preference for that item, but indicates the required properties of the item.

The Contractor may offer an alternative to any proprietary item. Apply in writing for approval to use the alternative. The request must be accompanied by all available technical information and describe how, if at all, the alternative differs from the proprietary item and how it will affect other parts of the Works and performance of the Works.

Except to the extent that the approval, if any, of the Principal's Representative includes a contrary provision, the approval shall be deemed to include the conditions that:

- use of the alternative must not directly or indirectly result in any increase in the cost to the Principal of the Works;
- the Contractor must indemnify the Principal against any increase in costs;
- use of the alternative must not directly or indirectly cause any delay to the Works and if it does, the Contractor will compensate the Principal for any loss which the delay causes.

#### 2.14 GUARANTEES

#### Generally

Obtain and ensure that Parliament House Building Services will have the benefit of warranties or guarantees as specified in the Contract or offered by suppliers, including warranties or guaranties that are obtained by, or offered to the subcontractors of the Contractor.

# 2.15 SCHEDULE TO PRELIMINARIES - ENVIRONMENTAL MANAGEMENT PLAN

ISSUE	OBJECTIVE	HOW THE OBJECTIVE WILL BE ACHIEVED. ACTIONS REQUIRED TO ACHIEVE THE OBJECTIVE	WHEN THE ACTIONS WILL BE TAKEN	WHO WILL ENSURE THAT THE OBJECTIVE IS ACHIEVED	ACTION ACTUALLY TAKEN TO ACHIEVE THE OBJECTIVE	OTHER RECORDS AND WHERE THEY ARE KEPT
General						
Vehicles and plant	Exhaust emissions are minimised	No vehicles or plant producing excessive exhaust emissions will be used				
Emergencies - Incident reporting.	All environmental incidents are reported to the Principal's Representative. immediately	All environmental incidents will be reported to the Principal's Representative immediately				
Emergencies - Spills	Spills are contained, damage to the eco-system minimised and rectification organised	Emergency procedures to handle spills including oil and chemicals will be established before delivery begins				
Other environmental emergencies	Damage to the eco-system from environmental emergencies is minimised	Emergency procedures to handle other foreseeable environmental emergencies will be established				
Compliance	Compliance with	The Contractor will:				
Audit	environmental requirements and, if breaches are detected, rectification of defects	<ul> <li>Cooperate with periodic environmental audits; and</li> </ul>				
		<ul> <li>Rectify any environmental breaches identified within the time frame specified in the audit</li> </ul>				
Noise	Minimal detrimental impact	Adherence to EPA, Council and other noise limits will be mandatory				
		Equipment will be kept in good repair and condition				
		The Contractor will contact, co- operate and coordinate with neighbouring facility operators				

ISSUE	OBJECTIVE	HOW THE OBJECTIVE WILL BE ACHIEVED. ACTIONS REQUIRED TO ACHIEVE THE OBJECTIVE	WHEN THE ACTIONS WILL BE TAKEN	WHO WILL ENSURE THAT THE OBJECTIVE IS ACHIEVED	ACTION ACTUALLY TAKEN TO ACHIEVE THE OBJECTIVE	OTHER RECORDS AND WHERE THEY ARE KEPT
Waste - Quantity of materials	Minimal quantity of waste materials generated as a consequence of the Contract	Development and implementation of a strategy to reduce the quantity of waste generated as a consequence of the Contract				
Waste Disposal	<ul> <li>Appropriate and lawful disposal of waste associated with the Contract including:</li> <li>Packaging materials;</li> <li>Replaced or redundant parts or materials;</li> <li>Chemicals;</li> <li>Oils and grease from machinery;</li> <li>Paints and solvents including the cleaning of equipment, tools and brushes;</li> <li>Cleaning materials and rags;</li> <li>Trade Waste;</li> <li>Materials unsuitable for re-use; and</li> </ul>	Identify lawful places for disposal of all types of waste generated as a consequence of the Contract. Ensure that no waste from the site is conveyed to or deposited at any place that cannot lawfully be used as a waste facility for that waste. Record, for all waste, the method and location of disposal, and whether or not that location was a place that could lawfully be used as a waste facility for that waste. Submit to the Principal's Representative reports, including the record of waste disposal and method and location of disposal; and immediate reports of the details of any waste from the site which has been conveyed or deposited at any				
	• Other waste	place that cannot lawfully be used as a waste facility for that waste.				

ISSUE	OBJECTIVE	HOW THE OBJECTIVE WILL BE ACHIEVED. ACTIONS REQUIRED TO ACHIEVE THE OBJECTIVE	WHEN THE ACTIONS WILL BE TAKEN	WHO WILL ENSURE THAT THE OBJECTIVE IS ACHIEVED	ACTION ACTUALLY TAKEN TO ACHIEVE THE OBJECTIVE	OTHER RECORDS AND WHERE THEY ARE KEPT
Records	Sufficient records to demonstrate appropriate environmental management Notifications and Fines from	This Environmental Management Plan and modifications to suit this Contract will be submitted to the Principal's Representative				
	the EPA and the resulting Corrective Action	The Environmental Management Plans will be updated as required				
		Appropriate progress and other reports will be submitted to the Principal's Representative				
		The Principal's Representative will be notified of all EPA action and Fines from the EPA and the resulting Corrective Action				
		All records will be securely filed using an effective document retrieval system				
Delivery						
Vehicle access	Damage to the ecosystems on Site is minimised	All vehicles and plant will access the site along designated routes				
Parking of vehicles and plant.	Damage to the ecosystems on Site is minimised	All vehicles and plant will park in designated areas				
Movements of Pedestrians, materials and equipment	Damage to the ecosystems on Site is minimised	All pedestrian materials and equipment movement from and to vehicles will be along approved access routes				
Wash down of vehicles and plant.	Stormwater is not polluted by residues from wash down	Vehicles and plant will be washed down only in areas approved by the Principal's Representative for this purpose				

ISSUE	OBJECTIVE	HOW THE OBJECTIVE WILL BE ACHIEVED. ACTIONS REQUIRED TO ACHIEVE THE OBJECTIVE	WHEN THE ACTIONS WILL BE TAKEN	WHO WILL ENSURE THAT THE OBJECTIVE IS ACHIEVED	ACTION ACTUALLY TAKEN TO ACHIEVE THE OBJECTIVE	OTHER RECORDS AND WHERE THEY ARE KEPT
Removal and Making Good						
Reinstatement	Re-instatement of damaged eco-systems to their previous condition	Relevant areas of Site will be cleaned and re-instated				

**END OF SECTION - PRELIMINARIES** 

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

# **3. TECHNICAL REQUIREMENTS**

# 1 **GENERAL**

## 1.1 BACKGROUND

The purpose of the Technical Requirements Section is to specify the requirements to upgrade the nominated existing lighting system at NSW Parliament House.

Most of the general office luminaires at NSW Parliament House were installed when the building was extended in about 1980. Many luminaires are thus approximately 27 years old and are nearing the end of their serviceable life.

Fttings in offices on levels 11 and 12 were recently upgraded, approximately two years ago.

Most of the office and meeting room luminaires are of the 5 foot tubular fluorescent recessed type, mounted in the ceiling with air distribution outlets, fitted with single 65 Watt lamp, rapid start control gear, polished aluminium semi-circular specular reflector, power factor correction capacitor and a 15 cell louvre. The luminous opening is approximately 1,510 mm x 160 mm. One active conductor supplies the ballast and the other active supplies the filament transformer.

Most of the car park and plant room luminaires are of the 5 foot tubular fluorescent bare tube batten type, fitted with single 65 Watt lamp, rapid start control gear, white polycarbonate endcaps and power factor correction capacitor. One active conductor supplies the ballast and the other active supplies the filament transformer.

Most of the fire stair luminaires are of the 5 foot tubular fluorescent surface mounted prismatic diffuser type, fitted with single 65 Watt lamp, linear diffused batten, rapid start control gear, white polycarbonate end-caps and power factor correction capacitor. One active conductor supplies the ballast and the other active supplies the filament transformer.

Existing luminaires may be inspected at NSW Parliament House at the pre-tender site meeting as specified in CLAUSE 5.3 of the Conditions of Tendering section.

Decisions made to constrain cost of the refurbishment were:

- $\Rightarrow$  to retain the existing suspended ceiling system,
- $\Rightarrow$  replace or retrofit the existing recessed low-brightness louvre type luminaires with energy efficient luminaires or retro-fit kits with nominal dimensions of 1,540mm x 190mm, fitted with air boots, using as much of the existing wiring as possible,
- $\Rightarrow$  replace the existing bare tube batten and surface mounted linear diffused type batten fittings with energy efficient fittings using as much of the existing wiring as possible and,
- $\Rightarrow$  to retain the existing HVAC air distribution system,

## 1.2 SCOPE

At the NSW Parliament House, investigate, design, supply, install and commission a complete energy efficient lighting system as follows:

Design a lighting system for all office and larger room areas lighting systems using lowbrightness luminaires fitted with linear 35 Watt T5 (16mm diameter) fluorescent lamp, utilising replacement luminaires or retrofit kits for the existing luminaires with new control gear utilising electronic ballasts, lampholders and lamps. Existing specular reflectors and louvres may be used if suitable or replaced with new specular reflectors and multi-cell louvres. The existing luminaire layout is to be used so the air distribution will not be changed.

Existing 65W linear fluorescent bare batten luminaries located in car park areas, plant room areas and storage areas are to be replaced with new batten fittings as per CLAUSE 3.9. Existing wiring is to be retained as much as possible.

Existing 65W linear diffused battens located in fire stairs areas are to be replace with new surface mounted prismatic diffused fittings as per CLAUSE 3.10. Existing wiring is to be retained as much as possible.

Exisitng luminaires located on level 10 of the NSW Parliament House building shall **NOT** form part of this lighting upgrade.

Existing luminaires located in offices and meeting rooms fitted with a recessed prismatic diffuser type luminaire or pendent type luminaire are **NOT** part of this lighting upgrade. Existing downlights are also **NOT** part of this lighting upgrade.

The contractor shall forward any ambiguities in the document at the time of tender for the works specified. Claims for extra costs based on the lack of knowledge of the documents will not be accepted after submission of the tender.

## 1.3 NUMBER OF LUMINAIRES TO BE REPLACED

Section 4 NSW PARLIAMENT HOUSE LIGHTING SCHEDULE provides details of the estimated numbers and types of luminaires. It should be stressed that this schedule may not be 100% accurate and a Schedule of Contract Additions and Deductions is included in the Tender Form for flexibility to cover any discrepancies.

## 2 LIGHTING SYSTEMS PERFORMANCE REQUIREMENT

The Contractor shall design a lighting system for NSW Parliament House that complies with the performance requirements of this specification. The Contractor shall submit the lighting design to the Principal's Representative for approval before placing orders for luminaires.

The lighting installation in the offices and meeting rooms shall comply with AS 1680. Maintenance illuminance levels shall be equal to or greater than the recommendations contained in AS 1680.2.2 Table F1 for General Tasks involving typing, Reading and Writing, i.e. 320 lux. The glare index shall be equal to or less than the recommendations contained in AS 1680.2.2 Table F1 for General Tasks involving typing, Reading and Writing i.e. 19.

Maintenance illuminance levels shall be equal to or greater than the recommendations contained in AS 1680.2.2 Table F1 for Screen-based Task Areas with average detail reference material, i.e. 320 lux. The glare index shall be equal to or less than the recommendations contained in AS 1680.2.2 Table F1 for Screen-based Task Areas with average detail reference material i.e. 16.

The lamp output to be used in glare index testing shall be that nominated in clause 3.5, Fluorescent Lamps, at the optimum output temperature. The uniformity of illuminance within all rooms and areas shall not be less than 0.7.

The replacement lighting systems shall be energy efficient to minimise energy consumption. This will require the use of highly efficient luminaires with a photometric performance that provides even light distribution based on continuous rows of luminaires at approximately 1,800 mm centres. For the purpose of calculating maintained illumination levels in interior, office and meeting room areas, the following data shall be used:

- height from the ceiling to the working plane, 2.0 metres,
- reflection factor of the ceiling, 75%,
- reflection factor of the walls, 30%,
- reflection factor of the floor, 10% and,
- maintenance factor of 0.8.

Contract No: 0701487

## 3 **REPLACEMENT LUMINAIRES**

#### 3.1 GENERAL

Preference shall be given to offers that provide luminaires of Australian and New Zealand origin. Manufacturers of known satisfactory performance in recent Crown Property Portfolio lighting upgrades, include:

Energy Conservation Systems Pty Ltd (contact Ray Rudkin tel: (02) 9983 1144),

Moonlighting International (contact Simon Orgill tel: (02) 9838 7732),

Pierlite Pty Ltd (contact Simon Morrison tel: (02) 9794 9393).

Thorn Lighting Pty Ltd (contact Scott Tindale tel: (02) 9757 5300),

All equipment will be securely held to the luminaire via mechanical fixings, eg the use of "Velcro" and glue etc is not acceptable.

Unless otherwise approved, the following new components shall be of the same manufacture throughout the lighting upgrade:

- All luminaires or retro-fit kits,
- All lamps and
- All electronic control gear.

## 3.2 FLUORESCENT LUMINAIRES

The existing 65 Watt T12 fluorescent lamp troffer luminaires recessed into the ceiling are to be replaced with new luminaires or upgraded with a retro-fit kit with the performance and components as detailed in CLAUSES 3.5, 3.6, 3.7 and 3.8. Luminaires shall contain lamp(s) rated at 35 Watts. The lamp(s) shall be easily replaced without the use of tools. New troffer luminaires shall be similar in appearance to existing troffer luminaires and supplied with flexible cabling of suitable length to suit the existing socket outlet locations. Plug sockets fitted to new luminaires shall match the existing lighting socket outlets. The upgraded luminaires are to be of an equal standard as, and similar in appearance to, those recently upgraded on levels 11 and 12.

The components of replacement luminaires for the luminaires shown in Section 4 NSW PARLIAMENT HOUSE LIGHTING SCHEDULE shall comply with CLAUSES 3.5 and 3.6.

## 3.3 LOCATION

Contract No: 0701487

The existing luminaire locations shall be maintained. The Contractor is to ensure the lighting systems for all areas exceed the Lighting Systems Performance Requirement as specified in CLAUSE 2. Additional luminaires shall be provided to ensure the Lighting Systems Performance Requirements are met or exceeded. The exact location of new additional luminaires must be approved by the Principal's Representative prior to placing orders for new luminaires.

# 3.4 REPLACEMENT LUMINAIRE PERFORMANCE

Luminaires shall be of the high output types. **Replacement luminaires shall have a minimum light output ratio as shown in the following table:** 

Luminaire Type	Light Output Ratio
1 x 35 Watt Recessed Low- Brightness Louvre Troffer	75%
2 x 35 Watt Recessed Low- Brightness Louvre Troffer	75%

The luminaire internal reflective surfaces shall have a reflectance of greater than 85%.

The nominated upgraded or replacement luminaire will be type-tested for photometric data, in an approved NATA accredited laboratory. Results are to be submitted to the Principal's Representative for endorsement before any luminaires are manufactured. This data shall also be supplied in the MANUALS as stipulated in CLAUSE 4.8.

All new luminaires or luminaire components when assembled shall comply with AS 4051 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment. All new luminaires or new gear trays shall be clearly labelled with a C-tick Mark and associated Registration Label.

The recessed troffer luminaires shall be designed to ensure the lamps operate at approximately their optimum operating temperature, i.e.  $35^{\circ}$ C, to achieve maximum light output.

All equipment shall be designed for a nominal 240 voltage with the possibility of periods at 265 volts. The contractor may fit voltage regulators to sub-circuits.

All new luminaires shall have a power factor of 0.95 or higher.

# 3.5 FLUORESCENT LAMPS

All fluorescent lamps shall:

- Have a colour temperature of 4000degK, be of the tri-phosphor type manufactured by a reliable supplier such as Osram, Philips or Sylvania,
- Be guaranteed to be compatible with the electronic control gear,
- Have a guaranteed life of 16,000 hours, based on a 3 hour warm start switching cycle with electronic gear,
- Have a 10% drop, or less, in luminous flux after 16,000 operating hours.

Linear fluorescent lamps shall be of the following types:

• T5 (16mm diameter) type with rating of 35 Watt, output of 3,650 lumens at 35<sup>o</sup>C and nominal length of 1,449mm for all luminaires contained within Section 4 NSW PARLIAMENT HOUSE LIGHTING SCHEDULE.

## 3.6 FLUORESCENT LAMP BALLASTS

All fluorescent lamp ballasts shall be of the high frequency electronic type manufactured by a reliable supplier such as Osram, Philips or Atco Tridonic. Electronic ballasts shall have a designed mean service life of 50,000 hours at a maximum ambient temperature of at least  $50^{\circ}$ C.

In twin lamp luminaires, the ballast shall be of the type that allows one lamp to continue normal operation when the other lamp has failed. All ballasts shall be of the soft start (pre-heat) type.

Lamp Wattage	<b>Circuit Power (Watts)</b>
Single 35 Watt (T5)	39.2
Twin 35 Watt (T5)	78.4

Ballasts for linear lamp luminaires shall comply with EEI-Class A2 and the circuit power shall not exceed the power as shown in the following table at 240Volts:

## 3.7 **REFLECTORS**

Aluminium and silver film reflectors shall have a total reflectance of greater than 94%. Reflectors can be constructed of aluminium or silver film with a 10 year warranty against surface deterioration leading to a reduction of reflective performance. Highly reflective white paint with a total reflectance of 85% or higher may be used on reflective surfaces in lieu of aluminium and silver film reflectors only if the required luminaire Light Output Ratios can be achieved without the use of aluminium and silver film reflectors.

If the existing reflector is to be used in the upgraded luminaire, it shall be maintained in accordance with AS/NZS 1680.4:2001, Section 6, clauses 6.1 to 6.4 inclusive.

Soft cotton gloves shall be worn then handling the existing or replacement reflectors.

## 3.8 GLARE CONTROL DEVICES

Glare control devices in recessed troffer fittings shall be of the low brightness type, multi-cell louvres to minimise glare.

If the existing louvre is to be used in the upgraded luminaire, it shall be maintained in accordance with AS/NZS 1680.4:2001, Section 6, clauses 6.1 to 6.4 inclusive. If the existing louvre is to be used, the Contractor shall confirm by a certified test report from a NATA accredited laboratory and computer software that the performance requirements in clause 2, especially the glare index requirements, shall by met or exceeded.

Soft cotton gloves shall be worn then handling the existing or replacement cellular louvres.

## 3.9 REPLACEMENT BARE BATTEN LUMINAIRES

Existing 65W linear fluorescent bare batten fittings are to be replaced throughout car park areas, storage areas and plant room areas in NSW Parliament House according to Items 2.3 and 2.4 of the Schedule of Lump Sum Items. The replaced linear fluorescent bare batten fitting must be identical to either of the following:

Model	Version	Manufacturer	Code
Fino T5 Bare	1 x 35WT5	Pierlite	FN135BE4M
Fino T5 Bare	2 x 35WT5	Pierlite	FN235BE4M
Square Line T5 (SL- T5)	1 x 35W	Harcroft	SL135
Square Line T5 (SL- T5)	2 x 35W	Harcroft	SL235

Alternative fittings may be submitted at the time of tender but will only be accepted if they can be demonstrated to be equivalent or better than the fittings listed above in the following aspects:

NSW Parliament House - Lighting Upgrade

- Dimensions
- Appearance
- Luminous output
- Light Output Ratio

The location and layout of replaced luminaires must be coincident with the existing luminaire location and layout.

## 3.10 REPLACEMENT SURFACE MOUNTED PRISMATIC DIFFUSER LUMINAIRES

Existing 65W linear fluorescent surface mounted prismatic diffuser fittings are to be replaced in all fire stairs areas in NSW Parliament House according to Item 2.5 of the Schedule of Lump Sum Items. The replaced linear fluorescent surface mounted prismatic diffuser fitting must be identical to either of the following:

Model	Version	Manufacturer	Code
Fino T5 Linear Diffused	1 x 35WT5	Pierlite	FN135DE4M
Fino T5 Linear Diffused	2 x 35WT5	Pierlite	FN235DE4M
Square Line T5 (SL- T5)	1 x 35W + Diffuser Kit	Harcroft	SL135/49 + SZDK
Square Line T5 (SL- T5)	2 x 35W + Diffuser Kit	Harcroft	SL235/49 + SZDK

Alternative fittings may be submitted at the time of tender but will only be accepted if they can be demonstrated to be equivalent or better than the fittings listed above in the following aspects:

- Dimensions
- Appearance
- Luminous output
- Light Output Ratio

The location and layout of replaced luminaires must be coincident with the existing luminaire location and layout.

## 3.11 EXISTING WIRING

The contractor shall use the existing wiring system in the building. The contractor shall also provide new wiring and sockets, as required, to any additional luminaires required from existing circuits. The use of double adaptors is prohibited.

## 4 ADDITIONAL REQUIREMENTS

## 4.1 SUPPLY OF SPARES FOR STORAGE

For spares, tenders are to be priced as follows:

- Supply for storage an additional one hundred (100) recessed troffer luminaires or retrofit kits, complete with 1x35 Watt T5 lamp, electronic control gear and multi-cell louvre.
- Supply for storage an additional four (4) recessed troffer luminaires or retro-fit kits, complete with 2x35 Watt T5 lamp, electronic control gear and multi-cell louvre.
- Supply for storage one hundred (100) electronic ballasts to suit the 1x35 Watt T5 lamp luminaires, as spares after the defects liability period.
- Supply for storage four (4) electronic ballasts to suit the 2x35 Watt T5 lamp luminaires, as spares after the defects liability period.
- Supply for storage two hundred (200) 35 Watt T5 lamps, as spares after the defects liability period.
- Supply for storage fifty (50) bare batten luminaires complete with 1 x 35 Watt T5 lamp, and electronic control gear, as spares after the defects liability period.
- Supply for storage ten (10) bare batten diffuser kits as spares after the defects liability period.
- Supply for storage eight (8) bare batten luminaires complete with 2 x 35 Watt T5 lamp, and electronic control gear, as spares after the defects liability period.
- Supply for storage ten (10) motion detector kits, as spares after the defects liability period.

Spare luminaires and diffusers shall be delivered to Parliament House and stored in a location nominated by the Principal's Representative. Spare luminaires and diffusers shall be packaged in sealed cardboard containers.

## 4.2 MAINTENANCE OF LUMINAIRES

Existing luminaires that are retrofitted or augmented are to be maintained as follows:

- thoroughly clean the inside and outside of luminaire;
- wash both sides of any diffuser, or lens, and reflector with a non ionic and non corrosive solution, drip dry and replace using cotton gloves.

Refer to AS/NZS 1680.1 Section 12, AS/NZS 2293.2:1995 and AS/NZS 2293.2:1995/Amdt 1-1998 for additional details.

Notify the Principal's Representative if any capacitors containing PCB are found in any luminaires to remain.

#### 4.3 EQUIPMENT SPECIFICATIONS AND DESIGN DATA

The Contractor shall provide in the MANUALS as per CLAUSE 4.8:

- A certified test report from a NATA accredited laboratory of the replacement luminaires used in the lighting upgrade that includes the light output ratio, luminaire power, intensity data and summary, uniformity diagram and comments on any uncertainties.
- Calculations of expected maintained lux levels on desktops with luminaires using the row centres and distance between luminaires in the installed configuration for the office areas. For the purpose of calculating maintained illumination levels, the following data shall be used:
  - height from the ceiling to the working plane, 2.0 metres,

NSW Parliament House - Lighting Upgrade

- reflection factor of the ceiling, 75%,
- reflection factor of the walls, 30%,
- reflection factor of the floor, 10% and,
- maintenance factor of 0.8.
- Glare index calculations for the open plan office area using the height and reflection factors from above, the data contained in the certified test report and the lamp lumen output specified in CLAUSE 3.5.

## 4.4 MOTION DETECTOR SWITCHES

Provide movement detectors to operate luminaire switching in all rooms within toilet areas on levels 5-12 of NSW Parliament House. In addition provide movement detectors within rooms 734 and 734E on level 7 of NSW Parliament House as shown in Section 4 NSW PARLIAMENT HOUSE LIGHTING SCHEDULE. The movement detectors are to operate in series with the existing light switches, i...e. they only turn lights on when local switch is in the 'ON' position.

Timer: Incorporate 'on' timer adjustable between 1 and 5 minutes minimum and 10 and 30 minutes maximum.

Standard: To AS 2201.3.

Type: Passive infra-red.

## 4.5 WORKS PROGRAM

Within 7 days of the acceptance of the tender, the contractor shall submit a program detailing the manufacture, supply, delivery to site, installation and commissioning of this section of the works.

## 4.6 WORKING HOURS AND WORKING DAYS

The Site is generally available to the Contractor to perform the Works between 7 am and 5 pm Monday to Friday but excluding public holidays.

No work is to be carried out on site during NSW Parliament sitting days. This includes periods when the Legislative Council is sitting, the Legislative Assembly is sitting and both houses are sitting. A sitting day calendar is available from the following website:

http://www.parliament.nsw.gov.au/

Generally both houses will not sit during the months January and February and during school holiday periods.

## 4.7 INSPECTION

Contract No: 0701487

Acceptance testing: Notify the Principal's Representative that the installation is ready for acceptance only after the Quality Assurance Inspection and Testing reports as detailed in the Inspection & Testing are filled with "Yes" answers. Minimum notice required is 5 working days.

## 4.8 MANUALS

#### Requirement

Before the date of Practical Completion, the contractor shall provide three copies of the Operating and Maintenance Manual.

Manuals shall contain to following items:

- Table of Contents;
- Project Directory that includes contact details of the Consultants, Principal's Representative, Contractor and luminaire manufacturer;
- Technical Description of the project;
- Material Specifications including technical brochures of every item supplied in the contract;
- All documentation specified in clause 4.2, Equipment Specifications and Design Data above;
- Copies of Notification of Electrical Work;
- Emergency Evacuation Lighting Equipment Schedule for any new items installed;
- Drawings of all luminaires supplied and;
- Copies of distribution board schedules if changes have been made.

Preference is for A4 size, printed or typed on durable printing paper, with each page consecutively numbered, and neatly bound in durable vinyl or similar hard covers.

#### 4.9 CLEANING UP

All visible external and internal surfaces, including fittings, fixtures, air boot outlets and inlets, ceiling and equipment, must be free of marks, dirt, dust, vermin and unwanted materials, at Completion. The contractor shall remove dirt from around air boots when a retrofit kit is installed.

The Contractor will provide and place protective covers over all work areas, workstations and desks. All visible external and internal surfaces, including fittings, fixtures and equipment, must be free of marks, dirt, dust, vermin and unwanted materials, at completion. The Contractor shall clean up the work areas daily or immediately work has finished in that area for the day. Each work area shall be vacuumed to collect dirt and dust.

All areas that work has been underaken in the previous 24 hours shall be cleaned and inspected by the contractor before 7 am of that day. The Principal's Representative may also carry out an inspection. The completed work will not be accepted unless these inspections are satisfactory.

## 4.10 WASTE MANAGEMENT

#### Requirement

All redundant components of the luminaires, except working 65Watt lamps become the property of the Contractor. All working 65Watt lamps shall be placed in cardboard containers and returned to the Principal's Representative. All other redundant components shall be removed from site.

Recycle and divert from landfill surplus materials, wherever this is practical. Also separately collect and stream quantities of waste concrete, bricks, blocks, timber, metals, plasterboard, paper and packaging, glass and plastics and offer them for recycling where practical.

The Principal's Representative shall nominate an area where a waste removal bin can be placed. This bin shall be covered at all times, except when loading with waste materials. The Contractor is to keep the area around the bin tidy and free of any spilt waste materials.

Ensure that no waste from the site is conveyed to or deposited at any place that cannot lawfully be used as a waste facility for that waste.

# 5 STANDARDS

#### **Referenced Documents**

- AS 1125 Conductors in insulated cables and flexible cords
- AS 1345 Identification of the contents of piping, conduits and ducts
- AS 1680 Interior Lighting
- AS 2053 Non-metallic conduits and fittings
- AS 2293 Emergency evacuation lighting for buildings
- AS/NZ 3000 SAA Wiring Rules
- AS 3008 Electrical installations Selection of Cables Part 1 Cables for alternating voltages up to and including 0.6/1 kV
- AS 3013 Electrical installations Wiring systems for specific applications
- AS 3760 In-service safety inspection and testing of electrical equipment
- AS 4051 Limits and methods of measurement of radio disturbance, characteristics of electrical lighting and similar equipment

## 6 AUTHORITIES' APPROVALS

#### **Requirements**

Documents evidencing approval of regulatory authorities, to be provided before practical completion or other specified dates.

#### Works by Authority

If the responsible authority, pursuant to statutory powers vested in it, elects to perform or supply part of the Works, make the necessary arrangements with the authority.

#### **Supply Authority Requirements**

Provide the works required by the supply authority to complete the electrical services installation, include the installation of equipment supplied by the authority.

#### Fees

Pay any fee lawfully imposed by Supply Authority for inspection.

## 6.2 TESTING AND COMMISSIONING

#### Notice

The contractor shall give sufficient notice so the Principal's Representative may witness tests. Minimum notice required is 5 working days.

#### **Notification of Electrical Work**

Before the date of Practical Completion, the contractor shall provide one copy of each "Certificate of Compliance Electrical Work" as submitted to the Electricity Distributor and the Office of Fair Trading.

#### Site Testing

The contractor shall perform functional checks including spot lux level measurements. Evidence of this must be included in the MANUALS as per CLAUSE 4.8

#### **Faulty Installation**

During testing, the contractor shall replace all equipment damaged as a result of incorrect installation work.

# 7 ACCESSORIES

## 7.1 ACCESSORIES STANDARDS

#### Generally

To AS /NZ 3000.

## 7.2 POSITIONING OF CONTROL DEVICES

Locate all controls in a position that is practical and affords easy access when required.

## 7.3 ACCESSORIES INSTALLATION

MOUNTING GENERALLY: Accessories will be generally surface-mounted, unless directed to be flush-mounted for special circumstances. Unless otherwise indicated, such circumstances are expected to occur at maximum of 10% of all accessory installation points. For surface mounting use standard, proprietary mounting blocks wherever available.

RESTRICTED LOCATION: Do not install wall boxes across the junction of wall finishes.

FIXING: Use corrosion resistant fixings for external locations. Avoid fixing to hollow blocks. Where approved, use M5 electro-galvanised, round head screws and spring loaded butterfly toggles for fixings to hollow section.

MOUNTING BLOCKS: Fix mounting blocks with four screws in accordance with Fixing in Conduits, Generally - Electrical Services. Use one of the following fixings to suit the surface:

- Steel wood screw, No. 8, countersunk, cadmium plated, or
- No. 8, electro-galvanised, binding head, self tapping, or
- M5, round head, cadmium plated.

SURFACE MOUNTING DUCTING: Unless otherwise specified, use surface mounted ducting in accordance with OTHER WIRING ENCLOSURES.

## 8 MOUNTING

#### NOGGINGS.

Where required for fixing, provide noggings of similar size to the timber joists, and of minimum size 75x50 mm.

#### PACKING.

Where required, packing of approved material to level the luminaires and to prevent distortion. FIXING.

Provide fixings into structural members of ceilings or walls. Do not fix fitting to junction boxes.

#### MINIMUM SIZE.

The minimum size of fixing for luminaires, hangers, or brackets for various surfaces is as follows:

- To timber: Steel wood screw No. 10 x 25mm, round head, cadmium plated.
- To concrete: Approved screw expanding bolts M5 x 40mm

• To hollow blocks: M5 electro galvanised, round head screws with spring loaded butterfly toggles.

Where a deep cast iron junction box is provided in the building, use M5 metal screws with approved expanded fixings at each end.

#### ALL FIXINGS

Fit with large diameter (minimum 3 x screw dia.) cadmium plated washer under the head of each screw.

SURFACE MOUNTED FLUORESCENT LUMINAIRES Provide minimum two fixings near each end.

SURFACE MOUNTED NARROW LUMINAIRES For fittings less than 100mm wide provide one fixing near each end

## 9 CABLES

## 9.1 CABLE INSTALLATION

REQUIREMENT

All cables and cable enclosures to be concealed unless approved by the Principal's Representative.

## 9.2 CABLE MANUFACTURE

STANDARDS

Conductors: To AS 1125

Selection of Cables: To AS 3008.1

## 9.3 CABLE SELECTION

#### STANDARDS

To AS/NZ 3000 and AS 3008.1. To AS 3012 for construction and demolition sites.

RATINGS.

Unless otherwise specified use AS 3008.1 for the determination of current ratings and voltage drop.

#### CONDUCTORS.

Minimum size: to AS/NZ 3000 Clause 3.5. Unless otherwise specified, and where available, use multi-stranded copper conductors.

#### CONTROL CIRCUITS CONDUCTORS.

Copper, minimum size: 1.5 mm<sup>2</sup>

#### PVC INSULATED CABLES.

Unless otherwise specified use V75 insulation.

## 9.4 CABLE INSTALLATION

#### STANDARDS.

NSW Parliament House - Lighting Upgrade

To AS/NZ 3000 and AS 3013.

To AS 3012 for construction and demolition sites. To AS 3013 for specific application

REQUIREMENT.

All cables and cable enclosures to be concealed unless approved by the Principal's Representative

TPS cables may be used in the concealed suspended ceiling space.

All surface run cables to be enclosed in metal or PVC wiring duct.

MANUFACTURERS' RECOMMENDATIONS.

Unless otherwise specified, install, terminate and joint cables in accordance with manufacturers' recommendations.

#### HANDLING CABLES.

Handle cables so as to avoid damage to insulation and serving or sheathing. Report all damage and replace or repair damaged cable as directed.

STRAIGHT THROUGH JOINTS.

Unless unavoidable due to length or difficult installation conditions, run cables for their entire route length without intermediate straight-through joints. Locate approved joints as directed.

#### CONDUIT DROPS.

For surface or concealed wiring in TPS cables to switches, outlets and similar terminations, provide conduit drops originating at an accessible point in the roof space.

#### TPS CABLING.

Install TPS cabling so that it may be fully replaced.

TPS cabling to be attached to the underside of the floor slab or a building structure member and not attached or laid on the ceiling grid.

#### CONDUCTORS.

Colours: For fixed wiring colour the conductor insulation or, if this is not practicable, slide not less than 150 mm of close fitting coloured sleeving to each conductor at the termination points as follows:

- Active conductors in single phase circuits: RED
- Switched active conductors to fittings: WHITE
- Other conductors: To AS/NZS 3000 Clause 3.8

Sheathing colour: White for flat TPS, Orange for circular cables.

#### DRAW-IN SYSTEM.

Carry out sub-circuit wiring in "Draw-in, Loop-in" system for both TPI and TPS cables. No intermediate connections to be made except for TPS cables where looping terminals may be used at switches, lighting fittings, etc.

## 9.5 SINGLE INSULATED WIRING IN CONDUIT

#### REQUIREMENT.

Complete and permanently fix the conduit run before installing the wiring. Use draw wires to pull in the conductor groups from outlet to outlet.

#### JUNCTION BOXES.

Do not make conductor joints in through runs of cables unless approved. Install boxes containing joints in accessible locations.

#### VERTICAL RUNS.

For vertical conduit runs in excess of 15 m make adequate provision for supporting the weight of the wiring to avoid insulation damage.

DAMAGED INSULATION.

Replace all wiring in conduits containing conductors with insulation damaged during installation, after determining and removing the cause of damage.

#### 9.6 COPPER CONDUCTOR TERMINATIONS

REQUIREMENT.

Terminate wiring in tunnel type connectors.

Small accessory and luminaires: Terminate wiring in tunnel type connectors.

Stud or pillar connections: Prevent stranded conductors from spreading. Twisting multistranded conductors is not considered adequate.

Ross Courtney terminations: May be used on conductors up to 4 mm<sup>2</sup>.

#### **RESTRICTIONS.**

Do not use forked type cable lugs that spread on tightening down.

CONNECTION TO CIRCUIT BREAKERS.

Double the conductors back in "Open Loop" form for connection of single strand conductors to tunnel terminals on circuit breakers.

WITHIN SWITCHBOARDS AND EQUIPMENT.

Loom and lace together, with PVC straps or string, all conductors from within the same cable or conduit from the point of cable sheath or conduit termination to the terminal block. Neatly bend each conductor to enter directly into the terminal tunnel or terminal stud section, allowing sufficient slack for easy disconnection and reconnection.

## 10 CONDUITS AND CABLE SUPPORTS

## 10.1 CONDUITS GENERALLY

STANDARDS.

Non-metallic conduits and fittings to AS 2053. Installation to AS 3000

MINIMUM SIZES.

Non-metallic conduits: 20 mm

COLOUR.

For exposed conduit, paint to match surroundings using minimum of undercoat plus two coats of paint of matching colour.

#### FIXINGS.

For 20, 25 and 32mm dia. conduits: Use one of the following fixings:

- To masonry, concrete and cement rendered walls: Steel wood screw No. 8 x 25mm, round head, cadmium plated, into 25mm long metallic plugs.
- To plastered walls: The same fixing as for masonry. However, the metallic plugs shall be 25mm minimum into the masonry and screws shall be of sufficient length to allow for the plaster thickness, eg. for 20mm thick plaster, use 44mm long screws.
- To timber: Where directly fixed, steel wood screw No. 8 x 20 mm, round head, cadmium plated. where fixed through fibreboard plasterboard, etc., the screws shall be of sufficient length to allow for the additional thickness.
- To sheet metal: No. 8x13mm long, electro galvanised binding head, and self-tapping screws.
- To steel: M5 cadmium plated, round head screws of appropriate length tapped or bolted.

## CONDUIT SYSTEM.

Unless otherwise specified, conceal all conduits. Install conduits in "draw in, loop in" system. Complete conduit system before wiring is drawn in. Do not use elbows and tees in inaccessible locations.

#### SUPPORT.

Unless otherwise specified, fix conduit saddles at a maximum of 1m intervals in horizontal runs and 2m intervals in vertical runs. Ensure that installed conduits are fully supported during construction.

#### PROTECTION IN ROOF SPACE.

Protect UPVC conduits installed in accessible roof spaces and the like by timber battens.

LENGTHS.

Up to the commercially obtainable conduit lengths of run, install conduits without joints. Remove all rags, burrs, and sharp edges from each length before completing each conduit joint. Fit moulded plastic screwed bushes to the free ends of metallic conduit runs before installing the conductors.

#### DRAW-IN BOXES.

Provide draw-in boxes at suitable intervals not exceeding 30 mm in straight runs, and at intervals not exceeding 25m in other runs including directional changes.

## 10.2 NON-METALLIC CONDUITS AND FITTINGS

#### TYPE.

Unless otherwise specified, use heavy duty type Associated fittings shall be of the same material as specified for the conduit.

Light duty UPVC conduits: These conduits may be used in concealed space, in slabs or in other areas not exposed to mechanical damage.

#### COLOUR.

For exposed conduit, paint to match surroundings.

## CONDUITS EXPOSED TO DIRECT SUNLIGHT.

In locations exposed to director sunlight use conduits and fittings of a type specially treated for such use.

NSW Parliament House - Lighting Upgrade

#### JOINTS.

Use cemented joints. Adopt the manufacturer's recommended procedure for making joints.

#### WALL BOXES.

Standard size wall boxes shall be of the same material as the conduit. Where special size boxes are specified, and where such boxes are not obtainable in UPVC, use pre-fabricated metal boxes.

#### CONDUIT ENTRIES.

Fix conduits to wall boxes, draw-in boxes, switchboards, luminaires etc. with screwed PVC adaptors and lock nuts, unless conduits can enter wall boxes via a moulded conduit entry. An approved grommet system may be used for conduit entry to metal boxes and switchboards.

#### FITTINGS.

Use inspection-type fittings in accessible and exposed locations.

CONDUIT SETTING.

Where practicable have conduits performed by the manufacturer. At site, use correctly sized springs to form set in UPVC conduit. Bends shall be of large radii and, after setting, shall maintain effective diameter and shape. Reject conduit sets distorted by kinks, wrinkles, flats or heating.

MECHANICAL DAMAGE.

In situations where the conduit is exposed to mechanical damage and external to buildings, provide mechanical protection to UPVC conduit for a height of not less than 3 m above ground or platform level.

## 10.3 FLEXIBLE CONDUIT

TYPE.

Use PVC flexible conduit with associated fittings unless otherwise specified.

Colour: For exposed conduit, paint to match surroundings.

USE.

In addition to its use on expansion joints, fit flexible conduit to equipment and plant subjected to vibration or where necessary for adjustment or ease of maintenance.

#### LENGTH.

The maximum length of a flexible conduit connection shall be 600 mm.

## **10.4 OTHER WIRING ENCLOSURES**

DUCTING.

Use proprietary type, of either metal or PVC.

COLOUR.

For exposed duct, paint to match surroundings using minimum of one coat of undercoat plus two coats of paint of matching colour.

MATERIAL.

Ductings and covers must be robustly constructed from heavy gauge material to avoid sagging between supports and warping.

NSW Parliament House - Lighting Upgrade

#### ASSOCIATED FITTINGS.

Provide associated fittings of similar material.

COVERS.

Use screw-fixed covers, unless installed in a location not readily accessible, where clip-on lids may be used. Covers must be easily removable.

FIXING.

Fixing methods must provide a smooth internal surface from the cables. Do not use self-tapping screws.

ENTRIES.

Round off sharp edges and provide PVC bushes or the like for cable entries into metallic ducting.

SUPPORT.

Rigidly support the duct in all locations.

CABLE SUPPORT.

Support the wiring by retaining clips at intervals not exceeding 1 m except where ducts are run horizontally with covers uppermost.

METAL DUCTS.

Minimum 0.8 mm thick and free from dags, burrs and sharp edges.

## END OF SECTION -TECHNICAL SPECIFICATION

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

# 4. NSW PARLIAMENT HOUSE LIGHTING SCHEDULE

LEVEL 1					
	1,540mm x 190mm Luminaires per Room				
ROOM NUMBER	Recessed Troffer Low- Brightness Louvre		Bare Batten		
	65W FL	2 x 65W FL	65W FL	2 x 65W FL	
101		2	1	4	
102	2		2		
103			70		
104				8	
105				4	
106	16				
107	8				
108	6				
109			8		
TOTAL	32	2	81	16	

	1,540mm	1,540mm x 190mm Luminaires per Room				
ROOM NUMBER	Recessed T Brightnes		Bare Batten			
	65W FL	2 x 65W FL	65W FL	2 x 65W FL		
(POOL) 205	1		1			
212			4			
213			3			
214				6		
215				11		
217	6		6			
Parking Bays			52			
Car Park			44			
TOTAL	7	0	110	17		

LEVEL 3				
	1,540mm x 190mm Luminaires per Room			
ROOM NUMBER	Recessed Troffer Low-Brightness Louvre		Bare	Batten
	65W FL	2 x 65W FL	65W FL	2 x 65W FL
301	1			
302	4			
306	4			
307	4			
308	2			
309	1			
310	15			
311	3			
Parking Bays			72	
Car Park			66	
TOTAL	34	0	138	0

#### LEVEL 4

	1,540mm x 190mm Luminaires per Room				
ROOM NUMBER	Recessed Troffer Low- Brightness Louvre		Bare Batten		
	65W FL	2 x 65W FL	65W FL	2 x 65W FL	
406			4		
407			2		
Parking Bays			80		
Car Park			65		
TOTAL	0	0	151	0	

	1,540mm x 190mm Luminaires per Room			
ROOM NUMBER	Recessed Troffer Low- Brightness Louvre		Bare Batten	
	65W FL	2 x 65W FL	65W FL	2 x 65W FL
502	4		4	
506	2		2	
520			1	16
521				13
522				10
534 - 535			2	
536	4			
TOTAL	10	0	9	39

LEVEL 6				
	1,540	0mm x 190mm	Luminaires	per Room
ROOM NUMBER	Recessed Troffer Low-Brightness Louvre		Bare Batten	
	65W FL	2 x 65W FL	65W FL	2 x 65W FL
601	201			
602 - 603	14			
604 - A+B	5			
607	8			
609	4			
610 A	4			
612	4			
615	6			
618	8			
619	40			
626 + 627	5			
628	3			
629	3			
630	6			
631	24			
635 - A+B				2
638	134			
640	12			
641	12			
655	2			
656 A - D		1		
658	17			
659	8			
660				
661	10			
662				6
663	20			
664	6			
665	18			
666	22			
674	29			
D.B's			3	
		· ·		•
TOTAL	625	1	3	8

LEVEL 7				
		nm x 190mm L	uminaires	per Room
ROOM NUMBER	Recessed Troffer Low- Brightness Louvre		Bare Batten	
	65W FL	2 x 65W FL	65W FL	2 x 65W FL
703 - 704	8			
705	4			
706 - 707	1			
714	1			
715	2			
716	1			
727	6			
731	6			
732	6			
734 A-E	1			
734 D	1			
741 - 744	4			
750	8			
751 - A	14			
752 - A	12			
753 - A	10			
754 - A	12			
755	8			
756	4			
765	4			
DB's			2	
TOTAL	113	0	2	0

LEVEL 8		
ROOM NUMBER	1,540mm x 190mm	Luminaires per Room
	Recessed Troffer Low- Brightness Louvre	Bare Batten

	65W FL	2 x 65W FL	65W FL	2 x 65W FL
801	21			
802	19			
803	19			
804	3			
805B	10			
805L	3			
805L	5			
	4			
805Q				
805R	4			
805S	2			
805W	4			
806	11			
807	19			
808	19			
809	19			
810	19			
811	22			
813a	6			
813	2			
813c	1			
813d	2			
814	25			
815	20			
823	9			
823 824A	34			
824B	4			
824C	4			
824D	4			
824E	6			
825	5			
826	5			
828	4			
829	51			
830	4			
832	10			
839 A - B	19			
840	8			
841	8			
844	4			
845a	3			
845b	2			+
8450 845c	2			
	2			
846		3		
847		2		
848a		3		
848b		6		
848c		9		
848d		2		
848e		2		
848f		3		
850a		4		
851		4		
852		4		
	Recessed	Troffer Low-		
ROOM NUMBER		ess Louvre	Bar	e Batten
	65W FL	2 x 65W FL	65W FL	2 x 65W FL
853		4		
859 - A	2			
- A - 600	<u> </u>			

860a	6	1	I	
860b	4			
860c	4			
860d	6			
860e	2			
860f	2			
860g	2			
860h	2			
860i	2			
867	24			
867e	10			
867f	4			
867g	4			
867h	4			
868	6			
869	4			
869B	4			
870	4			
870a	4			
870b	45			
871a	15			
871b	4			
871c	4			
871d	4			
D.B's	2			
L8 Corridor	50			
TOTAL	669	46	0	0

LEVEL 9	1	,540mm x 190mm Lւ	uminaires per Roc	m
ROOM NUMBER	Recessed Troffer Low- Brightness Louvre		Bare Batten	
	65W FL	2 x 65W FL	65W FL	2 x 65W FL
901	18			
904	18			
905	18			
906	5			
907	22			
908	18			
909	14			
910	18			
911	18			
912	18			
913	18			
914	18			
915	20			
916	6			
917	6			
918	6			
919	6			
920	6			
921	6			
922	6			
923	6			
924	6			
925	6			
926	6			
929	5			
934	12			
935	8			
TOTAL	314	0	0	0

Existing luminaires on level 10 of NSW Parliament House shall **NOT** form part of this lighting upgrade as per CLAUSE 1.2. The following lighting schedule has been provided for information only.

LEVEL 10				
	1,540	mm x 190mm Lun	ninaires per F	Room
ROOM NUMBER		Recessed Troffer Low- Brightness Louvre		e Batten
	65W FL	2 x 65W FL	65W FL	2 x 65W FL
1001	6			
1002	6			
1003	6			
1004	6			
1005	6			
1006	6			
1007	6			
1008	6			
1009	6			
1010	3			
1011 C	3			
1011 F	6			
1011 L	10			
1011 M	4			
1011 N	4			
1011 P	8			
1011Q	2			
1012	6			
1013	6			
1014	6			
1015	6			
1016	6			
1017	6			
1018	6			
1019	6			
1020	6			
1021	6			
1022	6			
1023	6			
1024	6			
1025	6			
1026	6			
1027	6			
1028	6			
1029	6			
1032	18			
1033	6			
1034	6			
1035	6		ļ	
1036	6		ļ	
1037	6		ļ	
1038	6		<b> </b>	
1039	6			
1040	6			
1043	10			
TOTAL	278	0	0	0

I EVEL 10

	1,540mm x 190mm Luminaires per Room			
ROOM NUMBER	Recessed Troffer Low- Brightness Louvre		Bare	Batten
	65W FL	2 x 65W FL	65W FL	2 x 65W FL
Plantroom North			10	
Plantrooms South			14	
TOTAL	0	0	24	0

## FIRE STAIRS

_	1,540mm x 190mm Luminaires per Roc		
ROOM NUMBER	Surface Mounted	Prismatic Diffuser	
-	65W FL	2 x 65W FL	
Staircase A	26		
Staircase B	26		
Staircase D	12		
Staircase F	9		
TOTAL	73	0	

#### GRAND TOTAL

		1,540mm x 190mm Luminaires per Room				
Level	Recessed Troffer L Brightness Louv		Bare Batten		Surface Mounted Prismatic Diffuser	
	65W FL	2 x 65W FL	65W FL	2 x 65W FL	65W FL	
1	32	2	81	16		
2	7	0	110	17		
3	34	0	138	0		
4	0	0	151	0		
5	10	0	9	39		
6	625	1	3	8		
7	113	0	2	0		
8	669	46	0	0		
9	314	0	0	0		
10	278	0	0	0		
11	0	0	0	0		
12	0	0	0	0		
13	0	0	24	0		
Fire Stairs					73	
TOTAL	2082	49	518	80	73	

## MOTION DETECTORS

DETECTORS		1
Level	Room	Number of Motion Detectors
4	401	1
4 5	501	2
	512	1
	513	1
	516	1
	517	1
	518	1
6	605	2
	606	2
	615	2
	618	2
	622-624 + A	4
	644	1
	646	1
	650	3
	651	3
	654	1
	657	1
7	705	2
	706-707	2
	715	2
	716	2
	728	2
	730	2
	734	 1
	734E	1
	757 – 759	4
8	806	2
	816	2
	817	2
	820	2
	820D	- 1
	821	3
	825	1
	826	1
	827	1
	828	1
	834	2
	837	2
	864	2
	865	2
9	927	2
3	928	4
	932	4 4
	932	4 2
Level	Room	Number of Motion Detectors

10	1041	3
	1042	3
	1045	2
	1046	4
11	1134	2
	1135	2
	1139	2
	1140	2
12	1252	3
	1253	3
	1256	2
	1257	4
TOTAL		116

# END OF SECTION – NSW PARLIAMENT HOUSE LIGHTING SCHEDULE