

## Explanatory table

This table provides an explanation of the information Hunter Water has determined should not be disclosed in connection with this contract.

<b>Contract Clause (and general description)</b>	<b>Reason under Government Information (Public Access) Act 2009</b>	<b>Explanation of the reasons under the Government Information (Public Access Act) 2009</b>
Table of Contents – Annexures 17-21	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"><li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li><li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li><li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li><li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li></ul>
Clause 4 Contract Documents - Entire Table	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"><li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li><li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li><li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li><li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li></ul>



Contract Clause (and general description)	Reason under Government Information (Public Access) Act 2009	Explanation of the reasons under the Government Information (Public Access Act) 2009
<p>Clause 6 – paragraph has reference to dollar amounts and reference to Annexure 17 which is redacted in Clause 4.</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li> </ul>
<p>Clause 7 – Contact Details</p>	<p>Could reasonably be expected to affect public safety or security</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because disclosure would reveal and individual's personal information whose identity is apparent or can reasonably be ascertained from the information.</p>
<p>Contract Information</p> <p>Clause 9 "Contractor's Authorised Person"</p> <p>Clause 10 "Notices to the Contractor"</p> <p>Clause 11 "Contractor's Senior executive"</p>	<p>Could reasonably be expected to affect public safety or security</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because disclosure would reveal and individual's personal information whose identity is apparent or can reasonably be ascertained from the information.</p>



Contract Clause (and general description)	Reason under Government Information (Public Access) Act 2009	Explanation of the reasons under the Government Information (Public Access Act) 2009
<p>Contract Information</p> <p>Clause 22 "Public liability insurance" – dollar amount  Clause 24 "Professional indemnity insurance" – dollar amount  Clause 29 "Inclusion of consistent requirements in Subcontractors" – dollar amount  Clause 31 "Preferred Subcontractors" – link to Hunter Water internal url  Clause 44 "Contractor's margin - %"  Clause 49 "Delay costs and liquidated damages" – reference to dollar amount LD, Subclause B – reference to dollar amount for liquidated damages  Clause 50 "Litigation Threshold" – subsection C with reference to dollar amount  Clause 54 "Threshold amount for litigation" – reference to dollar amount</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li> </ul>
<p>Annexure 2 – Technical Specification</p> <p>Clause A3.2 "Documents to be provided to the Contractor" Reference to Principal's asset information,  Clause A6.11.1 "Road and Powerline Crossings" – references to Principal's Assets,  Clause A7.1 "Earthing and lightning report",  Clause A7.2 "Connection to Earth grids" – references to Principal's Assets,  Clause B8 (A8.1) – Monitoring and SCADA  Clause A8.2 – Monitoring ABS Position at Tomago Distribution,  Clause A8.3 – Tomago Power Distribution SCADA page,  Clause B13 – ABS's Complete with Poles,  Clause B14 – Circuit Breaker at 59BA</p>	<p>Could reasonably be expected to affect public safety or security</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because disclosure would reveal the location of and other information about critical public assets that may be targeted for terrorist or other detrimental activities.</p>



<b>Contract Clause (and general description)</b>	<b>Reason under Government Information (Public Access) Act 2009</b>	<b>Explanation of the reasons under the Government Information (Public Access Act) 2009</b>
<p>Annexure 2 – Technical Specification</p> <p>Clause B5 “Defect Repairs” dot point 2 – reference to Principal’s asset records and reports.</p> <p>Clause A6.4 – “Tomago Distribution” – reference to Principals Commercial in Confidence ratings, fault levels and assets numbers (Table)</p> <p>Clause A6.5.1 “Nelson Bay Boreline” – references to Principal’s asset information</p> <p>Clause A6.5.2 “Fingal Bay Boreline” – references to Principal’s asset information</p> <p>Clause A6.5.3 “Anna Bay Boreline” – references to Principal’s asset information,</p> <p>Clause B15 – Planning.</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor’s financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor’s financial arrangements.</li> </ul>
<p>Annexure 3 – General Specifications</p> <p>Clause B2 “Scope” – Table1. Table 2, Table 3 and Table 4 in addition to the dot points at the end of the Clause, reference to Principal’s network locations,</p> <p>Clause B11.5.1 “General” and table.</p>	<p>Could reasonably be expected to affect public safety or security</p>	<p>.</p> <p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because disclosure would reveal the location of and other information about critical public assets that may be targeted for terrorist or other detrimental activities.</p>



<b>Contract Clause (and general description)</b>	<b>Reason under Government Information (Public Access) Act 2009</b>	<b>Explanation of the reasons under the Government Information (Public Access Act) 2009</b>
<p>Annexure 3 - General Specifications</p> <p>Clause B13 - Restrictions on Working hours and/or working days</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li> </ul>
<p>Annexure 3 - General Specifications</p> <p>B14.1 to B14.6 "Access to Site" – Reference to Principal's facilities</p>	<p>Could reasonably be expected to affect public safety or security</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because disclosure would reveal the location of and other information about critical public assets that may be targeted for terrorist or other detrimental activities.</p>
<p>Annexure 4 – Appendix A</p> <p>Table – reference to Principal's reports</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> </ul>



Contract Clause (and general description)	Reason under Government Information (Public Access) Act 2009	Explanation of the reasons under the Government Information (Public Access Act) 2009
		<p>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</p>
<p>Annexure 5 – Appendix B Table – reference to Principal's reports</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li> </ul>
<p>Annexure 6 – Appendix C Table – reference to Principal's reports</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li> </ul>



<b>Contract Clause (and general description)</b>	<b>Reason under Government Information (Public Access) Act 2009</b>	<b>Explanation of the reasons under the Government Information (Public Access Act) 2009</b>
Annexure 7 – Appendix D Table – reference to Principal's reports	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(e) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(f) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(g) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(h) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li> </ul>
Annexure 8 – Appendix E Table – reference to Principal's reports	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li> </ul>



<b>Contract Clause (and general description)</b>	<b>Reason under Government Information (Public Access) Act 2009</b>	<b>Explanation of the reasons under the Government Information (Public Access Act) 2009</b>
Annexure 9 – Appendix F Table – reference to Principal's reports	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements.</li> </ul>
Annexure 10 – Appendix G Table – reference to Principal's reports	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</li> </ul>
Annexure 11 – Appendix H Table – reference to Principal's reports	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other</li> </ul>



Contract Clause (and general description)	Reason under Government Information (Public Access) Act 2009	Explanation of the reasons under the Government Information (Public Access Act) 2009
		<p>contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</p> <p>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</p> <p>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</p>
<p>Annexure 12 – Appendix I</p> <p>Table – reference to Principal's reports</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <p>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</p> <p>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</p> <p>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</p> <p>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</p>
<p>Annexure 13 – Appendix J</p> <p>Table – reference to Principal's reports</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <p>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</p> <p>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</p> <p>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</p> <p>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</p>



Contract Clause (and general description)	Reason under Government Information (Public Access) Act 2009	Explanation of the reasons under the Government Information (Public Access Act) 2009
Annexure 14 – Appendix K Table – reference to Principal's reports	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</li> </ul>
Annexure 15 – Appendix L Table – reference to Principal's reports	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</li> <li>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</li> <li>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</li> </ul>
Annexure 16 Table – reference to Principal's Drawings	Commercial-in-confidence provisions	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <ul style="list-style-type: none"> <li>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</li> <li>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other</li> </ul>



Contract Clause (and general description)	Reason under Government Information (Public Access) Act 2009	Explanation of the reasons under the Government Information (Public Access Act) 2009
		<p>contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</p> <p>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</p> <p>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</p>
<p>Annexure 17 – Payment Milestones and Schedule of Rates</p> <p>Table – reference to dollar amounts</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <p>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</p> <p>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</p> <p>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</p> <p>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</p>
<p>Annexure 18 – project teams</p>	<p>Could reasonably be expected to affect public safety or security</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because disclosure would reveal and individual's personal information whose identity is apparent or can reasonably be ascertained from the information.</p>
<p>Annexure 19 – Subcontractors</p>	<p>Could reasonably be expected to affect public safety or security</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because disclosure would reveal and individual's personal information whose identity is apparent or can reasonably be ascertained from the information.</p>
<p>Annexure 20 – Contract Program</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <p>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</p>



Contract Clause (and general description)	Reason under Government Information (Public Access) Act 2009	Explanation of the reasons under the Government Information (Public Access Act) 2009
		<p>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</p> <p>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</p> <p>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</p>
<p>Annexure 22 – Principal's Standards and Policies</p> <p>Table – reference to Principal's standards and reports</p>	<p>Commercial-in-confidence provisions</p>	<p>Hunter Water weighed the competing public interest considerations and determined there was an overriding public interest against disclosure of this information because:</p> <p>(a) disclosure of the figure would provide visibility of the Contractor's financial information and liability, project risks and cost structure;</p> <p>(b) disclosing this information would place Hunter Water and the Contractor at a disadvantage in negotiations with other contractors or potential contractors and will prejudice the business, commercial and financial interests of the Contractor;</p> <p>(c) disclosure would provide visibility on the amount and apportionment of risk and consequences assumed by the Contractor and Hunter Water;</p> <p>(d) disclosure may reveal the cost structure and profit margins of the Contractor as well as provide insight into the Contractor's financial arrangements</p>





HUNTER WATER CORPORATION

# SUPPLY CONTRACT

## HIGH VOLTAGE NETWORK UPGRADE



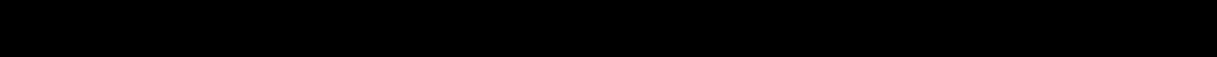


CONTRACT NO: CS0603





# Table of Contents

---

TABLE OF CONTENTS .....	1
FORMAL INSTRUMENT OF AGREEMENT .....	2
ANNEXURE 1 - CONDITIONS OF CONTRACT .....	I
ANNEXURE 2 – TECHNICAL SPECIFICATION .....	120
ANNEXURE 3 – GENERAL SPECIFICATION .....	160
ANNEXURE 4 – APPENDIX A.....	214
ANNEXURE 5 – APPENDIX B.....	215
ANNEXURE 6 – APPENDIX C .....	216
ANNEXURE 7 – APPENDIX D .....	217
ANNEXURE 8 – APPENDIX E.....	218
ANNEXURE 9 – APPENDIX F.....	219
ANNEXURE 10 – APPENDIX G .....	220
ANNEXURE 11 – APPENDIX H .....	221
ANNEXURE 12 – APPENDIX I .....	222
ANNEXURE 13 – APPENDIX J .....	223
ANNEXURE 14 – APPENDIX K.....	224
ANNEXURE 15 – APPENDIX L.....	225
ANNEXURE 16 – DRAWINGS .....	226
	
	
	
	
	
ANNEXURE 22 – PRINCIPAL’S STANDARDS AND POLICIES .....	242



# Formal Instrument of Agreement

---

This agreement is made the                      day of March 2016.

BETWEEN:

**HUNTER WATER CORPORATION (ABN 46 228 513 446)** of 36 Honeysuckle Drive Newcastle NSW 2300  
(“Principal”)

AND:

**NJ CONSTRUCTION PTY LTD (ABN 11 066 157 391)** of 99A Auburn Street Coniston NSW 2500  
(“Contractor”)

## BACKGROUND

- A. The Principal has called for tenders for the upgrade of the High Voltage Network (“the Works”).
- B. The Contractor has submitted a tender which the Principal has accepted subject to the terms hereof.
- C. The Contractor has represented and represents to the Principal that it has the requisite skill, experience, ability and available resources to execute or provide the Works in accordance with the Contract.
- D. In reliance on the Contractor’s representations, the Principal wishes to engage the Contractor to supply the Works in accordance with the Contract.
- E. The Principal has accepted the sum of \$7 345 071.00 as the contract sum (exclusive of GST).
- F. The Principal and Contractor record in this Formal Instrument of Agreement the terms and conditions of their agreement for and relating to the carrying out of the Works.

## OPERATIVE PART

### 1. Interpretation

1.1. The Parties agree the recitals are correct and form part of this Formal Instrument of Agreement.

1.2. Unless the context requires otherwise;

- (a) words defined in the General Conditions of Contract shall have the same meaning throughout the Contract; and
- (b) words defined in any part of this Formal Instrument of Agreement shall have the same meaning as in any other part of the Contract.

### 2. Performance of the Contract

The Principal and the Contractor agree to perform their respective obligations under the Contract and for completion of the Works in accordance with the Contract.



---

### 3. Term

This Contract shall commence on the date of execution of this Formal Instrument of Agreement and, subject to any extension, will remain in effect until completion of all stages and obligations under the Contract, unless varied or terminated earlier in accordance with the Contract or as otherwise allowed at law.

### 4. Contract Documents

This Formal Instrument of Agreement CS0603 and the documents listed as follows shall together constitute the Contract and forms the entire agreement between the parties:

No.	Document Description	Source	No. of Pages





## 5. Order of Precedence

The order of precedence of the Contract documents will be in the order in which the Contract documents are listed in clause 4 of this Formal Instrument of Agreement.

To the extent that there is any ambiguity, discrepancy or inconsistency (“Inconsistency”) between the Contract documents, then the Inconsistency shall be resolved and interpreted in accordance with the order of precedence of the Contract documents pursuant to clause 4 of this Formal Instrument of Agreement, but only to the extent of the Inconsistency, as it is the intent of the parties that the Contract documents are to be read together and are to be taken as mutually explanatory.

## 6. Price



## 7. Contact Details

### (a.) Hunter Water’s Accounts Payable

All invoices should be sent to Hunter Water’s Accounts Payable team by post or email, and quote the contract number:

Postal Address: P.O. Box 5171, HRMC 2310

Email: [accounts.payable@hunterwater.com.au](mailto:accounts.payable@hunterwater.com.au)

### (b.) Hunter Water’s Contract Representative

Unless advised otherwise, Hunter Water’s representative for this Contract is:

Name : Varun Agashe

Phone : 02-4979-9456

Email : [varun.agashe@hunterwater.com.au](mailto:varun.agashe@hunterwater.com.au)

### (c.) Hunter Water’s Dispute Resolution Representative

Unless advised otherwise, Hunter Water’s representative for this Contract is:

Name : Darren Cleary

Phone : 02-4979-9473

Email : [darren.cleary@hunterwater.com.au](mailto:darren.cleary@hunterwater.com.au)

### (d.) NJ Construction Pty Ltd Contract Representative





---

## Signing page

**DATED:** .....

**EXECUTED by Hunter Water Corporation ABN 46 228 513 446** by its  
Authorised Officer in the presence of:

.....  
Signature of witness

.....  
Occupation (print)

.....  
Name of witness (print)

.....  
Signature of Authorised Officer

.....  
Office Held (print)

.....  
Name of Authorised Officer (print)

**EXECUTED by NJ Construction Pty Ltd ABN: 11 066 157 391** by its Authorised  
Officer in the presence of:

.....  
Signature of witness

.....  
Occupation (print)

.....  
Name of witness (print)

.....  
Signature of Authorised Officer

.....  
Office Held (print)

.....  
Name of Authorised Officer (print)



# Annexure 1 - Conditions of Contract

---

## PREFACE VII

## CONTRACT FRAMEWORK 8

### ROLES AND RELATIONSHIPS 8

1	<i>General responsibilities</i>	8
2	<i>Authorised persons</i>	8
3	<i>Co-operation</i>	8
4	<i>Duty not to hinder performance</i>	8
5	<i>Early warning</i>	9
6	<i>Evaluation and monitoring</i>	9

### THE CONTRACT 9

7	<i>The Contract</i>	9
8	<i>Scope of the Works, Temporary Work and work methods</i>	10
9	<i>Assignment</i>	11
10	<i>Governing law of the Contract</i>	11
11	<i>Notices and instructions</i>	11

### STATUTORY AND GOVERNMENT REQUIREMENTS 11

12	<i>Statutory Requirements</i>	11
13	<i>Codes of Practice and Implementation Guidelines</i>	11
14	<i>No collusive arrangements</i>	13
15	<i>Compliance with NSW Government Requirements</i>	13
16	<i>Work Health and Safety</i>	14
17	<i>Commonwealth OHS Accreditation</i>	16
18	<i>Working hours and working days</i>	17
19	<i>Authorisation to release and use information</i>	17
20	<i>Long service levy</i>	17
21	<i>Registration and licences</i>	17

### MANAGEMENT DUTIES 17

22	<i>Time management</i>	17
23	<i>Intellectual property</i>	19
24	<i>Confidentiality and privacy</i>	20
25	<i>Media releases and enquiries</i>	22
26	<i>Care of people, property and the environment, indemnities and limitations</i>	22
27	<i>Insurance</i>	25

### SUBCONTRACTORS, SUPPLIERS AND CONSULTANTS 27

28	<i>Subcontractor relationships</i>	27
29	<i>Engaging Subcontractors</i>	28
30	<i>Subcontractor warranties</i>	28
31	<i>Consultant and Supplier relationships</i>	28
31A	<i>Security of Payment</i>	28

## CARRYING OUT THE WORKS 29

### STARTING 29

32	<i>Start-up workshop</i>	29
33	<i>Security</i>	29
34	<i>Site access</i>	30



35	<i>Engagement and role of Valuer</i>	31
35A	<i>Personnel</i>	31
THE SITE	32	
36	<i>Site information</i>	32
37	<i>Site Conditions</i>	32
DESIGN	34	
38	<i>Faults in Contract Documents</i>	34
39	<i>Design by Contractor and Contractor's Documents</i>	34
40	<i>Submitting Contractor's Documents</i>	36
41	<i>Not used</i>	36
CONSTRUCTION	36	
42	<i>Setting out the Works and survey</i>	36
43	<i>Construction</i>	36
44	<i>Testing</i>	37
45	<i>Defects</i>	37
46	<i>Acceptance with Defects not made good</i>	38
46A	<i>Free Issue Material</i>	38
CHANGES TO WORK AND TIME	39	
47	<i>Valuation of changes</i>	39
48	<i>Variations</i>	40
49	<i>Changes to Statutory Requirements</i>	42
50	<i>Changes to Contractual Completion Dates</i>	43
51	<i>Delay costs and liquidated damages</i>	44
52	<i>Acceleration</i>	46
53	<i>Principal's suspension</i>	46
54	<i>Contractor's suspension</i>	46
PAYMENT	46	
55	<i>The Contract Price</i>	46
56	<i>Goods and Services Tax (GST)</i>	48
57	<i>Prepayment</i>	49
58	<i>Payment Claims</i>	49
59	<i>Payments</i>	51
60	<i>Completion Amount</i>	51
61	<i>Final payment</i>	52
62	<i>Interest on late payments</i>	52
63	<i>Set-off</i>	52
COMPLETION	53	
64	<i>Early use</i>	53
65	<i>Completion</i>	53
66	<i>Close-out workshop</i>	53
67	<i>Defects after Completion</i>	53
CLAIM AND ISSUE RESOLUTION	54	
CLAIM RESOLUTION	54	
68	<i>Contractor's Claims</i>	54
ISSUE RESOLUTION	54	
69	<i>Notification of Issue</i>	55
70	<i>Resolution by senior executives</i>	55



71	<i>Expert Determination</i>	55
72	<i>Parties to perform the Contract</i>	56
<b>TERMINATION 56</b>		
73	<i>Termination for Contractor's Default or Insolvency</i>	56
74	<i>Termination for Principal's convenience</i>	57
75	<i>Termination for Principal's default</i>	58
76	<i>Termination notices</i>	58
77	<i>Survival</i>	58
<b>GENERAL 58</b>		
77A	<i>PPSA</i>	58
77B	<i>Further assurances</i>	59
77C	<i>Severance</i>	59
77D	<i>Preservation of existing rights</i>	59
77E	<i>No merger</i>	60
77F	<i>Counterparts</i>	60
77G	<i>Indemnities</i>	60
77H	<i>Amounts due</i>	60
77I	<i>Contractor's responsibility</i>	60
77J	<i>Compliance with Damstra Plan</i>	60
<b>MEANINGS 61</b>		
78	<i>Interpretation</i>	61
79	<i>Definitions</i>	61
<b>CONTRACT INFORMATION 71</b>		
<b>CONTRACT 71</b>		
1	<i>Contract name</i>	71
2	<i>Site</i>	71
3	<i>Description of the Works</i>	71
<b>PRINCIPAL'S DETAILS 71</b>		
4	<i>Principal</i>	71
5	<i>Principal's Authorised Person</i>	71
6	<i>Notices to the Principal</i>	71
7	<i>Principal's Senior executive</i>	72
<b>CONTRACTOR'S DETAILS 72</b>		
8	<i>Contractor</i>	72
9	<i>Contractor's Authorised Person</i>	72
10	<i>Notices to the Contractor</i>	72
11	<i>Contractor's senior executive</i>	72
<b>DATES AND TIMES 73</b>		
12	<i>Date of Contract</i>	73
13	<i>Times for Site access and Completion</i>	73
<b>STATUTORY AND GOVERNMENT REQUIREMENTS 73</b>		
14	<i>Fees, charges and approvals</i>	73
15	<i>Compliance with NSW Government guidelines</i>	73



16	<i>Requirements for Commonwealth Funded projects</i>	75
17	<i>Principal contractor</i>	75
18	<i>Working hours and working days</i>	75
LIABILITY	76	
19	<i>Limitation of liability</i>	76
20	<i>Proportionate liability</i>	76
INSURANCE	76	
21	<i>Works insurance</i>	76
22	<i>Public liability insurance</i>	76
23	<i>Workers compensation insurance</i>	76
24	<i>Professional indemnity insurance</i>	76
25	<i>Marine liability insurance</i>	77
CONTRACT DOCUMENTS	77	
26	<i>Other Contract Documents</i>	77
PRINCIPAL'S DOCUMENTS	77	
27	<i>Copies of Principal's Documents</i>	77
CONTRACTOR'S DOCUMENTS	77	
28	<i>Copies of Contractor's Documents</i>	77
SUBCONTRACT WORK	78	
29	<i>Inclusion of consistent requirements in Subcontracts</i>	78
30	<i>Payment period for Subcontracts</i>	78
31	<i>Preferred Subcontractors</i>	78
32	<i>Subcontractor's warranty</i>	78
UNDERTAKINGS	78	
33	<i>Completion Undertaking</i>	78
34	<i>Post-Completion Undertaking</i>	78
35	<i>Return of Post-Completion Undertaking</i>	78
SITE INFORMATION	79	
36	<i>Site information</i>	79
37	<i>Site Conditions</i>	79
DESIGN AND DOCUMENTATION	79	
38	<i>Scope of design activities</i>	79
39	<i>Not used</i>	80
PAYMENTS	80	
40	<i>Contract Price at the Date of Contract</i>	80
41	<i>Rise or fall adjustments</i>	80
42	<i>Provisional Sums</i>	81
43	<i>Provisional Sum margin</i>	81
44	<i>Contractor's Margin</i>	81
45	<i>Amount of Prepayment</i>	81
46	<i>Payment date and method</i>	81
47	<i>Completion Amount</i>	81
48	<i>Interest on late payments</i>	81
EXTENSION OF TIME EVENTS, DELAY COSTS, AND LIQUIDATED DAMAGES	82	
49	<i>Delay costs and liquidated damages</i>	82
ENGAGEMENT OF VALUER	83	
50	<i>Engagement of Valuer</i>	83
EXPERT DETERMINATION	84	



51	<i>Time to refer Issue to Expert Determination</i>	84
52	<i>Expert Determination representative</i>	84
53	<i>Person to nominate an Expert</i>	84
54	<i>Threshold amount for litigation</i>	84
<b>SCHEDULES 71</b>		
<b>SUBCONTRACTOR'S WARRANTY 86</b>		
TERMS OF DEED 86		
1	<i>Warranty</i>	86
2	<i>Replacement or making good</i>	87
3	<i>Costs</i>	87
4	<i>Indemnity</i>	87
5	<i>Notice of Defects</i>	87
6	<i>Time to remedy</i>	87
7	<i>Failure to remedy</i>	87
8	<i>Urgent action by Principal</i>	88
9	<i>Assignment</i>	88
10	<i>Operation of Deed</i>	88
<b>UNDERTAKING 89</b>		
ON BEHALF OF THE CONTRACTOR 89		
<b>PAYMENT CLAIM WORKSHEET 90</b>		
<b>AGREEMENT WITH VALUER 91</b>		
TERMS OF AGREEMENT 91		
1	<i>Request to determine and acceptance</i>	91
2	<i>Determination by Valuer</i>	91
3	<i>Principles for valuation</i>	91
4	<i>Meeting</i>	92
5	<i>Documents</i>	92
6	<i>Role of Valuer</i>	92
7	<i>Certificate final</i>	92
8	<i>Liability of Valuer</i>	92
9	<i>Fees and expenses</i>	92
10	<i>Confidentiality</i>	93
11	<i>Termination of agreement</i>	93
12	<i>Payment</i>	93
13	<i>Period of engagement of Valuer</i>	93
<b>EXPERT DETERMINATION PROCEDURE 94</b>		
1	<i>Questions to be determined by the Expert</i>	94
2	<i>Submissions</i>	94
3	<i>Conference</i>	95
4	<i>Role of Expert</i>	95
<b>COMBINED SUBCONTRACTOR'S STATEMENT AND SUPPORTING STATEMENT 96</b>		



---

COSTS ADJUSTMENT FORMULA	101	
DAYWORK	102	
1	<i>Daywork procedure and determination</i>	102
2	<i>Amounts included in and excluded from Daywork</i>	102
3	<i>Principles for calculating time</i>	103
SUBCONTRACT REQUIREMENTS	104	
1	<i>General requirements for specified subcontracts</i>	104
PRINCIPAL ARRANGED INSURANCES	105	
NOT USED	105	
STATEMENT REGARDING MATERIALS	106	
COMPLIANCE WITH BUILDING CODE 2013	107	
DEED OF FINAL RELEASE	109	
ATTACHMENTS	111	
THE GC21 START-UP WORKSHOP	112	
PARTICIPANTS	112	
AGENDA	112	
PERFORMANCE EVALUATION (EXAMPLE)	113	
PERFORMANCE EVALUATION	115	
PERFORMANCE EVALUATION RECORD	117	
EVALUATION TRENDS: SCENARIOS	118	



# Preface

---

## Using this document

All defined words and phrases have initial capitals and are in italics in the GC21 General Conditions of Contract unless they are one of the following basic terms, which appear too often for italics to be used:

- Contract
- Contract Information
- Contractor
- Consultant
- Date of Contract
- Principal
- Site
- Subcontract
- Subcontractor
- Supplier
- Valuer
- Works

Attachments 1, 2, and 3 do not form part of the Contract.



# CONTRACT FRAMEWORK

This section deals with the purpose and structure of the Contract. It allocates responsibilities and sets up the procedures for making the Contract work. Underlying it are the basic principles of GC21: co-operative contracting, enhanced communication, clear definition of roles, responsibility for outcomes, and promoting best practice.

## Roles and relationships

Although the parties have different responsibilities, co-operation is a key element of the Contract.

### 1 General responsibilities

- .1 The Contractor must:
  - .1 design and construct the Works in accordance with the Contract; and  
*The extent of the Contractor's Design obligations is specified in clause 39 and Contract Information item 38A.*
  - .2 perform and observe all its other obligations under the Contract.
- .2 The Principal must:
  - .1 pay the Contractor the *Contract Price* for its performance, in accordance with and subject to the Contract; and
  - .2 perform and observe all its other obligations under the Contract.
- .3 The Principal may give instructions to the Contractor concerning the Works and anything connected with the Works, and the Contractor must comply at its own cost unless the Contract expressly provides otherwise.

### 2 Authorised persons

#### Contractor's Authorised Person

- .1 The Contractor must ensure that, at all times, there is a person appointed to act as the *Contractor's Authorised Person*. The *Contractor's Authorised Person* acts with the Contractor's full authority in all matters relating to the Contract. The Contractor must promptly notify the Principal of the name and contact details of the *Contractor's Authorised Person* and of any change in those details. If the Principal reasonably objects to the *Contractor's Authorised Person* at any time, the Contractor must replace that person.

#### Principal's Authorised Person

- .2 The Principal must ensure that, at all times, there is a person appointed to act as the *Principal's Authorised Person*. The Principal must promptly notify the Contractor of the name and contact details of the *Principal's Authorised Person* and of any change in those details.
- .3 The *Principal's Authorised Person* does not act as an independent certifier, assessor or Valuer. The *Principal's Authorised Person* acts only as an agent of the Principal.
- .4 The *Principal's Authorised Person* may delegate any of its contractual functions and powers to others by written notice to the Contractor.

### 3 Co-operation

- .1 The parties must do all they reasonably can to co-operate in all matters relating to the Contract, but their rights and responsibilities under the Contract (or otherwise) remain unchanged unless the parties agree in writing to change them.

### 4 Duty not to hinder performance

- .1 Each party must do all it reasonably can to avoid hindering the performance of the other under the Contract.



## 5 Early warning

- .1 Each party must promptly inform the other if it becomes aware of anything that is likely to affect the time for *Completion*, or the cost or quality of the Works. The parties must then investigate how to avoid or minimise any adverse effect on the Works and *Scheduled Progress*.
- .2 Clause 5.1 does not change the rights and responsibilities of either party under the Contract, unless they agree in writing to change them.

## 6 Evaluation and monitoring

**As the Contract proceeds, regular meetings (usually monthly) allow the parties and selected stakeholders to evaluate performance and identify priorities for improvement.**

- .1 The parties must meet monthly to evaluate and monitor performance of the Contract.

*Performance Evaluation and Performance Evaluation Record forms are provided at Attachments 2, 2A and 3. They do not form part of the Contract and the parties may amend them to suit the specific attributes of the Contract.*

- .2 The parties must decide jointly who will participate in the meetings. Participants may include Subcontractors, Suppliers, Consultants and, if appropriate, representatives of government authorities, end users and local communities. Participation in meetings does not give the participants any additional rights or responsibilities.
- .3 Nothing concerning or in connection with completed evaluation forms changes either party's rights and responsibilities, or can be relied on or used by one party against another in any proceedings.
- .4 Participants in the evaluation and monitoring meetings must meet their own costs for attendance, and the parties must share equally the other costs.

### The Contract

## 7 The Contract

*The Contract is formed by the execution of a formal agreement or deed.*

- .1 The Contract is made up solely of the *Contract Documents*, which supersede all understandings, representations and communications made between the parties before the Date of Contract in relation to the subject matter of the Contract. The *Contract Documents* are:
  - .1 the formal instrument of agreement;
  - .2 these GC21 General Conditions of Contract;
  - .3 the Contract Information;
  - .4 the annexed Schedules;
  - .5 the *Principal's Documents* as at the Date of Contract; and
  - .6 the other *Contract Documents* listed in Contract Information item 26.
- .2 The *Contract Documents* must be read as a whole, and anything included in, or ~~reasonably to be inferred from~~, one or more documents must be read as included in all other documents, unless the context requires otherwise.
- .3 The terms of the Contract cannot be amended or waived unless both parties agree in writing. Delay by a party in exercising a right does not constitute a waiver of that right, nor will a waiver (either wholly or in part) by a party of a right operate as a subsequent waiver of the same or of any other right of that party.
- .4 The Principal must give the Contractor the number of copies of the *Principal's Documents* stated in Contract Information item 27.
- .5 Even where a *Letter of Award* has been used to form the Contract, the Principal may require the Contractor to execute a formal agreement or deed on terms no



different from those contained in the existing *Contract Documents*. If required, the Contractor must execute and return to the Principal two copies of the agreement or deed within 14 days after the Principal's written request for their execution. The Principal will return an executed copy to the Contractor.

## 8 Scope of the Works, Temporary Work and work methods

- .1 The Works are described in brief in Contract Information item 3 and in more detail in the *Contract Documents*, and include:
  - .1 all work specifically referred to in or contemplated by the Contract;
  - .2 all work and items necessary to achieve the effective and efficient use and operation of the Works; and
  - .3 all work and items necessary for the Works to be fit for the purposes required by, or reasonably to be inferred from, the Contract.
- .2 Other work required in connection with the Contract includes:
  - .1 all work and items, other than the Works, specifically referred to in or contemplated by the Contract;
  - .2 all work and items necessary to carry out and complete the Works properly; and
  - .3 all work and items reasonably inferred from the *Contract Documents* as necessary to properly perform the other obligations of the Contractor under the Contract.
- .3 The Contractor acknowledges that:
  - .1 it is both experienced and expert in work of the type, complexity and scale of the Works;
  - .2 it has made full allowance in the *Contract Price* for the matters referred to in clauses 8.1 and 8.2; and
  - .3 unless the Contract expressly provides an entitlement to payment, everything required to be done by the Contractor under the Contract is to be done at the Contractor's own cost.
- .4 The Contractor acknowledges that *Variations* instructed by the Principal may change the scope of the Works.
- .5 Unless the Contract specifies, or the Principal instructs, that the Contractor use a particular work method or perform particular *Temporary Work*, the Contractor is solely responsible for determining the work methods and the requirements for all *Temporary Work*.
- .6 Subject to clause 26.12, if requested in writing by the Principal, the Contractor must, within the time specified in the request, advise the Principal of:
  - .1 its price (excluding all costs of delay or disruption) for any proposal by the Principal to use a particular work method or perform particular *Temporary Work* proposed by the Principal after the date of the Contract, or to change a work method or *Temporary Work* specified in the Contract;
  - .2 the anticipated effect of the Principal's proposal on achieving *Completion*; and
  - .3 the effect of the Principal's proposal on any other matter specified by the Principal.
- .7 If the parties agree in writing on the effects of the Principal's proposal and the Principal instructs the Contractor to carry out the proposal then, subject to clause 26.12, any affected *Contractual Completion Dates* and the *Contract Price* must be adjusted as agreed.
- .8 Subject to clauses 8.9 and 26.12, if the Principal instructs the Contractor to use a particular work method or perform particular *Temporary Work* or to change a specified work method or *Temporary Work* without first agreeing in writing with the Contractor the effects of the instruction, the Contractor may only make a *Claim* for:



- .1 an extension of time in accordance with clause 50 and delay costs in accordance with clause 51, subject to the requirements of those clauses; and
- .2 an increase in the *Contract Price* to be valued in accordance with clause 47 for any unavoidable costs incurred by the Contractor additional to what it would have incurred if the Principal had not given the instruction.
- .9 If the need for the instruction given under clause 8.8 or with respect to compliance with WHS Laws arises from the Contractor's own act or omission, the Contractor is not entitled to any extension of time or adjustment to the *Contract Price*.

## 9 Assignment

- .1 The Contractor must not assign a right or benefit under the Contract without first obtaining the Principal's written consent.

## 10 Governing law of the Contract

- .1 The Contract is governed by the laws of New South Wales, and the parties submit to the non-exclusive jurisdiction of the courts of New South Wales.

## 11 Notices and instructions

- .1 Notices must be sent to the relevant persons at the addresses in Contract Information items 4 to 11 or 52, or at the address for service most recently notified in writing by the addressee.
- .2 All notices must be in writing, and all instructions by the Principal must be in writing or, if given orally, must be confirmed in writing as soon as practicable.

## Statutory and Government Requirements

## 12 Statutory Requirements

- .1 The Principal must ensure that the licences, authorisations, approvals and consents listed in Contract Information item 14 are obtained and paid for.
- .2 The Contractor is responsible for:
  - .1 compliance with all *Statutory Requirements*, subject to clause 49, except if, because of the nature of the requirement, only the Principal can comply;
  - .2 giving all notices necessary to comply with *Statutory Requirements*;
  - .3 obtaining all licences, authorisations, approvals and consents necessary to carry out the work in connection with the Contract, other than those listed in Contract Information item 14; and
  - .4 the payment of all necessary fees and charges, other than those listed in Contract Information item 14.
- .3 As a condition of achieving *Completion*, the Contractor must give to the Principal originals of all licences, authorisations, approvals, consents and other documents issued by authorities or providers of services in connection with the Works or the Site.

## 13 Codes of Practice and Implementation Guidelines

### Terminology

- .1 In addition to terms defined in this document, terms used in this clause have the same meaning as is attributed to them in the New South Wales Government's Implementation Guidelines to the NSW Code of Practice for the Building and Construction Industry (NSW Guidelines) (as published by the NSW Treasury July 2013). The NSW Code and NSW Guidelines are available at [www.industrialrelations.nsw.gov.au](http://www.industrialrelations.nsw.gov.au).



**Primary Obligation**

- .2 The parties must comply with and meet any obligations imposed by the NSW Government Code of Practice for Procurement (NSW Code) and the NSW Guidelines.
- .3 The Contractor must notify the CCU and the Principal of any possible non-compliance with the NSW Code and NSW Guidelines and of remedial action taken, within 24 hours of becoming aware of the possible non-compliance.
- .4 Where the Contractor engages a Subcontractor or Consultant, the Contractor must ensure that that contract imposes on the Subcontractor or Consultant equivalent obligations to those in this clause, including that the Subcontractor or Consultant must at all times comply with, and meet any obligations imposed by, the NSW Code and the NSW Guidelines.
- .5 The Contractor must not appoint or engage another party in relation to the contract where that appointment or engagement would breach a sanction imposed on the other party in relation to the NSW Code or NSW Guidelines.

**Access and information**

- .6 The Contractor must maintain adequate records of compliance with the NSW Code and NSW Guidelines by it, its Subcontractors, Consultants and related entities.
- .7 The Contractor must allow, and take reasonable steps to facilitate, authorised personnel (including personnel of the CCU) to:
  - .1 enter and have access to sites and premises controlled by the Contractor, including but not limited to the project site;
  - .2 inspect any work, material, machinery, appliance, article or facility;
  - .3 access information and documents;
  - .4 inspect and copy any record relevant to the project;
  - .5 have access to personnel; and
  - .6 interview any person;as is necessary for the authorised personnel to monitor and investigate compliance with the NSW Code and NSW Guidelines, by the Contractor, its Subcontractors, Consultants, and related entities.
- .8 The Contractor, and its related entities, must agree to, and comply with, a request from authorised personnel (including personnel of the CCU) for the production of specified documents by a certain date, whether in person, by post or electronic means.

**Sanctions**

- .9 The Contractor warrants that at the time of entering into this contract, neither it, nor any of its related entities, are subject to a sanction in connection with the NSW Code or NSW Guidelines that would have precluded it from responding to a procurement process for work to which the NSW Code and NSW Guidelines apply.
- .10 If the Contractor does not comply with, or fails to meet any obligation imposed by, the NSW Code or NSW Guidelines, a sanction may be imposed against it in connection with the NSW Code or NSW Guidelines.
- .11 Where a sanction is imposed:
  - .1 it is without prejudice to any rights that would otherwise accrue to the parties; and
  - .2 the State of NSW (through its agencies, Ministers and the CCU) is entitled to:
    - .1 record and disclose details of noncompliance with the NSW Code or NSW Guidelines and the sanction; and



- .2 take them into account in the evaluation of future procurement processes and responses that may be submitted by the Contractor, or its related entities, in respect of work to which the NSW Code and NSW Guidelines apply.

### **Compliance**

- .12 The Contractor bears the cost of ensuring its compliance with the NSW Code and NSW Guidelines, including in respect of any positive steps it is obliged to take to meet its obligations under the NSW Guidelines. The Contractor is not entitled to make a claim for reimbursement or an extension of time from the Principal or the State of NSW for such costs.
- .13 Compliance with the NSW Code and NSW Guidelines does not relieve the Contractor from responsibility to perform the works and any other obligation under the contract, or from liability for any *Defect* in the works or from any other legal liability, whether or not arising from its compliance with the NSW Code and NSW Guidelines.
- .14 Where a change in the contract or works is proposed, and that change may, or may be likely to, affect compliance with the NSW Code and NSW Guidelines, the Contractor must immediately notify the Principal (or nominee) of the change, or likely change and specify:
  - .1 the circumstances of the proposed change;
  - .2 the extent to which compliance with the NSW Code and NSW Guidelines will be, or is likely to be, affected by the change; and
  - .3 what steps the Contractor proposes to take to mitigate any adverse impact of the change (including any amendments it proposes to a Workplace Relations Management Plan or Work Health and Safety (WHS) Management Plan); and

the Principal will direct the Contractor as to the course it must adopt within 10 *Business Days* of receiving notice.

### **Commonwealth Building Code 2013**

- .15 If required by Contract Information item 16A, the Contractor must comply with the requirements of the Building Code 2013 and Schedule 12 (Compliance with Building Code 2013) applies

## **14 No collusive arrangements**

- .1 The Contractor warrants that it has not engaged in any collusive or anti-competitive arrangement or understanding in connection with its tender for, or entry into, the Contract.
- .2 Without limiting any other right or remedy, the Principal may recover from the Contractor the value of any payment or other benefit made directly or indirectly to an unsuccessful tenderer or a trade or industry association in breach of the warranty in clause 14.1.

## **15 Compliance with NSW Government Requirements**

- .1 The Contractor must implement and maintain the systems, strategies and plans required to comply with the following NSW Government Guidelines and as required by Contract Information item 15:
  - .1 NSW Implementation Guidelines to the NSW Code of Practice for Procurement: Building and Construction (NSW Guidelines)
  - .2 the Work Health and Safety Management Systems and Auditing Guidelines;
  - .3 the Quality Management Systems Guidelines for Construction;
  - .4 the Environmental Management Systems Guidelines;
  - .5 the Training Management Guidelines; and



- .6 the Aboriginal Participation in Construction Guidelines.
- .2 The requirements of relevant NSW Government Guidelines are additional to any other requirements of the Contract and *Statutory Requirements*.
- .3 The Contractor must submit and implement the plans identified in Contract Information item 15 by the times stated there. Those plans must comply with all requirements of the relevant NSW Government Guidelines and the Contract.
- .4 The Contractor must:
  - .1 systematically manage its obligations under the Contract and applicable *Statutory Requirements* according to the systems, plans and procedures required under clauses 15.1 and 15.3;
  - .2 review and update its systems, plans and procedures to ensure ongoing compliance with the Contract;
  - .3 control non-conformances and undertake corrective and preventive action as and when necessary; and
  - .4 provide sufficient access to the workplace, and to information, records and other relevant documentation, resources (including personnel) and all other things necessary to allow the Principal to carry out reviews and audit of the Contractor's plans and procedures and confirm compliance with the Contract.

## 16 Work Health and Safety

- .1 At all times during the undertaking of the Works the Contractor shall identify and exercise all necessary precautions and take all reasonably practicable steps to ensure the health and safety of all persons on the *Site* or who may be affected by the Works.
- .2 The Contractor:
  - .1 shall comply and shall ensure that it and the Subcontractors (and both their employees and agents) comply with the *WHS Laws*;
  - .2 warrants that it is familiar with and has the capability, appropriate resources and processes to comply with the *WHS Laws*;
  - .3 shall develop and implement *WHS* processes and programs, including a Subcontractor management system, to identify and manage *WHS* requirements; and
  - .4 shall ensure that any person engaged to provide any part of the Works who is required by any *Statutory Requirement* to have an *Approval* in order to perform that part of the Works has obtained the *Approval* prior to the commencement of that part of the Works.
- .3 The Principal and the Contractor acknowledge and agree that the Contractor has control of:
  - .1 the manner in which the Works are performed; and
  - .2 all matters arising out of or as a consequence of the carrying out of or failure to carry out the Works that give rise or may give rise to risks to the health or safety of any person.
- .4 The Contractor shall, prior to the performance of any part of the Works:
  - .1 undertake an assessment of the *WHS* risks associated with the performance of the Works and identify and take all reasonably practicable steps to implement appropriate *WHS* risk control measures to eliminate or, if that is not reasonably practicable, to minimise, all such *WHS* risks; and
  - .2 as required by the *Principal's Authorised Person*, provide the Principal with details of the *WHS* risk assessment undertaken and evidence of implementation of appropriate *WHS* risk control measures required under subclause 16.4.1.



- .5 The Contractor shall so far as is reasonably practicable consult, cooperate and coordinate the Works with:
  - .1 any person identified in clause 34.3 who accesses the *Site* or the Works;  
or
  - .2 any person who has control of access to or from the *Site* or the Works,so as to:
  - .3 achieve effective coordination of activities to ensure optimal health and safety risk management; and
  - .4 enable:
    - .1 the Principal, the Contractor and any person identified in clause 34.3; and
    - .2 any person who has control of access to or from the *Site* or the Works,to comply with their respective obligations under all relevant *WHS Laws*.
- .6 The Contractor shall on the date as specified by the Principal, submit to the Principal a report setting out all *WHS* issues relating to the Works in relation to the previous month. The report shall include the following:
  - .1 information regarding any workplace safety incidents or near-misses including:
    - .1 details of the date, time and nature of the incidents or near-misses;  
and
    - .2 any action taken by the Contractor or any other person to eliminate or reduce risks to health and safety arising from the incidents or near-misses; and
  - .2 certification to the Principal that:
    - .1 if applicable, the Contractor has complied with its obligations as the Principal Contractor and, if not, details of the extent to which it has not done so;
    - .2 the Contractor has complied with the requirements of the *WHS Laws* applicable to it as a contractor and, if not, details of the extent to which it has not done so; and
    - .3 each of the Contractor's employees and *Subcontractors* have complied with the requirements of the *WHS Laws* applicable to the employee or the Subcontractor.
- .7 The Principal may require the Contractor to include additional information in the report required under clause 16.6.
- .8 The Contractor:
  - .1 is engaged as Principal Contractor for the Works the subject of this Contract, in accordance with Clause 293 of the *WHS Regulation*;
  - .2 is authorised to have management and control of the workplace as necessary to enable it to discharge the duties of a Principal Contractor and of a person having management or control of a workplace;
  - .3 must perform the duties of:
    - .1 a Principal Contractor, as specified in the *WHS Regulation*, and
    - .2 a person with management or control of a workplace as specified in the *WHS Act* and the *WHS Regulation*; and
  - .4 must notify the Principal promptly of any matter affecting *WHS* where consultation with the Principal is necessary.
- .9 Subject to clause 16.11, the Contractor shall:
  - .1 immediately orally notify the Principal of any incident, lost time incident or injury which occurs during the undertaking of the Works;



- .2 within 2 *Business Days* of any incident, lost time incident or injury referred to in subclause 16.8.1, provide a report to the Principal giving complete details of the incident, lost time incident, injury or damage, including the results of investigations into its cause and any recommendations or strategies for prevention of a recurrence;
- .3 immediately notify the Principal of any act, fact or circumstance associated with the activities of the Contractor or any other person that might affect the ability of the Contractor to perform any part of the Works in a manner that is safe and without risks to the health or safety of any person;
- .4 prior to the commencement of the Works, provide the Principal with a copy of any *Approval* that any person engaged to provide any part of the Works is required by any *Statutory Requirement* to have in order to perform that part of the Works;
- .5 maintain and prepare such necessary records, documents and information concerning the health, safety and welfare of persons arising out of or as a consequence of the carrying out of or failure to carry out the Works;
- .6 as the Principal may require, provide a report to the Principal concerning:
  - .1 the health, safety and welfare of persons arising out of or as a consequence of the carrying out of or failure to carry out the Works; and
  - .2 the Contractor's compliance or non-compliance with its *WHS* obligations under the Contract;
- .7 at all reasonable times provide the Principal with access to such records, documents and information as may be necessary to establish the Contractor's compliance or non-compliance with its *WHS* obligations under the Contract;
- .8 as the Principal may require, provide the Principal with audits of the Contractor's *WHS* management system and the Contractor's:
  - .1 *Principal Contractor WHS Management Plan*;
  - .2 *WHS Management Plan*; or
  - .3 *Safe Work Method Statement*,
 as applicable;
- .9 before commencing the Works, provide the *Principal's Authorised Person* and the Principal with a copy of the Contractor's *Principal Contractor WHS Management Plan*; and
- .10 if the Works include the carrying out of *High Risk Construction Work*, before the Contractor commences the *High Risk Construction Work*, provide the *Principal's Authorised Person* and the Principal with a copy of the Contractor's *Safe Work Method Statement*.
- .10 Subject to subclause 16.11, if the Contractor is required by any *Statutory Requirement* to give any notice of any event specified in clause 16.8.1 to an appropriate *Authority*, the Contractor shall at the same time or as soon practicable thereafter give a copy of the notice to the *Principal's Authorised Person* and the Principal.
- .11 Any review or inspection by the Principal or the *Principal's Authorised Person* of any information provided by the Contractor under clause 16.8 or clause 16.9 shall not constitute the verification or acceptance by the Principal of the adequacy of the information, which remains the sole responsibility of the Contractor.

## 17 Commonwealth OHS Accreditation

- .1 If required by Contract Information item 16B, the Contractor must maintain accreditation under the Australian Government Building and Construction OHS



Accreditation Scheme (the Scheme) established by section 35 of the *Fair Work (Building Industry) Act* (Cwlth) (FWBI Act) and the *Fair Work (Building Industry – Accreditation Scheme) Regulations 2005* (Cwlth) while building work (as defined in the FWBI Act) is carried out. The Contractor must comply with all conditions of Scheme accreditation.

## **18 Working hours and working days**

- .1 The Contractor must observe:
  - .1 *Statutory Requirements* which regulate working hours and working days; and
  - .2 any requirements in Contract Information item 18.

## **19 Authorisation to release and use information**

- .1 The Contractor authorises the Principal to:
  - .1 provide information about the Contractor, including information provided by the Contractor and information related to the Contractor's performance, to other Commonwealth, State or local government agencies at any time or for any reason; and
  - .2 take account of information about the Contractor, including reports of unsatisfactory performance, from any government agency or other reputable source, when deciding whether to offer the Contractor future opportunities for work.
- .2 The Contractor agrees and acknowledges that the Principal is entitled to rely on the defence of qualified privilege for the purposes of section 30 of the *Defamation Act 2005* (NSW) in making information available to others as contemplated by clause 19.1.1.
- .3 The Contractor releases and indemnifies the Principal from and against any claim, action, loss, damage, expense or liability the Principal may sustain or incur in connection with anything authorised by clause 19 or anything done by a recipient of the information.

## **20 Long service levy**

- .1 Before starting construction work, the Contractor must:
  - .1 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) in respect of the building and/or construction work; and
  - .2 give the Principal documentary evidence of payment of the levy.

## **21 Registration and licences**

- .1 All vehicles and plant used in carrying out work in connection with the Contract must be registered as required by law.
- .2 All drivers who operate vehicles or plant in carrying out work in connection with the Contract must be licensed to operate those vehicles or plant as required by law.
- .3 Whenever requested, the Contractor must promptly provide documentary evidence of compliance with clause 21.

### **Management duties**

## **22 Time management**

**The Contractor must actively manage progress, anticipating and responding to events to stay on schedule and achieve the Contractual Completion Dates.**



## Contract Program

- .1 The Contractor must submit a *Contract Program* to the Principal within 14 days after the Date of Contract. If the Principal so instructs, the program submitted by the Contractor with its tender is the *Contract Program* until the Contractor submits a *Contract Program*.
- .2 The *Contract Program* must:
  - .1 reflect *Scheduled Progress* and show the *Contractual Completion Dates* for the whole of the Works and all *Milestones*;
  - .2 show, and be consistent with, all constraints on access, performance and coordination;
  - .3 show the start and finish dates or, in the case of future activities, the intended start and finish dates, of all design and construction activities and other significant events;
  - .4 show the logical relationship between activities and events, the sequence of activities which constitute the critical path or paths, time leads and lags, and resource and other constraints;
  - .5 show the dates when the Contractor will require information, documents, instructions or materials from the Principal and the dates when the Contractor will provide information or documents to the Principal; these dates must be consistent with dates which the Principal could reasonably have anticipated at the Date of Contract;
  - .6 be accurate, comprehensive and complete;
  - .7 comply with any other specific requirements of the Contract, including any specified format or software; and
  - .8 comply with any reasonable requirements of the Principal.
- .3 The Contractor must update the *Contract Program* at the following times:
  - .1 at least once every month; and
  - .2 whenever there is a significant change in scheduling; and
  - .3 within 7 days after receiving an instruction from the Principal to do so; and
  - .4 when required to comply with clause 50.4; and
  - .5 following the granting of an extension of time under clause 50.
- .4 Updated *Contract Programs* must take account of the Contractor's actual progress to the date of the update and must be submitted promptly to the Principal.
- .5 The Contractor must submit to the Principal an updated and current *Contract Program* showing actual progress and *Scheduled Progress* at the date of submission:
  - .1 with each *Payment Claim*;
  - .2 whenever there is a significant change in scheduling;
  - .3 within 7 days after receiving an instruction from the Principal to do so; and
  - .4 with any claim for an extension of time under clause 50.
- .6 The Principal need not respond to the Contractor about a *Contract Program*, but if the Principal advises the Contractor that the *Contract Program* submitted does not comply with the requirements of the Contract, or otherwise instructs the Contractor, the Contractor must revise the *Contract Program* so that it complies with the requirements of the Contract and the instructions of the Principal, and must submit the revised *Contract Program* to the Principal within 7 days after receiving the Principal's advice or instructions.

## Scheduled Progress

- .7 The Contractor must carry out all work in connection with the Contract so as to achieve *Scheduled Progress*.



- .8 Whenever requested, the Contractor must demonstrate to the Principal that it is achieving *Scheduled Progress*.
- .9 If the Contractor does not demonstrate to the Principal that it is achieving *Scheduled Progress*, the Principal may instruct the Contractor to take all reasonable steps to achieve *Scheduled Progress* at its own cost. An instruction under this clause is not an *Acceleration Notice*.

#### **Minimisation of delay**

- .10 When there is any change in work in connection with the Contract, or the program or sequence of the work, the Contractor must take all reasonable steps to:
  - .1 carry out any additional work concurrently with other work; and
  - .2 otherwise minimise any effects on the time for *Completion*.

#### **Principal's Involvement**

- .11 The Principal shall not be obliged to furnish any information, materials, documents or instructions earlier than the Principal should reasonably have anticipated at the Date of Contract as necessary to enable the Contractor to reach *Completion* on the *Contractual Completion Date*. The Principal, and the Principal's employees, consultants, other contractors and agents will not be obliged to do or refrain from doing anything to enable the Contractor to reach *Completion* before the *Contractual Completion Date*.
- .12 The Principal may, in its sole discretion, direct in what order and at what time the various stages or parts of the work under the Contract shall be performed. If the Contractor can reasonably comply with the direction, the Contractor shall do so. If the Contractor cannot reasonably comply, the Contractor shall notify the Principal in writing, giving reasons. No direction by the Principal shall constitute a direction under this clause 22.12 unless the direction is in writing and expressly states that it is a "Sequencing Direction under clause 22.12 of the Contract".
- .13 If compliance with the direction causes the Contractor to incur more or less cost than otherwise would have been incurred had the Contractor not been given the direction, the difference shall be valued as if it were a *Variation*, except where the direction was given under or for the purpose mentioned in clause 52, or was necessitated by the Contractor's failure to comply with, or breach of, the Contract.
- .14 No review, approval, acceptance or rejection by the Principal of, nor any comment or direction by the Principal upon or in connection with, a *Contract Program*, revised *Contract Program*, amended *Contract Program* or change to a *Contract Program* shall:
  - .1 relieve the Contractor from any of its liabilities or obligations, especially the obligation to achieve *Completion* by the *Contractual Completion Date*;
  - .2 evidence or constitute a direction by the Principal to accelerate, disrupt, prolong or vary any or all of the work under the Contract;
  - .3 evidence or constitute a direction by the Principal under clause 22.12;
  - .4 evidence or constitute the granting of any extension of time for *Completion*; or
  - .5 affect the time for performance of the Principal's obligations.

### **23 Intellectual property**

- .1 The Contractor assigns or otherwise transfers *Intellectual Property Rights* in all *Data* created specifically for the Contract, upon its creation, to the Principal. The Contractor, at its own cost, will do all things necessary, including execution of all necessary documentation, to vest ownership of all such *Intellectual Property Rights* in the Principal.



- .2 The Contractor must include provisions in all Subcontracts and agreements with Consultants to ensure that *Intellectual Property Rights* in all *Data* created specifically for the Contract are assigned or otherwise transferred to the Principal upon their creation.
- .3 The Contractor, Subcontractors and Consultants are granted royalty-free licences to use the *Data* for the purposes of the Contract.
- .4 For *Data* not created specifically for the Contract but required to use, operate, maintain, modify and decommission the Works, the Contractor must obtain irrevocable royalty-free licences to allow the Principal to use that *Data* for those purposes, including a right to sub-licence.
- .5 Licences referred to in clause 23.4 apply in perpetuity from the Date of Contract or (if the *Data* has not then been created) from the date the *Data* is created.
- .6 The Contractor is responsible for the timely payment of all royalties and fees for *Intellectual Property Rights* it uses in connection with the Contract and the Works.
- .7 The Contractor indemnifies the Principal against any claims (including *Claims*), actions, loss or damage arising out of any failure to make such payments or any infringement or alleged infringement of *Intellectual Property Rights* in relation to *Data* created or provided by the Contractor in connection with the Contract, including any related design, materials, documents or methods of working, or otherwise in the course of the Contractor's performance of the Contract.
- .8 The Contractor warrants that the *Data* created or provided by the Contractor under the Contract, including any related design, materials, documents and methods of working, will not infringe any *Intellectual Property Rights*.
- .9 The Contractor must ensure that *Data* created specifically for the Contract by or for the Contractor is only used for the purposes of the Contract.
- .10 The Principal may grant the Contractor a royalty-free licence to use innovations developed during the course of the Contract for purposes agreed by the Principal.
- .11 Without limiting the foregoing, the Contractor irrevocably waives, and shall procure that each of his Subcontractors, Suppliers and Consultants irrevocably waive, any Moral Rights (as defined in the *Copyright Act 1968 (Cth)*) which they may have in any *Data* created, or otherwise brought into existence, for the purposes the Contract and, if requested by the Principal, the Contractor shall obtain a written waiver from its employees, and from the respective employees of each of its Subcontractors, Suppliers and Consultants of any such rights which they may have.

## 24 Confidentiality and privacy

- .1 The Principal on the one hand and the Contractor on the other:
  - .1 may use *Confidential Information* of the other party (as the case may be) solely for the purposes of this Contract;
  - .2 except as permitted under clause 24.1.3, must keep confidential all *Confidential Information* of the other party; and
  - .3 may disclose *Confidential Information* of the other party only:
    - .1 to persons who:
      - .1 are aware and agree that the *Confidential Information* of the other party must be kept confidential; and
      - .2 either have a need to know (and only to the extent that each has a need to know), or have been specifically approved by the other party; or
    - .2 as required by law or stock exchange regulation.
- .2 Even though information is the *Confidential Information* of a party, the other party does not have to comply with clause 24.1 in relation to that Confidential Information if:



- .1 the *Confidential Information* becomes public knowledge during the term of this Contract; or
  - .2 the other party was made aware of that *Confidential Information* by a third party,
- provided that the *Confidential Information* did not become public knowledge, or was not disclosed by that third party, as a result of a breach of this Contract or any other breach of confidence.
- .3 Notwithstanding any other provision of this Contract, the Contractor acknowledges and agrees that the Principal may disclose any *Confidential Information*:
    - .1 to the extent necessary to comply with any legislative requirement (including the Principal's obligations under the GIPA Act);
    - .2 if required in connection with legal proceedings;
    - .3 for public accountability reasons, including disclosure on request to any Minister, department or officer of the State of New South Wales for a legitimate government purpose; or
    - .4 if the Principal is compelled to do so for any other reason.
  - .4 Each party must establish and maintain effective and proper security measures (including computer and digital security in relation to the storage of that information) to safeguard the other party's *Confidential Information* from disclosure, use or reproduction not authorised by the Contract.
  - .5 The Contractor must return or destroy (and provide evidence of such destruction) any of the Principal's *Confidential Information* (including any copies) in the power, possession or control of the Contractor or its related entities on the earlier of the expiry or termination of this Contract or at any other time at the request of the Principal, save for one copy of the *Confidential Information*, which the Contractor may retain and use only for regulatory or compliance purposes (and which must not be disclosed at any time).
  - .6 The Principal may at any time require the Contractor to give a written undertaking in a form approved by the Principal relating to the non-disclosure, use and reproduction of the Principal's *Confidential Information*. The Contractor must promptly arrange for such undertakings to be given. The Contractor must also ensure to the best of their ability, that any of their related entities, employees and agents comply with this undertaking.
  - .7 Each party must comply with:
    - .1 the reasonable directions of the other party in relation to the handling of any *Personal Information* held or controlled by the first party; and
    - .2 the *Privacy Act 1988* (Cth).
  - .8 Each party must immediately notify the other party on becoming aware of a suspected or actual breach of this clause 24 by any person involved in the performance of the Works.

#### **GIPA Act Requirements**

- .9 The Contractor acknowledges that the Principal is required under the GIPA Act to provide access to information relating to the Contract.
- .10 The Contractor must provide all reasonable assistance to the extent necessary to enable the Principal to comply with its obligations under the GIPA Act.
- .11 Without limiting its obligations under this clause, the Contractor must, within 7 days of receiving a written request from the Principal, provide the Principal with immediate access to its records containing details of any related body corporate (within the meaning of the *Corporations Act 2001* (Cth)) in respect of which the Contractor, or which any other private sector entity in which the Contractor has an interest, will be:



- .1 involved in carrying out any of the Contractor's obligations under the Contract; or
- .2 will receive a benefit under the Contract.

## 25 Media releases and enquiries

- .1 The Contractor must obtain the Principal's prior written consent to:
  - .1 any press release or promotional advertisement it wishes to make or place concerning the Contract, the Principal or the Works; and
  - .2 the release for publication in any media of any information concerning the Contract, the Principal or the Works.
- .2 The Contractor must refer any media enquiries concerning the Contract, the Principal, or the Works, to the Principal. The Contractor must not respond to any media enquiry without the Principal's prior written consent.
- .3 The Contractor must ensure that all Consultants, Subcontractors and Suppliers comply with clause 25 and obtain the Principal's prior written consent (through the Contractor) before doing anything which, if done by the Contractor, would require the Principal's prior written consent.
- .4 The Principal may give or refuse its consent, in its absolute discretion.

## 26 Care of people, property and the environment, indemnities and limitations

### Obligations of care

- .1 The Contractor is responsible for all of the following:
  - .1 preventing personal injury or death;
  - .2 preventing loss or damage to the Site, any *Temporary Work* and the Works;
  - .3 preventing loss or damage to adjoining and other properties and the environment arising in connection with carrying out the Works;
  - .4 locating and caring for existing services;
  - .5 repairing or making good loss or damage to the Works, any *Temporary Work* and the Site; and
  - .6 bearing the cost of repairing, or making good, loss or damage to adjoining and other properties and the environment arising in connection with carrying out the Works.
- .2 If, in the opinion of the Principal, urgent action is required to avoid death, injury, loss or damage, and the Contractor does not take the necessary action immediately when the Principal requests it, the Principal may take the action (without relieving the Contractor of its obligations), at the Contractor's cost, and the Principal's costs of doing so will be recoverable as a deduction from the *Contract Price*.

### Indemnities for property, personal injury or death

- .3 The Contractor indemnifies the Principal against loss or damage to:
  - .1 the Works, from the date the Contractor begins carrying out the Works;
  - .2 the *Temporary Work*, from the date the Contractor begins carrying out the *Temporary Work*; and
  - .3 the Site and anything brought onto the Site for the purposes of the Contract from the date the Contractor is given access to the Site, or the relevant part of the Site,

until and including the *Actual Completion Date* of the whole of the Works except that, in respect of any part of the Works which is occupied or taken into use by the Principal under clause 64, this indemnity ceases when that part is occupied or taken into use and the indemnity in clause 26.4 then applies as if the *Actual Completion Date* had been achieved with respect to that part.



- .4 After the *Actual Completion Date* of the whole of the Works, the Contractor indemnifies the Principal against loss or damage to the Works, the Site, and anything brought onto the Site for the purposes of the Contract:
  - .1 arising out of carrying out its obligations under the Contract, including carrying out *Variations*, making good *Defects* and removing *Materials* from the Site; or
  - .2 which occurred while the Contractor indemnified the Principal under clause 26.3.
- .5 The Contractor's liability for loss or damage under clauses 26.3 and 26.4 is reduced to the extent that the loss or damage is contributed to or caused by:
  - .1 any act or omission of the Principal;
  - .2 any risk specifically excepted in the Contract;
  - .3 war, invasion, act of foreign enemies, hostilities, (whether war be declared or not), act of terrorism, civil war, rebellion, revolution, insurrection or military or usurped power, martial law or confiscation by order of any Government or public authority; or
  - .4 ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel not caused by the Contractor or any of its Subcontractors, Consultants or Suppliers.
- .6 The Contractor indemnifies the Principal against the following where they arise in connection with the carrying out of the Works:
  - .1 all damage to property other than property covered under clause 26.3;
  - .2 all claims (including *Claims*), actions, other liability, and loss, including loss of use, in connection with property other than property covered under clause 26.3;
  - .3 any loss or damage arising out of the Contractor's use or disclosure of Personal Information held by the Contractor; and
  - .4 all claims (including *Claims*), actions, other liability, and loss in connection with personal injury, or death.
- .7 The Contractor's liability to indemnify the Principal under clause 26.6 is reduced to the extent that the loss, damage, injury or death is contributed to or caused by an act or omission by the Principal.

#### **Limitation of liability**

- .8 The Contractor's liability to the Principal in connection with loss or liability other than for personal injury or death, in respect of any one occurrence arising in connection with the Contract is limited to the amount stated in Contract Information item 19.
- .9 Clause 26.8 does not limit or affect any liability of the Contractor in respect of claims, actions, costs, losses, damages or liability in connection with:
  - .1 liability which cannot be limited at law;
  - .2 intellectual property and indemnities given by the Contractor in connection with intellectual property;
  - .3 conduct of the Contractor which is negligent or is carried out with wilful or reckless disregard for the consequences to the Principal, the public or the environment;
  - .4 fraudulent or criminal conduct;
  - .5 the Contractor's abandonment of its obligations under the Contract; or
  - .6 the Contractor's obligation to pay liquidated damages under the Contract.
- .10 The Contractor's liability may be further limited to the extent that the *Professional Standards Act 1994* (NSW), or any equivalent statutory provision in any other state or territory, applies.



**Consequential loss**

- .11 The Contractor is not liable to the Principal for any loss of profit, loss of any contract, loss of revenue, loss of use, loss of business opportunities, loss of anticipated savings, damage to goodwill, loss of customers or any indirect or consequential losses or damages not in the reasonable contemplation of the parties at the Date of Contract, arising in connection with the Contract, other than:
- .1 loss in connection with any of the matters referred to in clause 26.9; or
  - .2 loss that is or should be covered by insurance required under the Contract to be held by the Principal or the Contractor, or which would have been covered but for an act or omission of the Contractor or any of its employees, agents, Subcontractors, Suppliers or Consultants.
- .12 Without prejudice to the Contractor's other obligations under this Contract or otherwise at law, the Contractor shall:
- .1 ensure that the structural integrity of adjacent or nearby structures or buildings (including any retained structures within or abutting the Site or the Works) are not affected adversely by the carrying out of the Works, and the Contractor shall carry out or provide all temporary works and/or modify the design of the Works or the method of their execution accordingly, but no *Variation* shall be regarded as having arisen and the Contractor shall comply with the foregoing at no extra cost to the Principal and without any entitlement to an extension of time;
  - .2 at no cost and to the reasonable satisfaction of the Principal, repair and make good temporary and permanent roads footpaths and pathways, the Site and other property of whatsoever nature (including without limitation the repair to adjoining and neighbouring property) where such repair or making good arises as a consequence of the carrying out and completion of the Works or any part thereof unless the Principal shall otherwise instruct. Where repair is required for adjoining and/or neighbouring property, the Contractor shall not commence any such repair without first seeking the necessary consent from the Principal and the Contractor shall not seek such consent directly from the adjoining and/or neighbouring owner or tenants; and
  - .3 at all times prevent nuisance (including, without limitation, any such nuisance caused by noxious fumes, noisy working operations or construction activities, or the deposit of any material or debris on any public roadway), annoyance, danger, trespass, inconvenience to others (including neighbours), disturbance, vibration, shock, and any other actionable interference of whatsoever nature with the rights and activities of any adjoining or neighbouring owner, occupier, or any applicable utility company or statutory body, arising out of the carrying out of the Works and shall indemnify the Principal from any Claims made in relation to any breach of this clause.

**Exclusion of proportionate liability**

- .13 If Contract Information item 20 states that proportionate liability is excluded from the Contract then, to the extent permitted by law, the operation of Part 4 of the *Civil Liability Act 2002* (NSW), and any equivalent statutory provision, is excluded in relation to all rights, obligations and liabilities in connection with the Contract whether such rights, obligations or liabilities are sought to be enforced as a breach of contract or a claim in tort or otherwise.
- .14 To the extent permitted by law:
- .1 the Contractor must not seek to apply the provisions of Part 4 of the *Civil Liability Act 2002* (NSW) in relation to any claim by the Principal against the Contractor (whether in contract, tort or otherwise); and



- .2 if any of the provisions of Part 4 of the *Civil Liability Act 2002* (NSW) are applied to any claim by the Principal against the Contractor (whether in contract, tort or otherwise), the Contractor will indemnify the Principal against any loss, damage, cost or expense that forms part of a claim by the Principal against the Contractor which the Principal is not able to recover from the Contractor because of the operation of Part 4 of the *Civil Liability Act 2002* (NSW).

## 27 Insurance

**The Contract Information states whether the Principal or the Contractor is to provide Works and public liability insurance. All other insurance required must be provided by the Contractor.**

- .1 If Contract Information item 21 or 22 states that the Principal is responsible to effect insurance covering the Works or public liability, the Principal must, not later than the *Date of Contract*, effect that insurance in accordance with the Contract Information item, on terms not less beneficial to the Contractor than those described in the insurance policy or policies or other details of insurance provided or made available to the Contractor by the Principal before the *Date of Contract*. The Principal must provide or make available to the Contractor a copy of the relevant insurance policy.
- .2 If Contract Information item 21 or 22 states that the Contractor is responsible to effect insurance covering the Works or public liability, the Contractor must, before starting work in connection with the Contract, effect that insurance in accordance with the Contract Information item, as follows:
  - .1 a Works policy of insurance to cover loss or damage to the Works; and
  - .2 a public liability policy of insurance to cover loss or damage to property or injury or death to persons arising out of or in connection with carrying out the Works.
- .3 Before starting work in connection with the Contract, the Contractor must effect any insurance required in accordance with Contract Information items 23, 24 and 25 as follows:
  - .1 workers compensation and related liability insurance in accordance with the requirements of the *Workers Compensation Act 1987* (NSW) and where possible, extended to indemnify the Principal against statutory liability to persons employed by the Contractor;
  - .2 if stated in *Contract Information* item 24, a professional indemnity policy of insurance to cover liability for breach of professional duty (whether in contract or otherwise) arising out of any negligence, whether in relation to errors in design, documentation, supervision or other professional duties of the Contractor (whether in contract or otherwise), and extended to include cover for any breach of all such professional duties carried out on behalf of the Contractor by Subcontractors, Suppliers or Consultants; and
  - .3 if any work in connection with the Contract includes the use of waterborne craft of 8 or more metres in length, a marine liability policy of insurance to cover the use of such craft, as specified in Contract Information item 25.
- .4 The Contractor must pay all necessary premiums and maintain the insurance in accordance with the requirements of the relevant Contract Information item.
- .5 The Contractor must ensure that every Subcontractor, Supplier and Consultant is insured for workers compensation and related liability in accordance with the requirements of the *Workers Compensation Act 1987* (NSW) at all times.
- .6 Unless otherwise instructed by the Principal, the Contractor must make and manage all insurance claims.
- .7 The Contractor must meet the costs of all excesses or deductibles.
- .8 All policies must:
  - .1 require the insurer to notify the Principal (other than in relation to workers compensation and professional indemnity) at the same time as the insurer



- receives or gives any notice concerning the policy, and at least 7 days before any proposed cancellation of a policy; and
- .2 provide that a notice of claim given to the insurer by the Principal, the Contractor, or a Subcontractor, Supplier or Consultant will be accepted by the insurer as a notice of claim given by all of the insured.
- .9 Each policy referred to in clauses 27.2 and 27.3.3 must:
- .1 name or otherwise identify the Principal and the Contractor as persons covered by the policy or to whom the insurance cover provided by the policy extends; and
  - .2 include a cross-liability clause under which the insurer agrees that the term "insured" applies to each of the persons covered as if a separate policy of insurance had been issued to each of them, and a waiver of subrogation clause, under which the insurer agrees to waive all rights of subrogation or action against any of the persons covered.
- .10 The Contractor must:
- .1 ensure that in respect of each policy of insurance required to be effected or taken out as required by clause 27 by the Contractor or any Subcontractor, Supplier or Consultant, it:
    - .1 does not do anything which prejudices any insurance;
    - .2 if necessary, rectifies anything which might prejudice any insurance;
    - .3 reinstates an insurance policy if it lapses;
    - .4 does not cancel, vary or allow an insurance policy to lapse without the prior written consent of the Principal;
    - .5 immediately notifies the Principal of any event which may result in an insurance policy lapsing or being cancelled; and
    - .6 gives full, true and particular information to the insurer of all matters and things the non-disclosure of which might in any way prejudice or affect any such policy or the payment of all or any benefits under the insurance; and
  - .2 ensure that any non-disclosure by one insured does not prejudice the right of any other insured to claim on the policy; and
  - .3 ensure that a notice to the insurer by one insured will be deemed to be a notice by all insured parties.
- .11 The Contractor must give the Principal proof that all insurance policies required to be effected by the Contractor under the Contract are current:
- .1 before starting work in connection with the Contract; and
  - .2 whenever requested in writing by the Principal.
- .12 The Contractor must give the Principal copies of all insurance policies it is required to effect and maintain whenever requested in writing by the Principal.
- .13 If the Principal has a reasonable objection to an insurer or to any conditions of an insurance policy, and notifies the Contractor of the objection and the reasons for the objection, the Contractor must, within five *Business Days* after receiving the notification, either obtain insurance from another insurer or arrange changes to the insurance policy, so that the Principal has no objections.
- .14 If the Contractor fails to comply with clauses 27.11, 27.12 or 27.13, the Principal may effect and maintain the relevant insurance policy and pay the necessary premiums. The Principal may recover from the Contractor the cost of the premiums and the Principal's reasonable costs of effecting and maintaining the insurance, as a debt due from the Contractor to the Principal.
- .15 The Contractor must, as soon as practicable, inform the Principal in writing of the occurrence of an event that may give rise to a claim under a policy of insurance effected as required by the Contract and must ensure that the Principal is kept fully informed of subsequent action and developments concerning the claim.



- .16 If there is a claim under the Works policy of insurance for damage or destruction that is significant, as determined by the Principal acting reasonably:
  - .1 all settlement amounts must be paid by the insurer directly to the Principal;
  - .2 the Principal may decide to have the Works reinstated, or may decide not to proceed with the Works, without creating any default by the Principal under the Contract; and
  - .3 the Contractor must reinstate the Works if instructed to by the Principal and, except as otherwise provided in the Contract, may only make a *Claim* for payment for reinstatement of the Works up to the amount of any insurance settlement.

### **Subcontractors, Suppliers and Consultants**

**Contractual relationships between the Contractor and Subcontractors, Suppliers and Consultants must be on a similar basis to those between the Principal and Contractor. Clause 31 specifies which requirements apply to Consultants and Suppliers.**

## **28 Subcontractor relationships**

- .1 The Contractor is solely responsible for all Subcontractors (including Subcontractors engaged in accordance with clause 29.3) and is liable for their acts and omissions as if such acts or omissions were those of the Contractor. Subcontracting of any obligation under the Contract does not affect the Contractor's obligations or liability under the Contract.
- .2 The Contractor indemnifies the Principal against all claims (including *Claims*), actions, loss or damage and all other liability arising out of any acts or omissions of Subcontractors.
- .3 The Contractor must include in every Subcontract:
  - .1 details of the Contractor's obligations in connection with the Contract which are to be carried out by the Subcontractor;
  - .2 an obligation that the Subcontractor agrees to be bound by all WHS obligations imposed upon the Contractor by this Contract (including clause 16);
  - .3 the relevant provisions of clauses 13, 14, 15, 23, 24, and 25;
  - .4 consent for the Subcontract to be novated to the Principal or its nominee, if required by the Principal in the circumstances contemplated by clause 73.6.3;
  - .5 a right to terminate the Subcontract if this Contract is terminated for any reason; and
  - .6 a right of termination for convenience.
- .4 In addition, the Contractor must include:
  - .1 in each Subcontract with a Subcontractor valued at or over the amount stated in Contract Information item 29, written provisions giving effect to the requirements set out in Schedule 9 (Subcontract requirements); and
  - .2 in each Subcontract with a Subcontractor valued below the amount stated in Contract Information item 29, a written provision requiring the Contractor to pay the Subcontractor within the number of days stated in Contract Information item 30 after the Subcontractor has claimed payment in accordance with the Subcontract; and
  - .3 in each Subcontract and its other contracts (including with its Suppliers and Consultants), the consent in writing of each Subcontractor, Supplier, or Consultant (as the case may be) to the novation of the relevant Subcontract or other contract to the Principal upon the termination of this Contract for any reason.



## 29 Engaging Subcontractors

- .1 The Contractor must not subcontract the whole of the Works, but may subcontract parts of the Works in accordance with clauses 28 and 29.
- .2 If requested, before engaging any Subcontractor and at any other time, the Contractor must provide the Principal with the name and address of the proposed Subcontractor. The Principal may object to the appointment of any proposed Subcontractor on reasonable grounds. If the Principal objects to any proposed Subcontractor, the Contractor must propose another Subcontractor.
- .3 If Contract Information item 31 includes a list of *Preferred Subcontractors* for a particular class of work, the Contractor must only engage a Subcontractor from that list for work of that class. If no *Preferred Subcontractor* on the list will subcontract to carry out the work, the Contractor must provide a revised list and the provisions of clause 29.2 will apply.
- .4 If instructed by the Principal, the Contractor must accept novations of the contracts of specified Principal's consultants, contractors or suppliers, on the terms specified in the Contract.
- .5 Where and to the extent that the Contractor is required to provide a Subcontractor's Warranty in respect of any Subcontractor under clause 30.1, the Contractor shall not vary or amend any Subcontract (or any other contract) it has entered into with respect to the engagement of that Subcontractor and shall not waive or release any such Subcontractor from its obligations under the relevant Subcontract (or other contract) or otherwise estop itself from enforcing or seeking redress for any material obligation or duty owed to the Contractor by any such Subcontractor.

## 30 Subcontractor warranties

- .1 For each trade, item or area of work listed in Contract Information item 32, the Contractor must obtain from each relevant Subcontractor, before that Subcontractor completes its work, a warranty to the Principal in the form of Schedule 1 (Subcontractor's Warranty).
- .2 Clause 30.1 does not affect any of the Contractor's other obligations under the Contract.

## 31 Consultant and Supplier relationships

- .1 Clauses 28.1, 28.2, 28.3 and 29 apply to Consultants in the same way they apply to Subcontractors.
- .2 Clauses 28, 29 and 30 apply to Suppliers in the same way they apply to Subcontractors, unless the context requires otherwise.

## 31A Security of Payment

- .12 The Contractor must promptly (but in any event, within 2 *Business Days*) give the Principal a copy of any document (other than a payment claim in relation to which no further documentation has been received) the Contractor gives or receives in connection with the *Building and Construction Industry Security of Payment Act 1999* (NSW) (**Security of Payment Act**).
- .3 If the Principal becomes aware that a Subcontractor is entitled to suspend work under section 27 of the Security of Payment Act, the Principal may pay the Subcontractor such money that is, or may be, owing to the Subcontractor for work forming part of the Works, and the Principal may recover from the Contractor any amount paid as a debt.
- .4 The Contractor indemnifies the Principal against any loss, expense or damage of any nature, including financial loss and lawyers' fees and expenses on an indemnity basis, suffered or incurred by the Principal arising out of:
  - .1 a suspension by a Subcontractor under section 27 of the Security of Payment Act of work which forms part of the Works; or
  - .2 a failure by the Contractor to comply with this clause 31A.



- .5 If the Contractor makes a Payment Claim to the Principal under the Security of Payment Act and the Contractor applies for adjudication of the payment to be made, the Contractor irrevocably chooses for the purposes of section 17(3)(b) of the Security of Payment Act, the Institute of Arbitrators and Mediators Australia as the Authorised Nominating Authority.
- .6 If the Principal, in making a payment to the Contractor under a Contract, fails to comply with a Payment Withholding Request served on the Principal by a Subcontractor, such that under the Security of Payment Act the Principal becomes jointly and severally liable with the Contractor in respect of the whole or any part of a debt owed by the Contractor to the Subcontractor, the debt so incurred will become an amount due from the Contractor to the Principal. The amount will become due irrespective of whether the amount for which the Principal is liable to the Subcontractor is greater than the amount which the Contractor is ultimately required to pay the Subcontractor.

## CARRYING OUT THE WORKS

**This section deals with design and construction activities. It contains provisions that apply to the physical carrying out of the Works and also covers procedures for payment.**

### Starting

#### 32 Start-up workshop

**The start-up workshop is held to encourage the parties and others concerned with the Works to work co-operatively towards achieving a successful Contract. Start-up workshop guidance material is provided at Attachment 1 and does not form part of the Contract.**

- .1 The Principal must convene a start-up workshop within 28 days after the Date of Contract or such other period as the parties agree.
- .2 The parties must attend the start-up workshop and must jointly decide who else will attend. Clause 6.4 applies to the costs of the workshop.
- .3 The objective of the start-up workshop is to promote a culture of co-operation and teamwork for the management of the Contract. The parties agree to conduct the workshop collaboratively so as to achieve this objective.

#### 33 Security

**The Contractor is required to provide security to the Principal in the form of unconditional Undertakings to pay on demand, provided by financial institutions on the Contractor's behalf.**

- .1 Within 14 days after the Date of Contract (and before starting work on the Site), the Contractor must give the Principal the *Completion Undertaking* and the *Post-Completion Undertaking* for amounts calculated in accordance with Contract Information items 33 and 34 respectively. The *Undertakings* must be in the form specified in Schedule 2 (Undertaking).
- .2 If the Contractor does not comply with clause 33.1 the Principal may withhold from any payment to the Contractor an amount up to the total amount of *Unconditional Undertakings* that the Contractor has not given to the Principal in accordance with clause 33.1 until the Contractor gives the *Unconditional Undertakings* to the Principal or the Principal is required to return the *Unconditional Undertaking* whichever is earlier.
- .3 Unless the Principal has made or intends to make a demand against an *Undertaking*, the Principal must return the *Undertakings* (or, if applicable, the balance remaining after a demand on the *Undertakings*) to the Contractor as follows:
  - .1 the *Completion Undertaking* within 14 days after the *Actual Completion Date* of the whole of the Works; and



- .2 the *Post-Completion Undertaking* at the end of the period stated in Contract Information item 35 after the *Actual Completion Date* of the whole of the Works provided that at that time:
  - .1 there are no outstanding *Defects* or unresolved *Issues*; and
  - .2 the Contractor has signed and submitted to the Principal the *Deed of Final Release*;
  - .3 there are no moneys of any nature, including debts, damages and indemnity claims, payable by the Contractor to the Principal.
- .4 When any of the circumstances in clause 33.3.2 apply, the *Post-Completion Undertaking* will be returned when those circumstances no longer apply.
- .5 When *Completion* of a *Milestone* is achieved, the Principal may (in its absolute discretion) agree to a proportionate reduction in the amount held as *Undertakings*, based on the proportion of the Works included in the *Milestone*.
- .6 *Undertakings* must be unconditional and be provided by a bank, building society or credit union acceptable to the Principal (at its sole and absolute discretion).
- .7 The Contractor must not take any steps to prevent the Principal making a demand against the *Undertakings*, or to prevent the provider of an *Undertaking* from complying with the *Undertaking* or any demand by the Principal.

#### Cash Security - Subcontracts

**The Contractor may require Subcontractors to provide security for Subcontracts in the form of cash security, retention money or unconditional undertakings to pay on demand provided by financial institutions on the Subcontractor's behalf.**

- .8 If the Contractor receives or retains security in cash or converts security to cash under any of its Subcontracts, that security is held in trust by the Contractor from the time it receives, retains or converts it.
- .9 If the Contractor receives payment under the Contract for, or on account of, work done or *Materials* supplied by any Subcontractor, and does not pay the Subcontractor the whole amount to which the Subcontractor is entitled under the relevant Subcontract, the difference is held in trust for payment for the work done or *Materials* supplied.
- .10 The Contractor must deposit all money it receives in trust, as described in clauses 33.8 and 33.9, into a trust account in a bank selected by the Contractor no later than the next *Business Day*, and:
  - .1 the money must be held in trust for whichever party is entitled to receive it until it is paid in favour of that party;
  - .2 the Contractor must maintain proper records to account for this money and make them available to the Subcontractor on request; and
  - .3 any interest earned by the trust account is owned by the party which becomes entitled to the money held in trust.

#### 34 Site access

- .1 The Principal must give the Contractor access to sufficient of the Site to allow the Contractor to start work by the later of:
  - .1 when the Contractor has complied with relevant requirements of the Contract; and
  - .2 the time stated in Contract Information item 13.
- .2 If the Principal does not give the Contractor access to the Site as required by clause 34.1, the Contractor has no remedy or entitlement other than:
  - .1 an extension of time in accordance with clause 50 and delay costs in accordance with clause 51; and
  - .2 when an entitlement arises under clause 75, to terminate the Contract.
- .3 The Contractor shall be responsible for making whatever arrangements are necessary for obtaining ingress to or egress from the Site. Without prejudice to



the foregoing, the Contractor shall at no cost to the Principal be responsible for settling appropriate arrangements for such ingress or egress and for securing access to any areas beyond the boundaries of the Site necessary to execute any part of the Works located in off-site areas with the local road or other appropriate Authority and/or owners or occupiers, as appropriate, and shall thereafter comply with any such arrangements which the Contractor enters into. Notwithstanding any other provision of this Contract, the Contractor shall not be entitled to any extension of time or to any additional payment (including any increase in the Contract Price) as a result of any delay or disruption to the carrying out of the Works which arises from or in connection with the Contractor's responsibilities under this clause 34.3.

- .4 The Contractor must permit the Principal, including its authorised employees and agents, to have access to the Site and to the premises of the Contractor at all reasonable times and must arrange for equivalent access to premises of Subcontractors, Suppliers and Consultants. The Principal may require access for any reasonable purpose connected with the Contract, including surveillance, audit, inspection, *Testing*, certification and recording of information.

### 35 Engagement and role of Valuer

**Refer to Schedule 4 (Agreement with Valuer), under which the Valuer makes determinations about value and time under clauses 47 and 50.**

- .1 If Contract Information item 50A states that a Valuer must be engaged or if the parties agree to engage a Valuer, then:
  - .1 the parties, acting reasonably, must endeavour to agree in writing on the identity of the Valuer within 21 days after the Date of Contract or, failing agreement, the Principal must request the person named in Contract Information item 50B to select the Valuer;
  - .2 within a further 21 days after the date of selection of the Valuer, the Principal and the Contractor must jointly engage the Valuer using the form in Schedule 4 (Agreement with Valuer); and
  - .3 a Valuer's certificate will be final and binding unless the net amount of the Valuer's determination (excluding any amount for interest) exceeds the amount stated in Contract Information item 50C, in which case either party may commence litigation in respect of the matters referred to the Valuer, but only within 56 days after receiving the determination.
- .2 The parties may agree at any time to engage a Valuer in accordance with this clause, either for a single valuation or on an ongoing basis. When the parties agree to engage a Valuer after the Date of Contract, "Date of Contract" for the purposes of clause 35.1.1 refers to the date the parties agree to appoint the Valuer.

### 35A Personnel

- .1 Those persons referred to in the *Contract Information* are the Contractor's key personnel on the work under the Contract.
- .2 The Contractor will maintain these key personnel on the work under the Contract and will not replace them unless:
  - .1 the Principal approves the substitute;
  - .2 an instruction is given by the Principal, for any reason, that any one or more of the key personnel are to cease to be involved in the carrying out of the Works under the Contract;
  - .3 that person dies, retires or resigns (other than to accept other employment with the Contractor or any associate of the Contractor) or otherwise suffers from ill health or some serious domestic problem; or
  - .4 that person's section of the work under the Contract has been completed.



- .3 Any vacancy of key personnel will promptly be filled by the Contractor with a person approved by the Principal of at least equivalent experience, ability and expertise.
- .4 The Contractor must remove (or have removed) and keep removed from the *Site* or from any activity connected with the Works, within such time and for such period as the Principal or the *Principal's Authorised Person* directs, any person who, in the Principal's or the *Principal's Authorised Person's* sole opinion:
  - .1 is a threat to the health, safety or wellbeing of any person on the *Site* or has, is, or is threatening to, cause damage to the *Works*;
  - .2 is guilty of misconduct or fails to adhere to the policies and/or procedures of the Principal; or
  - .3 fails to comply with a reasonable direction given to that person by the Principal or the *Principal's Authorised Person*.

### The Site

## 36 Site information

- .1 The parties acknowledge that:
  - .1 at the Date of Contract, the Principal has provided in good faith the information concerning the Site identified in Contract Information items 36A and 36B;
  - .2 the information identified in Contract Information items 36A and 36B does not form part of the Contract;
  - .3 the Principal does not guarantee the completeness of the information identified in Contract Information item 36A;
  - .4 the Principal does not guarantee the accuracy, quality or completeness of the information identified in Contract Information item 36B; and
  - .5 the Principal has no duty of care in connection with information identified in Contract Information item 36B, or with having provided it.

*Other information concerning the Site may be included in the Contract.*

- .2 The Contractor warrants that it:
  - .1 has made its own inquiries concerning the Site, including checking information provided by the Principal;
  - .2 has examined the Site and surrounds and satisfied itself through its own investigation as to the *Site Conditions* which might reasonably be expected;
  - .3 has made its own assessment of the risks, contingencies and other circumstances which might affect the work in connection with the Contract and has allowed fully for these in the *Contract Price* (subject to clause 37);
  - .4 did not in any way rely on the completeness of the information identified in Contract Information item 36A other than as a guide for ascertaining what further Site information the Contractor considers it needs to obtain;
  - .5 did not rely on the accuracy, quality or completeness of information identified in Contract Information item 36B; and
  - .6 has made its own interpretations, deductions and conclusions and did not in any way rely on interpretations, deductions and conclusions made by or for the Principal.

## 37 Site Conditions

- .1 The Contractor is solely responsible for dealing with any adverse *Site Conditions*:
  - .1 so as to minimise delay;



- .2 so as to minimise increased costs; and
- .3 without awaiting any instruction from the Principal, but must comply with any instruction given by the Principal
- .2 Clauses 37.3 to 37.8 do not apply to the extent stated in Contract Information item 37 that the Contractor is to bear the risk of adverse *Site Conditions*.
- .3 If the Contractor becomes aware of adverse *Site Conditions* that differ materially from those it should reasonably have expected at close of tenders, the Contractor must notify the Principal in writing as soon as possible and in any event within 7 days after becoming aware of those *Site Conditions*. Where practicable, the notification should be given before the *Site Conditions* are disturbed. The notification must include details of:
  - .1 the *Site Conditions* the Contractor claims are adverse;
  - .2 the manner in which the Contractor contends they differ materially from the *Site Conditions* the Contractor should reasonably have expected at close of tenders (having regard to the warranty in clause 36.2), including any information supporting this contention;
  - .3 the effect on the Works;
  - .4 the effect on achieving *Completion*;
  - .5 the additional work and resources involved and the Contractor's estimate of its entitlement to any adjustment to the *Contract Price*; and
  - .6 any other matters the Contractor considers relevant.
- .4 The Principal may request the Contractor to provide further information about the matters notified under clause 37.3.
- .5 After considering the Contractor's notification under clause 37.3, the Principal must notify the Contractor whether it agrees with the Contractor's contentions under clause 37.3.1. and 37.3.2 as to the nature of the conditions encountered and whether or not the Contractor should reasonably have expected them.
- .6 If the Principal agrees that there are adverse *Site Conditions* that differ materially from those the Contractor should reasonably have expected at the close of tenders and the Contractor has given the notice required by clause 37.3 then:
  - .1 the parties may agree in writing on the effects of the unexpected adverse *Site Conditions* (including any *Variation* instructed by the Principal), and any affected *Contractual Completion Dates* and the *Contract Price* must be adjusted as agreed; or
  - .2 if the parties have not agreed as to the effects of the unexpected adverse *Site Conditions*:
    - .1 if the Principal instructs a *Variation* in connection with the adverse *Site Condition*, in addition to the entitlements the Contractor has under clause 48, the Contractor may also make a *Claim* for:
      - .1 an extension of time in accordance with clause 50 and delay costs in accordance with clause 51, for any delay incurred by it as a result of the unexpected adverse *Site Conditions* that has not been taken into account in any extension of time granted as a result of the *Variation*; and
      - .2 an increase in the *Contract Price* to be valued in accordance with clause 47 for any unavoidable additional costs incurred by the Contractor as a result of the unexpected adverse *Site Conditions*, but excluding any costs included in the valuation of the *Variation*;
    - or
    - .2 if no *Variation* in connection with the adverse *Site Condition* is instructed, the Contractor may make a *Claim* for:



- .1 an extension of time in accordance with clause 50 and delay costs in accordance with clause 51, subject to the requirements of those clauses; and
  - .2 an increase in the Contract Price to be valued in accordance with clause 47 for any unavoidable additional costs incurred by the Contractor as a result of the unexpected adverse Site Conditions.
- .7 If the Principal does not agree with the Contractor's contentions under clauses 37.3.1 and 37.3.2, the Contractor may notify an *Issue* under clause 69.
  - .8 Costs and delay incurred by the Contractor as a result of unexpected adverse *Site Conditions* before it gave the notice required by clause 37.3 must not be counted in any valuation or extension of time.

### Design

**The Contractor always has some design, design coordination and design management responsibility no matter whether the nature of the Contract is described as fully documented; construct only; design, development and construct; design and construct, lump sum or some similar description is given to it. The extent of design by the Contractor may be as little as shop detailing, as much as the full design of the Works, or something in between.**

## 38 Faults in Contract Documents

- .1 The Contractor must check the *Contract Documents*. At least 21 days before the Contractor proposes to use any *Contract Document*, the Contractor must notify the Principal of any *Fault* in that *Contract Document* and any related *Contract Documents*
- .2 The Principal must resolve any *Fault* notified under clause 38.1.
- .3 If the Principal resolves a *Fault* in the *Contract Documents*, then, subject to clause 38.4:
  - .1 to the extent that the Principal resolves the *Fault* by instructing a *Variation*, clause 48 applies; and
  - .2 to the extent that the Principal resolves the *Fault* other than by instructing a *Variation*:
    - .1 if the resolution has an effect on the time to achieve *Completion*, the Contractor may make a Claim for an extension of time under clause 50 and delay costs in accordance with clause 51, or the Principal may assess a reduction of time in accordance with clause 50; and
    - .2 if the resolution results in the Contractor incurring costs that are greater or less than the Contractor should reasonably have foreseen at the close of tenders, the parties may agree in writing on an adjustment to the *Contract Price* or if not agreed the Contractor may make a Claim for an adjustment to the *Contract Price* to be valued in accordance with clause 47.
- .4 If the Principal resolves a *Fault* in the *Contract Documents* that was not notified in accordance with clause 38.1, the Contractor is not entitled to any costs for delay or the cost of any aborted work.

## 39 Design by Contractor and Contractor's Documents

### Design responsibilities

- .1 The Contractor must complete the design provided by the Principal and carry out all other design necessary in connection with the Works, including:
  - .1 design, design development, documentation, workshop detailing and coordination of design and the interaction of the various disciplines;
  - .2 development of the design provided by the Principal for elements referred to in Contract Information item 38A.2; and



- .3 full design by the Contractor of elements referred to in Contract Information item 38A.3.
- .2 The Contractor must carry out its design responsibilities so that the Works are fit for the purposes required by the Contract and comply with the other requirements of the Contract. The Contractor warrants and undertakes to the Principal that any design undertaken by the Contractor shall be properly co-ordinated and integrated with the remainder of the Works, and with any other retained structures or buildings or structures adjoining or abutting the Works or the completed Works.
- .3 If Contract Information item 39C states that this clause applies, the Contractor's design responsibilities are reduced to the extent that the Works are not fit for a purpose required by the Contract because of the design provided by the Principal, provided that the Contractor immediately (but in any event within 2 Business Days) notifies the Principal or the *Principal's Authorised Person* as soon as it becomes aware, or should reasonably have been aware, that the Works are not fit for a purpose required by the Contract because of the design provided by the Principal.
- .4 Subject to clause 39.6, design or design development does not cause a *Variation* or reduce the Contractor's design responsibilities under clause 39.

#### **Departures from the design provided by the Principal**

- .5 Subject to clause 39.7, the Contractor must not depart from the design provided by the Principal unless instructed in writing by the Principal.
- .6 If the Contractor considers that some departure from the design provided by the Principal is desirable to ensure the effectiveness and efficiency of the Works, then the Contractor may propose a *Variation* under clause 48. Where a departure is necessary for the Works to be fit for the purposes required by the Contract, the Contractor must notify the Principal in accordance with clause 48.7.
- .7 In carrying out the design and design development of the elements referred to in Contract Information item 38A.4, the Contractor may, with the prior written consent of the Principal, depart from the design provided by the Principal, but only to the extent that any such departure does not adversely affect the construction, operation or maintenance of the Works or their performance or fitness for the purposes required by the Contract.

#### **Design review**

- .8 To the extent specified in the Contract, the Contractor must review its design in consultation with persons nominated by the Principal, and develop the design and the *Contractor's Documents* allowing for any matters identified in the review.

#### **Contractor's Documents**

- .9 The Contractor must produce *Contractor's Documents* which:
  - .1 ensure that the Works are fit for the purposes required by the Contract; and
  - .2 meet the requirements of all of the following:
    - .1 the Contract;
    - .2 *Statutory Requirements*;
    - .3 the Principal's instructions;
    - .4 the National Construction Code (if stated in Contract Information item 38B) and relevant Australian Standards; and
    - .5 if no other standard is specified in the Contract, good industry standards applicable to the Works.
- .10 The requirements of clause 39.9 are not affected by any *Variation*.



#### 40 Submitting Contractor's Documents

- .1 Unless the Contract provides otherwise, the Contractor must submit *Contractor's Documents* to the Principal at least 21 days before the date the Contractor proposes to use them for procurement, manufacture, fabrication or construction. *Contractor's Documents* must be submitted progressively with sufficient detail to demonstrate what is proposed. The number of copies must be as stated in Contract Information item 28. If the Contractor proposes to change any component of the Principal's design of the Works, the Contractor must submit the proposed change to the Principal at least 21 days before the Contractor proposes to use those changed documents.
- .2 The Principal need not respond to the Contractor about the *Contractor's Documents*.
- .3 If the Principal objects to the *Contractor's Documents*, the Contractor must take the objections into account and discuss them with the Principal. The Contractor must correct any *Fault*, error or omission in the *Contractor's Documents*.
- .4 Nothing the Principal does or omits to do in connection with the *Contractor's Documents* makes the Principal responsible for the *Contractor's Documents*, or prevents the Principal from relying on or enforcing any right under the Contract or otherwise.

#### 41 Not used

#### Construction

#### 42 Setting out the Works and survey

- .1 The Contractor must set out the Works within the boundaries of the Site and otherwise in accordance with the Contract.
- .2 The Contractor may request from the Principal any additional information that is necessary for setting out the Works and is not included in the *Contract Documents*. Such a request must be made at least 14 days before the information is planned to be used for setting out. As soon as practicable, the Principal must provide any additional information which it has or can reasonably obtain.
- .3 If at any time the Contractor discovers or is made aware of any error in the location, level, dimensions or alignment of the Works:
  - .1 the Contractor must notify the Principal; and
  - .2 unless instructed otherwise by the Principal, the Contractor must rectify the error to ensure that the Works comply with the Contract.
- .4 If an error notified in accordance with clause 42.3.1 is due to a *Fault* in the *Contract Documents*, clause 38 applies.
- .5 The Contractor must give the Principal a copy of a survey showing the Works as constructed on the Site, including the relationship of the Works to any relevant property boundaries, easements (including any right of way) and improvements on the Site. If requested in writing by the Contractor, the Principal may agree in writing that certain matters can be excluded from the survey. The survey must be carried out by a registered surveyor or other surveyor to whom the Principal has no objection.

#### 43 Construction

- .1 The Contractor must supply all *Materials* and construct the Works in accordance with all of the following:
  - .1 the Contract;
  - .2 the Contractor's Documents;
  - .3 *Statutory Requirements*;



- .4 the Principal's instructions;
- .5 the National Construction Code (if stated in Contract Information item 38B) and relevant Australian Standards;
- .6 any other standard specified in the Contract;
- .7 good industry standards applicable to the Works; and
- .8 such that all *Materials* supplied are fit for their intended purpose as part of the Works.

#### 44 Testing

- .1 The Contractor must *Test* all parts of the Works that are specified in the Contract to be *Tested*, give the Principal the opportunity to witness the *Tests* by giving reasonable notice, and make the results available to the Principal.
- .2 The Principal may instruct the Contractor at any time to carry out any other *Test* of any part of the Works.
- .3 If the results of any *Test* (not otherwise required by the Contract) instructed by the Principal under clause 44.2 shows compliance with the Contract, the Contractor may only make a *Claim* for an increase in the *Contract Price* to be valued in accordance with clause 47 for any unavoidable additional costs incurred by the Contractor in carrying out the *Test*. Otherwise the Contractor bears the cost, including any costs of opening up and reinstating any part covered up.
- .4 The Contractor must make good any part of the Works where *Testing* has not shown compliance with the Contract and must repeat the *Testing*, at its own cost and without any entitlement to an extension of time, until the results of the *Tests*, as reported in writing to the Principal, confirm that the Works comply with the Contract.

#### 45 Defects

**The Principal considers the Contractor to be an expert in the design and construction of the Works and holds the Contractor responsible for its work. The Principal requires Completion to be defect-free.**

**These Defects provisions are to ensure that the Works are constructed to the standards required by the Principal. The Principal can also rely on its common law rights. Also refer to clause 67 which deals with Defects after Completion.**

- .1 The Contractor must identify and promptly make good all *Defects* so that the Works comply with the Contract.
- .2 At any time before *Completion*, the Principal may instruct the Contractor to make good *Defects* within the time specified in a *Defect Notice*.  
**A similar provision applies after Completion under clause 67.1.**
- .3 If the Contractor fails to make good the *Defects* in the time specified in the *Defect Notice*, the Principal may have the *Defects* made good by others and then:
  - .1 the cost of doing so will be a debt due from the Contractor to the Principal; and
  - .2 the Contractor will be responsible for the work involved in making good the *Defects* as if the Contractor had carried out the work.
- .4 Nothing in clause 45 reduces the Contractor's warranties and other liabilities and obligations under the Contract, or affects the Principal's common law right to damages or any other right or remedy.
- .5 If at any time before *Completion* the Contractor becomes aware of any *Defect* which results from design for which it is not responsible, it must:
  - .1 promptly notify the Principal; and
  - .2 without limiting any entitlement which the Contractor may have to a *Variation*, comply with any instruction by the Principal to make good the *Defect*.



**46 Acceptance with Defects not made good**

- .1 The Principal, in its absolute discretion, may agree that specific *Defects* need not be made good.
- .2 Before the Principal does so, the Principal may propose deductions from the *Contract Price* and any terms it requires.
- .3 If the Contractor agrees with the proposed deductions and terms, the *Contract Price* must be adjusted as agreed.
- .4 If the Contractor agrees with the proposed terms but not with the proposed deductions:
  - .1 if no Valuer is engaged at the relevant time, the parties may agree to engage a Valuer for the purpose of making this single valuation;
  - .2 if a Valuer is engaged, the Principal may request the Valuer to determine the value of the deductions in accordance with clause 47.7, taking into account any increased future costs, loss of income or reduction in asset life, and the *Contract Price* will be adjusted accordingly; or
  - .3 if no Valuer is engaged and the parties do not agree to engage a Valuer then the Principal is to assess the value of the adjustment in accordance with clauses 47.7 and advise the Contractor in writing. The Contractor may dispute the assessment of the Principal in accordance with clause 69.
- .5 If the parties do not agree in writing on the Principal's proposed terms, the Contractor must make good the specified *Defects*.
- .6 The Contractor remains liable for all *Defects* (whether known or not known) other than the specific *Defects* identified in a written agreement made under clause 46 as not to be made good.

**46A Free Issue Material**

- .5 This clause 46A applies where:
  - .1 the Principal provides to the Contractor; or
  - .2 this Contract requires the Contractor to receive from the Principal, any *Free Issue Material*.
- .6 The Contractor shall:
  - .1 immediately upon receipt of the *Free Issue Material*, be responsible for the care of the *Free Issue Material* and accordingly ensure the *Free Issue Material* is satisfactorily covered by insurance. The Contractor shall be liable for any loss or damage to the *Free Issue Material* as if the *Free Issue Material* had been provided by the Contractor itself for incorporation in the Works or use by the Contractor in the performance of the work under this Contract;
  - .2 to the extent reasonably practicable, without unpacking the *Free Issue Material*, carefully inspect the *Free Issue Material* and within 7 days of receipt, notify the Principal in writing of the quantity of *Free Issue Materials* provided or received and any damage, omission (including as to quantity) or *Defect* in relation to that *Free Issue Material*;
  - .3 after receipt of the *Free Issue Material*, be responsible for the handling of the *Free Issue Material* and shall be liable to the Principal in respect of any cost, loss or expense incurred by the Principal as a consequence of or in connection with the leakage or escape of any material, liquid or gas from the *Free Issue Material*; and
  - .4 prior to the *Contractual Completion Date*, carry out, in conjunction with the *Principal's Authorised Person*, a reconciliation of the quantities of *Free Issue Material* used in connection with the Works. The Contractor shall, as a condition precedent to achieving *Completion*, return to the Principal in good order any *Free Issue Material* not incorporated into the Works together with appropriate documentation evidencing quantities and type.



## Changes to work and time

### 47 Valuation of changes

- .1 If the Contractor submits a *Claim* complying with clause 68.3 and the Principal agrees that the Contractor is entitled to an adjustment to the *Contract Price* or *Contractual Completion Date(s)*, then the parties must endeavour to reach agreement on the adjustments. If agreement cannot be reached then:
  - .1 if a Valuer is engaged, either party may by giving notice to the other party and to the Valuer, request the Valuer to determine the adjustment;
  - .2 if no Valuer is engaged at the relevant time, the parties may agree to engage a Valuer for the purpose of making this single valuation; or
  - .3 if no Valuer is engaged and the parties do not agree to engage a Valuer then, within 28 days after the Contractor has provided the information specified in clause 68.3, the Principal is to assess the value of the adjustments in accordance with clause 47 and 50 and advise the Contractor in writing. The Contractor may dispute the assessment under clause 69.
- .2 The Principal is not required to assess a *Claim* nor is a *Claim* to be referred to the Valuer until the Contractor provides all the information specified in clause 68.3.
- .3 If an event entitles the Contractor to adjustments to both the *Contract Price* and any *Contractual Completion Date*, these adjustments are to be dealt with together.
- .4 If the Principal does not agree that any entitlement exists, the Principal must advise the Contractor in writing and clauses 69 to 71 apply.

#### Valuation principles

- .5 When the Contract requires an adjustment to the *Contract Price* to be valued in accordance with clause 47, the principles set out below apply.
- .6 Subject to clause 47.8, if the Contractor is entitled to an increase in the *Contract Price* for additional work or for unavoidable additional costs, the value of the increase is to be assessed or determined as follows:
  - .1 if there is an item in the *Schedule of Rates* which is applicable to that additional work or unavoidable cost, by adding together the products of the quantity of the additional work or unavoidable cost for each item and its applicable rate; or
  - .2 if otherwise, by taking the sum of:
    - .1 the additional reasonable direct cost to the Contractor including labour, *Materials* and plant (not including the *Contractor's Margin*);
    - .2 the additional reasonable costs to the Contractor of Subcontractor and Consultant work involved in carrying out the additional work or in responding to the unavoidable circumstances (not including the *Contractor's Margin*);
    - .3 an additional amount for the *Contractor's Margin*, calculated as the percentage stated in Contract Information item 44 of the total of the costs under clauses 47.6.1 and 47.6.2; and
    - .4 any delay costs due in accordance with clause 51, subject to the requirements of clause 50.

*The Contractor is entitled to claim unavoidable additional costs under clauses 8.8, 37.6, 52.4 and 53.3 when the conditions of those clauses are satisfied.*
- .7 The value of decreased or omitted work or of any reduction in costs under clause 38, is to be assessed or determined on the basis of rates and lump sums in the Contract or, if there are no applicable rates or lump sums in the Contract,



based on reasonable rates and prices applying at the close of tenders. The deduction must include a reasonable amount for any time-dependent costs which will not be incurred by the Contractor and any profit on the decreased or omitted work.

- .8 A valuation under clause 47.6 must not include:
  - .1 any costs, losses or expenses attributable to any default, negligence or failure to minimise additional costs of the Contractor, Subcontractors or Consultants;
  - .2 any amount for costs that the Contractor would have incurred anyway or should reasonably have allowed for at the Date of Contract; or
  - .3 any amount that the Contractor is prohibited from claiming under the Contract (including under clauses 37.8, 38.4, 49.6 or 68.2).
- .9 A valuation under clause 46 must take into account the specific matters required by that clause.
- .10 For the purposes of valuation in accordance with clause 47.6.1, the rates in the *Schedule of Rates* include any entitlement to the *Contractor's Margin and Profits, Overheads and Preliminaries*, in addition to all delay or time related costs, and the Contractor has no entitlement to any compensation in addition to the rates set out in the *Schedule of Rates*.

#### Application of adjustments

- .11 The *Contract Price* and any relevant *Contractual Completion Date(s)* must be adjusted as agreed, assessed or determined under clause 47.

## 48 Variations

**The Principal will normally obtain, and seek to settle by negotiation, the Contractor's price and allowance for effect on time for a proposed Variation before instructing the Variation in writing, and clauses 48.2 to 48.3 provide for this. This does not prevent the Principal from instructing a Variation at any time.**

#### Instructing and commencing Variations

- .1 The Principal may instruct a *Variation* in writing at any time before *Completion* of the whole of the Works (and after *Completion* in accordance with clause 67.1.3), with which instruction the Contractor must comply.
- .2 If requested in writing by the Principal, the Contractor must, within the time specified in the request, advise the Principal of:
  - .1 its price (excluding all costs of delay or disruption) for a proposed *Variation*;
  - .2 the anticipated effect of the proposed *Variation* on achieving *Completion*; and
  - .3 the effect of the proposed *Variation* on any other matter specified by the Principal.
- .3 If the parties have agreed in writing on the effects of a proposed *Variation*, and the Principal instructs the Contractor to carry out the *Variation*:
  - .1 any affected *Contractual Completion Dates* and the *Contract Price* must be adjusted as agreed; and
  - .2 the Contractor shall not be entitled to any further payment (including any adjustment to the *Contract Price* or payment of delay costs) or to claim any further extension of time by reason of or in consequence of the *Variation*, including by reason of any consequential variation or change to the Works which will result from or be required in order to facilitate the implementation of the agreed *Variation*.
- .4 If the parties have not agreed in writing on the effects of a proposed *Variation* or the Principal has not made a request under clause 48.2, the Principal may instruct the *Variation* and, unless the Principal instructs the *Variation* to be carried out as *Daywork*, the Contractor may make a *Claim* for:



- .1 an extension of time under clause 50 and delay costs in accordance with clause 51, or the Principal may assess a reduction in time in accordance with clause 50; and
- .2 an adjustment to the *Contract Price* to be valued in accordance with clause 47, or the Principal may assess a deduction from the *Contract Price* to be valued in accordance with clause 47, unless the Principal has instructed the Contractor to carry out additional work as *Daywork*, in which case the requirements of Schedule 8 (Daywork) apply.
- .5 If the Contractor wishes to make a *Claim* for an extension of time, delay costs or any adjustment to *Contract Price* as a result of a *Variation*, the *Claim* must be submitted within 28 days of the Principal's written instruction. If the Contractor fails to do so, or performs a *Variation* without a written instruction from the Principal, then clause 68.2 will be deemed to apply.

#### **Variations proposed by the Contractor**

- .6 The Contractor may make a written proposal for a *Variation* for the Contractor's convenience.
- .7 The Principal may accept the Contractor's proposal but is not obliged to do so. The Principal's acceptance may be subject to conditions, including that the *Variation* is at the Contractor's risk. If the Principal accepts the Contractor's proposal, the Principal must instruct a *Variation*, stating any conditions, and make any agreed adjustments to the affected *Contractual Completion Dates* and the *Contract Price*.
- .8 If the Contractor considers that a *Variation* is necessary but the Principal has not instructed a *Variation*, the Contractor must notify the Principal within 7 days after the Contractor should reasonably have known that a *Variation* was necessary.
- .9 If the Principal does not agree that a *Variation* is necessary, all issues relating to the claimed *Variation* must be dealt with under clauses 68 to 71.

#### **General**

- .10 If the Contractor considers that a direction given by the *Principal's Authorised Person*, although not expressly identified as a *Variation*, is a *Variation* (including a direction to remedy or re-execute defective work or material which the Contractor is of the opinion complies with the Contract), then the Contractor shall within 7 days after the receipt of such direction, notify the *Principal's Authorised Person*.
- .11 Upon receipt of such a notice the *Principal's Authorised Person* shall, within 14 days, either:
  - .1 confirm in writing that the direction is a *Variation*, in which event it shall be dealt with in accordance with this clause 48 (and clause 48.5 will apply); or
  - .2 indicate that the direction is not a *Variation* (or, alternatively, not respond), in which case the Contractor shall be entitled to give a notice under clause 69.
- .12 Unless the Contractor gives the first notice required under clause 48.10 within the prescribed time, the Contractor cannot make any claim (including a *Claim*) arising out of or in relation to any such direction, and clause 68.2 shall apply such that the Contractor shall be absolutely and wholly barred from making any such *Claim*.
- .13 The Contractor shall not be entitled to make a claim for any extension of time or any further payment (including any adjustment to the *Contract Price* or payment of delay costs) where and to the extent the circumstances giving rise to a *Variation* and/or the expenditure of a provisional sum are attributable to any negligence, default or breach of contract by the Contractor or any Subcontractor, Consultant or Supplier, or by their respective servants or agents.



- .14 The Contractor acknowledges that development of the design by the Contractor does not constitute a *Variation*.
- .15 The Contractor hereby waives any claim it may have against the Principal in connection with the omission of work (including for loss of profit) and accepts that the Principal shall be entitled to arrange for the same to be executed by another party or parties.

#### 49 Changes to Statutory Requirements

- .1 If the Contractor becomes aware of changes in *Statutory Requirements* that come into effect after the Date of Contract and require a change to work in connection with the Contract (not including changes that the Contractor knew about or should reasonably have expected at close of tenders), the Contractor must notify the Principal in writing as soon as possible (but in any event within 7 days) after becoming aware of the changes in *Statutory Requirements*. The notification must include confirmation that the Contractor was not aware of the changes in *Statutory Requirements* at the Date of Contract and details of:
  - .1 the changes to *Statutory Requirements*;
  - .2 why the changes to *Statutory Requirements* should not reasonably have been expected by the Contractor at close of tenders;
  - .3 the changes to work in connection with the Contract that the Contractor considers necessary;
  - .4 any delays in achieving *Completion*;
  - .5 any additional work and resources involved and the Contractor's estimate of its entitlement to any adjustment to the *Contract Price*; and
  - .6 any other matters the Contractor considers relevant.
- .2 The Principal may request the Contractor to provide further information about the matters notified under clause 49.1.
- .3 After considering the Contractor's notification under clause 49.1, the Principal must notify the Contractor whether it agrees with the Contractor's contentions under clause 49.1.1 and 49.1.2 as to the change in *Statutory Requirements* and whether or not the Contractor knew about the *Statutory Requirements* or should reasonably have expected them.
- .4 If the Principal agrees that there are changes in *Statutory Requirements* that require changes to the work in connection with the Contract (that the Contractor did not know about and should not reasonably have expected at the close of tenders) and only if the Contractor has given the notice required by clause 49.1 then:
  - .1 the parties may agree in writing on the effects of the change in *Statutory Requirements* (including any *Variation* instructed by the Principal), and any affected *Contractual Completion Dates* and the *Contract Price* must be adjusted as agreed; and
  - .2 if the parties are unable to agree in writing as to the effects of the unexpected change in *Statutory Requirements*:
    - .1 if the Principal instructs a *Variation* in connection with the change in *Statutory Requirements*, in addition to the entitlements the Contractor has under clause 48, the Contractor may also make a *Claim* for:
      - .1 an extension of time in accordance with clause 50 and delay costs in accordance with clause 51, for any delay incurred by it as a result of the unexpected change in *Statutory Requirements* that has not been taken into account in any extension of time granted as a result of the *Variation*; and
      - .2 an increase in the *Contract Price* to be valued in accordance with clause 47 for unavoidable additional costs incurred by the Contractor as a result of the unexpected change in *Statutory*



- Requirements*, but excluding any additional or increased work included in the *Variation*; or
- .2 if no *Variation* in connection with the change in *Statutory Requirements* is instructed, the Contractor may make a *Claim* for:
    - .1 an extension of time in accordance with clause 50 and delay costs in accordance with clause 51, subject to the requirements of those clauses; and
    - .2 an increase in the *Contract Price* to be valued in accordance with clause 47 for any unavoidable additional costs incurred by the Contractor because of the unexpected change in *Statutory Requirements*.
  - .5 If the Principal does not agree with the Contractor's contentions under clauses 49.1.1 and 49.1.2, the Contractor may notify an *Issue* under clause 69.
  - .6 Costs and delay incurred by the Contractor as a result of changes in *Statutory Requirements* before it gave the notice required by clause 49.1 must not be counted in any valuation or extension of time.

## 50 Changes to Contractual Completion Dates

**The Contractor is responsible for managing progress to achieve Contractual Completion Dates for Milestones (if any) and for the Works. The initial Contractual Completion Dates are stated in the Contract Information and these may be adjusted under the Contract.**

**Clause 50 sets out the conditions under which the Contractor may claim an extension of time for a delay event. It also entitles the Principal to extend time for any reason, at its sole discretion.**

### Extensions of time

- .1 The Contractor is entitled to an extension of time for *Completion* and an adjustment to the related *Contractual Completion Dates* if:
    - .1 the Contractor is or will be delayed in achieving *Completion* of the Works or any *Milestone* by the applicable *Contractual Completion* date by:
      - .1 an act, default or omission of the Principal, including a breach of the Contract by the Principal; or
      - .2 subject to clause 8.9, an instruction of the Principal under clause 8.8 directly causes a delay or disruption; and
      - .3 any other cause stated in Item 49AA1 of the Contract Information, but not including any cause which the Contract expressly states is at the Contractor's risk or for which the Contract expressly precludes an entitlement for an extension of time;
    - .2 the delay is to an activity or activities on the critical path of the then current *Contract Program* and work is proceeding in accordance with this program;
    - .3 the Contractor has given the Principal an initial notice in writing within 7 days after the start of the delay, setting out the cause of the delay, any relevant facts and including a copy of the *Contract Program*, current at the start of the delay, which demonstrates how the delay affects the critical path and shows the expected effects of the delay; and
    - .4 the Contractor has given the Principal the *Claim* and other information required by clauses 50.3 and 50.4.
- Refer to clause 22 for Contract Program requirements*
- .2 The Contractor must take all reasonable steps to avoid delay and its effects.
  - .3 If the Contractor is delayed by a cause of delay listed in clause 50.1, it may make a *Claim* for an extension of time (that is not otherwise precluded by the Contract) in accordance with clause 50. The *Claim* must:
    - .1 identify the extension of time claimed and include other information sufficient for the Principal to assess the *Claim*; and



- .2 be submitted within 28 days after the start of the delay; and
- .3 be updated every subsequent 28 days while the delay continues.
- .4 With every claim made under clause 50.3 the Contractor must submit a copy of the then current *Contract Program* which shows the effects of the delay on the critical path and to the time required to achieve *Completion*.
- .5 The Contractor is only entitled to an extension of time for delays occurring on days on which the Contractor usually carries out work for the Contract.
- .6 When two discrete events cause a concurrent delay in achieving *Completion* and one or more of the events is an event in respect of which the Contractor is precluded by the Contract from making a claim for an extension of time then, to the extent that the effects of delay are concurrent, the Contractor will not be entitled to an extension of time for *Completion* notwithstanding that another cause of the delay is such that the Contractor would have, but for this clause 50.6, had an entitlement to an extension of time.
- .7 The Contractor is not entitled to an extension of time for any days which are expressly not to be counted under clause 37.8 or 49.6.
- .8 The Principal may, in its absolute discretion, but without any obligation to do so for the benefit of the Contractor (or otherwise), extend any *Contractual Completion Date* at any time and for any reason, whether or not the Contractor has claimed an extension of time.
- .9 If the initial notice referred to in clause 50.1.3 is provided later than 7 days after the start of the delay, any entitlement to an extension of time applies only to the period of delay from the date 7 days prior to the date of provision to the Principal of the initial notice.

#### **Reductions in time**

- .10 If a *Variation* or resolution of a *Fault* under clause 38 leads to less time being required for *Completion*, the Principal may assess a reasonable adjustment to the affected *Contractual Completion Date*.

#### **Adjustment to Contractual Completion Dates**

- .11 The relevant *Contractual Completion Dates* must be adjusted in accordance with clause 47 to account for any extension or reduction of time assessed under clause 50.

## **51 Delay costs and liquidated damages**

### **Delay costs**

- .1 The Contractor is entitled to delay costs only for delay or disruption caused by:
  - .1 a *Variation* (other than a *Variation* for the Contractor's convenience);
  - .2 failure to give the Contractor access to the Site within the time stated in Contract Information item 13;
  - .3 subject to clauses 8.9 and 26.12, an instruction under clause 8.8;
  - .4 adverse *Site Conditions* that differ materially from those the Contractor should reasonably have expected at the close of tenders (subject to clause 37.8 and Contract Information item 37);
  - .5 resolution of a *Fault* notified in accordance with clause 38.1;
  - .6 changes in *Statutory Requirements* that the Contractor did not know about, or should not reasonably have expected at the close of tenders and that require changes to work in connection with the Contract (subject to clause 49.6);
  - .7 a suspension instruction under clause 53 if the need for the suspension arises from the Principal's act or omission; or
  - .8 a breach of the Contract by the Principal.



- .2 Delay costs are calculated at the applicable rate in Contract Information item 49A for the number of days by which the time for achieving *Completion* is extended because of a cause listed in clause 51.1, subject to the limitations in clause 37.8, 38.4 and 49.6. The rate or rates stated in Contract Information item 49A1 apply where the delay is caused by the Principal's failure to give the Contractor access to sufficient of the Site to allow the Contractor to start work, in accordance with clause 34. The rate or rates stated in Contract Information Item 49A2 apply for any other delays for which the Contractor is entitled to delay costs.
- .3 Notwithstanding clause 51.2, the Contractor is not entitled to delay costs for any days on which it would have been delayed anyway by a cause for which it has no entitlement to delay costs.
- .4 The applicable rate of delay costs will be reduced where any part of the Works is being used or occupied prior to *Completion* under clause 64. The reduced rate of delay costs will be in the same proportion to the original rate as the value of the remaining work is to the *Contract Price* (as adjusted to the time of occupation). The value of the remaining work will be assessed by the Principal, acting reasonably.
- .5 The Contractor has no remedy or entitlement connected with delay or disruption other than:
  - .1 the amounts to be paid in accordance with clause 51;
  - .2 an extension of time to any *Contractual Completion Date* to which it is entitled under clauses 48 or 50; or
  - .3 any remedy it may have under clause 74 or 75.

#### **Liquidated damages**

- .6 If Contract Information item 49B states that liquidated damages do not apply, the Principal may claim general damages if the Contractor fails to achieve *Completion* of the Works or any *Milestone* by its *Contractual Completion Date*.
- .7 If Contract Information item 49B states that liquidated damages apply and the Contractor fails to achieve *Completion* of the Works or any *Milestone* by a *Contractual Completion Date* to which liquidated damages apply, the Contractor will be liable to pay the Principal liquidated damages at the rate stated in Contract Information item 49B, for every day after the *Contractual Completion Date*, up to and including the *Actual Completion Date*.
- .8 If, however, the Contract is terminated before the Contractor achieves *Completion*, any liquidated damages will apply only up to the date of termination of the Contract.
- .9 A failure by the Principal at any time to demand payment or to deduct, withhold or set-off the liquidated damages does not amount to a waiver of, or otherwise affect, the Principal's rights and entitlements.
- .10 If any *Contractual Completion Date* is extended after the Contractor has paid or the Principal has deducted liquidated damages, the Principal must re-pay any excess liquidated damages to the Contractor, subject to any right of set-off.
- .11 The applicable rate of liquidated damages will be reduced where any part of the Works is being used or occupied prior to *Completion*, under clause 64. The reduced rate of liquidated damages will be in the same proportion to the original rate as the value of the remaining work is to the *Contract Price* (as adjusted to the time of occupation). The value of the remaining work will be assessed by the Principal, acting reasonably.
- .12 The Contractor acknowledges that the rates for liquidated damages in Contract Information item 49B are a genuine pre-estimate of the Principal's loss and agrees that it will not challenge any rate for liquidated damages as being in the nature of a penalty.



## 52 Acceleration

- .1 The Principal may issue an *Acceleration Notice* instructing the Contractor to accelerate progress of the Works. The Contractor must comply unless, before taking any steps to accelerate, it demonstrates to the satisfaction of the Principal that the acceleration instructed cannot reasonably be achieved.
- .2 If requested in writing by the Principal, the Contractor must, within the time specified in the request, advise the Principal of:
  - .1 its price (excluding all costs of delay or disruption) for a proposed acceleration; and
  - .2 the effect of a proposed acceleration on any other matter specified by the Principal.
- .3 Whenever possible, the parties must agree on the steps to be taken, and the basis for reimbursing the Contractor's costs for acceleration, before the Contractor takes those steps.
- .4 If the Contractor achieves the acceleration instructed, taking into account any relevant extension of time that has been given, the *Contract Price* must be adjusted as agreed, or if not agreed, by a valuation made in accordance with clause 47 for any unavoidable costs incurred by the Contractor additional to what it would have incurred if the Principal had not given the instruction.

## 53 Principal's suspension

- .1 The Principal may instruct the Contractor to suspend progress of the Works, and the Contractor must comply with that instruction.
- .2 The Contractor must resume carrying out the Works when instructed by the Principal.
- .3 If the need for the suspension arises from the Principal's act or omission, and causes the Contractor delay, or unavoidable costs, additional to what the Contractor would have incurred had the suspension not been instructed, the Contractor may make a *Claim* for:
  - .1 an extension of time in accordance with clause 50, without the Contractor meeting the preconditions required by clause 50 other than provision of an updated *Contract Program* demonstrating the delays caused by the suspension;
  - .2 delay costs in accordance with clause 51; and
  - .3 an increase in the *Contract Price* to be valued in accordance with clause 47.
- .4 The Contractor has no other remedy or entitlement in connection with a suspension by the Principal.

## 54 Contractor's suspension

- .1 If the Contractor suspends work at any time in accordance with the *Building and Construction Industry Security of Payment Act 1999* (NSW), it may be entitled to an extension of time under clause 50, but despite clause 51, it will not be entitled to any payment for delay or disruption.
- .2 Clause 54 is not intended to limit any rights of the Contractor under the *Building and Construction Industry Security of Payment Act 1999* (NSW).

## Payment

## 55 The Contract Price

- .1 The *Contract Price* (at the Date of Contract), and the basis of calculating it, are stated in Contract Information item 40.
- .2 If stated in Contract Information item 41, the *Contract Price* (and the rates and/or lump sums it includes) will be adjusted for rise or fall in costs, on the terms set out in Schedule 7 (Costs Adjustment Formula).



- .3 Where and to the extent that the *Contract Price* includes a lump sum, no statements, schedules or bill of quantities shall be relied upon by the Contractor and the Contractor will not be entitled to any increase in the *Contract Price*, any extension of time pursuant to clause 50, or delay costs pursuant to clause 51 as a result of any error, omission or incorrect estimate or other statement of the quantity of work required under the Contract.
- .4 For clarity, it is acknowledged and agreed that the *Contract Price* and any rates included in this Contract, including in the *Schedule of Rates*, include an allowance for *Contractor's Margin* and for all *Profit, Overheads and Preliminaries*, and the Contractor is not entitled to any payment or compensation in addition to the *Contract Price* or in accordance with any such rate unless the Contract expressly states otherwise.

#### **Schedules of Rates**

- .5 If Contract Information item 40 states that a *Schedule of Rates*, in whole or in part, is the basis of calculation of the *Contract Price*, then without limiting clause 8:
  - .1 that part of the *Contract Price* calculated by reference to the *Schedule of Rates* is a notional price only, determined by adding together the products of the stated quantity for each item and its rate;
  - .2 all quantities are estimated, and none are guaranteed;
  - .3 some of the items may be provisional (that is, they may not be required at all); and
  - .4 subject to clause 55.6 and 55.7, the Contractor will be paid at the applicable rate stated in the *Schedule of Rates* for the measured quantity of work actually carried out in accordance with the Contract.
- .6 Notwithstanding anything else in this Contract, the Contractor will not be entitled to any adjustment to the *Contract Price* or any other payment or compensation whatsoever in respect of work undertaken, performed or carried out where the required quantity of such work exceeds the estimate stated in the *Schedule of Rates* for that item, unless the Contractor gives notice to the Principal, no later than 2 Business Days after receiving the Principal's instruction to undertake, perform or carry out such work, which notice must:
  - .1 state that the Contractor is (or will be) required to carry out a greater quantity of work than the estimate provided for in the *Schedule of Rates* for that item of work;
  - .2 set out the actual quantity of work which the Contractor will be required to carry out, perform or undertake as a result of the Principal's instruction; and
  - .3 include evidence of the direct actual cost to the Contractor (including costs for labour, *Materials* and plant) for carrying out the whole of such work.
- .7 If the *Schedule of Rates* provides an estimate of the quantity of work to be undertaken, carried out or performed by the Contractor in respect of any item therein and Principal instructs the Contractor to undertake, carry out or perform work the quantity of which exceeds such estimate by more than the limit of accuracy stated in the *Schedule of Rates* (or, if no limit is stated, by more than 10%), then:
  - .1 the Contractor will not be paid at the rate stated in the *Schedule of Rates* for that item for undertaking, carrying out, or performing that work;
  - .2 the Principal and the Contractor may agree a new rate for the relevant item in the *Schedule of Rates* for undertaking, carrying out, or performing that work, in which case the Contractor will be paid an amount being the product of the actual measured quantity of work carried out for that item and the agreed rate; and
  - .3 failing agreement in accordance with clause 55.7.2 within a reasonable time, then the Contractor will be entitled to be paid the actual direct cost to



the Contractor for the measured quantity of work actually carried out in accordance with the Contract (including labour, *Materials*, plant), plus *Contractor's Margin* (calculated as the percentage stated in Contract Information item 44) thereon.

### **Provisional Sums**

- .8 If Contract Information item 42 states that the *Contract Price* includes a *Provisional Sum*, then:
  - .1 the Contractor must not carry out the work specified against that *Provisional Sum* unless instructed by the Principal;
  - .2 if the Principal does not instruct the Contractor to carry out the work, the *Provisional Sum* for that work must be deducted from the *Contract Price*; and
  - .3 if the Principal instructs the Contractor to carry out the work:
    - .1 the Contractor must comply with the instruction; and
    - .2 the *Contract Price* must be adjusted as follows:
      - .1 the *Provisional Sum* will be deducted from the *Contract Price*;
      - .2 the cost of work carried out by the Contractor, a Subcontractor, Supplier or Consultant (excluding any amount payable due to default or negligence on their part or that of the Contractor) must be added to the *Contract Price*; and
      - .3 the amount calculated by applying the *Provisional Sum* margin percentage stated in Contract Information item 43 to that cost must be added to the *Contract Price*.
- .9 The Contractor agrees that it has allowed in its *Contract Program* for the performance of all *Provisional Sums* and that, accordingly, the Contractor shall not be entitled to any extension of time for *Completion* in connection with the expenditure or performance of any *Provisional Sum*.

## **56 Goods and Services Tax (GST)**

- .1 Unless otherwise expressly stated in the Contract, all prices, rates or other sums payable in accordance with the Contract are exclusive of GST.
- .2 The Principal will issue a tax invoice for each taxable supply it makes to the Contractor.
- .3 The Principal will issue to the Contractor a Recipient Created Tax Invoice (RCTI) for each taxable supply (other than an excluded supply) made by the Contractor to the Principal, and will issue an adjustment note for any adjustment event. The parties may agree in writing from time to time which supplies are excluded supplies.
- .4 The Contractor must not issue a tax invoice in respect of any supply it makes to the Principal, other than for an excluded supply. The Contractor must give the Principal a tax invoice for an excluded supply at or before the time the Contractor makes a *Payment Claim* or otherwise invoices the Principal for that supply.
- .5 Each party must be registered for GST and must notify the other party if it ceases to be registered for GST or to comply with any of the requirements of any taxation ruling issued by a taxation authority relating to the creation of RCTIs.

### **Reimbursable expenses**

- .6 If the Contract requires a party to pay for, reimburse or contribute to any expense, loss or outgoing ("reimbursable expense") suffered or incurred by the other party, the amount required to be paid, reimbursed or contributed by the first party must be the sum of:



- .1 the amount of the reimbursable expense net of input tax credits (if any) to which the other party is entitled in respect of the reimbursable expense; and
- .2 to the extent that the other party's recovery from the first party is consideration for a taxable supply to the first party, any GST payable in respect of that supply.

## 57 Prepayment

**Prepayment is an advance payment against the Contract Price which provides early cash flow to the Contractor. The Prepayment is repaid by the Contractor progressively by deductions from amounts payable under the Contract. Prepayment is secured by Undertakings provided to the Principal in respect of the Prepayment. Prepayment may be utilised for any purpose related to the Contract.**

- .1 The Contractor may claim *Prepayment*, as an advance payment against the *Contract Price* (but not as a *Payment Claim*), at any time before achieving *Completion* of the whole of the Works if all the following apply:
  - .1 the total amount claimed for *Prepayment* is no more than the amount stated in Contract Information item 45;
  - .2 the *Prepayment* does not exceed the remaining balance of the *Contract Price* less any amount that the Principal considers payable by the Contractor to the Principal;
  - .3 no more than one-third of the *Prepayment* amount is retained by the Contractor and the balance is assigned directly to Subcontractors, Suppliers and Consultants in the proportions notified to the Principal;
  - .4 the Contractor has established to the Principal's satisfaction that the *Prepayment* will be utilised for a purpose related to the Contract;
  - .5 the Contractor has provided *Undertakings* to the Principal for the amounts of the *Prepayment*; and
  - .6 the Contractor has assigned to Subcontractors, Suppliers and Consultants their respective shares of the *Prepayment* by effective written assignments, and has notified the Principal of the assignments, including the amounts assigned to each Subcontractor.
- .2 The Principal must pay the amount claimed within 14 days after the Contractor provides evidence that all the conditions in clause 57.1 have been met.
- .3 The Contractor must repay the *Prepayment* by way of progressive deductions from payments otherwise due under the Contract.
- .4 The Principal must return *Undertakings* provided for *Prepayment* when the amount of the *Prepayment* has been fully repaid.
- .5 The Principal may have recourse to the *Undertakings* provided for *Prepayment* if the *Prepayment* has not been fully repaid and:
  - .1 the unpaid balance of the *Contract Price* is insufficient to cover the outstanding balance of the *Prepayment*;
  - .2 the Contract is terminated; or
  - .3 the Contractor's employment under the Contract is terminated.

## 58 Payment Claims

**The Contract allows for progress payments by regular (usually monthly) payments or payments based on Milestone Completion or both.**

- .1 Subject to clauses 58.2 and 58.3, the Contractor must submit a *Payment Claim* each month, on the date in the month specified in Contract Information item 46A, for work carried out up to that date.
- .2 For *Milestones* for which Contract Information item 46B states that payments will be made after they reach *Completion*, each *Payment Claim* may only include the value of work in those *Milestones* if they reached *Completion* before the specified submission date.



- .3 The Contractor must submit the *Final Payment Claim* within the time specified in clause 61.
- .4 *Payment Claims* must be in the form of, and include all of the information required by, Schedule 3 (Payment Claim Worksheet) or in another form agreed by the Principal.
- .5 Every *Payment Claim* must:
  - .1 identify the work and *Materials* to which the *Payment Claim* relates;
  - .2 state the value of that work and those *Materials*;
  - .3 identify and state the amount the Contractor claims for any other *Claim* that the Principal has agreed or is required to pay under clause 68 or any other provision of the Contract;
  - .4 state the amount of interest, if any, that the Contractor claims under clause 62; and
  - .5 state the *Claimed Amount*, after allowing for retention of the *Completion Amount* specified in clause 60 and for payments already made.
- .6 Every *Payment Claim* must be accompanied by:
  - .1 a completed and true Combined Subcontractor's Statement and Supporting Statement in the form of Schedule 6, executed on the date of the *Payment Claim*;
  - .2 all relevant calculations;
  - .3 all relevant *Conformance Records*; and
  - .4 any other information specified in the Contract.

#### **Unfixed Materials**

- .7 *Payment Claims* must not include any amount for *Materials* intended for incorporation in the Works but not yet incorporated unless all of the following conditions are satisfied:
  - .1 the Principal has agreed in writing to pay the Contractor for the unincorporated *Materials*;
  - .2 the Contractor has provided no later than 14 days before submitting the *Payment Claim*:
    - .1 an *Undertaking* equal to the value of the unincorporated *Materials* (to be returned when the *Materials* are incorporated into the Works); and
    - .2 a statement in the terms in Schedule 11 (Statement regarding *Materials*).
  - .3 the Contractor provides evidence no later than 14 days before submitting the *Payment Claim* that:
    - .1 the unincorporated *Materials* are, or upon payment will become, the property of the Principal free of any *Encumbrance*; and
    - .2 the unincorporated *Materials* are clearly identified as the property of the Principal and are insured for their full value.
  - .4 for any unincorporated *Materials* imported or to be imported into Australia, the Contractor has given the Principal a clean on board bill of lading drawn or endorsed to the order of the Principal, appropriate insurance certificates and a Customs invoice.
- .8 The Contractor warrants that no *Encumbrance* exists over any *Materials* paid for by the Principal or incorporated into the Works.
- .9 Upon the *Materials* becoming the property of the Principal, they are entrusted to the Contractor for the purpose of carrying out the Works and the Contractor is solely liable for their care.
- .10 If the Contract or the Contractor's employment under the Contract is terminated by the Principal, the Contractor must ensure that, in respect of any unincorporated *Materials* for which payment has been made or which have



been appropriated to the Contract, the Principal may enter upon any premises where the *Materials* are stored and take possession of these *Materials*.

## 59 Payments

- .1 Within 10 *Business Days* after being served a *Payment Claim* by the Contractor, the Principal must provide a *Payment Schedule* to the Contractor that:
  - .1 identifies the *Payment Claim* to which it relates;
  - .2 indicates the amount the Principal proposes to pay, as the *Scheduled Amount*; and
  - .3 if the *Scheduled Amount* is less than the *Claimed Amount*, provides reasons explaining why it is less and why any money is being withheld. Reasons why the *Scheduled Amount* is less than the *Claimed Amount* may include failure by the Contractor to comply with any outstanding obligations under:
    - .1 clause 33 (Security);
    - .2 clause 27 (Insurance);
    - .3 clause 58.6.2 (Combined Subcontractor's Statement and Supporting Statement (Schedule 6));
 

*In accordance with the relevant legislation identified in Schedule 6, the Principal may withhold any payment to the Contractor until this Statement is provided.*
    - .4 clauses 58.6.3 to 58.6.4 (Items to accompany a *Payment Claim*);
    - .5 clause 58.7 (Unfixed Materials); and
    - .6 any provision of the Contract requiring the Contractor to submit anything or provide proof of any state of affairs at or before the time of a *Payment Claim*.
- .1A Failure by the Principal to set out in a *Payment Schedule* an amount which the Principal is entitled to retain, deduct, withhold or set-off from the amount which would otherwise be payable to the Contractor by the Principal will not prejudice the Principal's right to subsequently exercise its right to retain, deduct, withhold or set-off any amount under this Contract or in any further *Payment Schedule*.
- .2 The Principal must pay the Contractor the *Scheduled Amount* within 15 *Business Days* after being served with the *Payment Claim*.
- .3 Unless stated otherwise in the Contract, all payments to the Contractor must be made by electronic funds transfer to the Contractor's account notified to the Principal for that purpose. Changes to the Contractor's account details must be notified in accordance with protocols established by the Principal.
- .4 Payment by the Principal is payment on account only and is not evidence that the Principal accepts the value, quantity or quality of work or that the Contractor has complied with the Contract or that the Contractor has any particular entitlement.

## 60 Completion Amount

**The Completion Amount is intended to provide an incentive; the earlier the Contractor achieves defect-free Completion of the whole of the Works, the earlier the Completion Amount is paid.**

- .1 If Contract Information item 47 specifies a *Completion Amount*, the Contractor may claim it in the next *Payment Claim* after *Completion* of the whole of the Works or, if applicable, a specified *Milestone*, subject to the Principal's right to set-off under clause 63.
- .2 The Principal will retain the *Completion Amount* from payments when the amount paid to the Contractor exceeds 50% of the *Contract Price* at the Date of Contract. Until the *Completion Amount* has been retained in full, the amount retained against each payment must not exceed 50% of the value of the



payment. Thereafter, the *Completion Amount* will be held until the Contractor claims it in accordance with clause 60.1.

- .3 The Principal will own any interest earned on the monies retained for the *Completion Amount*.

## 61 Final payment

**Clause 61 contains provisions which apply to the Contractor's Final Payment Claim and the Principal's Final Payment Schedule.**

- .1 The Contractor must submit a *Final Payment Claim* and *Deed of Final Release* within 13 weeks after achieving *Completion* of the whole of the Works. The *Final Payment Claim* must include any *Claim* not previously included in a *Payment Claim*. Any *Claim* not submitted before or with the *Final Payment Claim* is barred.
- .2 Within 10 *Business Days* after receiving the *Final Payment Claim* and *Deed of Final Release* (if not received together, whichever is the later) or, if the Contractor has not submitted a *Final Payment Claim*, within 15 weeks after the whole of the Works reaches *Completion* and the Contractor has submitted its *Deed of Final Release* (if not concurrent, whichever is the later), the Principal must provide a *Final Payment Schedule* to the Contractor.
- .3 If the Principal proposes to make no payment to the Contractor and claims that the Contractor must pay the Principal money, the *Final Payment Schedule* must state the amount that the Principal claims the Contractor must pay, and include reasons and particulars supporting that claim.
- .4 Payments identified in the *Final Payment Schedule* as due from the Contractor to the Principal must be made within 14 days after the *Final Payment Schedule* is provided. Payments due from the Principal to the Contractor must be made in accordance with clause 59.
- .5 The issue of the *Final Payment Schedule* is conclusive evidence that all necessary adjustments to the *Contract Price* have been made and all entitlements of the Contractor have been met, except for those required by:
  - .1 arithmetical error; or
  - .2 resolution of:
    - .1 any *Claim* made in accordance with clause 61.1;
    - .2 any *Issue* properly notified under clause 69 prior to the *Final Payment Claim*; or
    - .3 any *Issue* arising out of the *Final Payment Schedule*, but only if it is notified to the Principal within 28 days after the date of the *Final Payment Schedule*; or
    - .4 clause 61.6.
- .6 The Contractor's liability under the Contract or otherwise is not affected by the issue of the *Final Payment Schedule*. The Contractor's liability continues until any limitation period under statute expires.

## 62 Interest on late payments

- .1 A party which fails to make a payment within the time specified in the Contract must pay interest to the other party on the unpaid amount, at the rate stated in Contract Information item 48, for the period the payment is late.

## 63 Set-off

- .1 If the Principal claims a sum, including a debt due, in connection with the Contract or any other contract between the Principal and the Contractor, the Principal may:
  - .1 withhold, deduct or set-off the claimed sum against any amount to which the Contractor is otherwise entitled in connection with the Contract; and/or
  - .2 make a demand against the *Undertakings* provided under the Contract for any amount of the claimed sum.



## Completion

### 64 Early use

- .1 Before the Contractor achieves *Completion*, the Principal, or anyone authorised by the Principal, may use or occupy all or any part of the Works which is sufficiently complete and then:
  - .1 the Contractor's responsibilities are not affected, except if they are reduced under clauses 26.3 or 26.7 or if the Principal, or anyone authorised by the Principal to use or occupy any part of the Works, causes the Contractor's work to be hindered; and
  - .2 the Principal becomes responsible for any additional insurance required.
- .2 If the Principal requires use or occupation of any part of the Works before the Contractor achieves *Completion*, the Principal must give not less than 21 days' notice in writing to the Contractor and must specify the date on which use or occupation is required and those parts to be used or occupied.
- .3 The Contractor must assist and cooperate with those using or occupying the Works.
- .4 No later than 21 days after receipt of a notice under clause 64.2, the Contractor must provide to the Principal all the documents and other things listed in the definition of *Completion* that are relevant to the parts of the Works to be used or occupied.

### 65 Completion

**The Contract requires defect-free Completion. Completion applies to any Milestone as well as to the whole of the Works.**

- .1 The Contractor must achieve *Completion* by the *Contractual Completion Date*.
- .2 When the Principal considers that *Completion* has been achieved, the Principal must give the Contractor a notice stating the *Actual Completion Date*.

### 66 Close-out workshop

**The close-out workshop is an opportunity to review the management of the Contract. It is also used to collect and provide feedback to the parties to enable them to improve the overall communication and management process for any possible future contract.**

- .1 The Principal must convene a close-out workshop within 21 days after *Completion* of the whole of the Works.
- .2 The parties must attend the close-out workshop and must jointly decide who else will attend. Clause 6.4 applies to the costs of the workshop.

### 67 Defects after Completion

- .1 At any time after *Completion*:
  - .1 the Principal may instruct the Contractor to make good any *Defect* within the time specified in a *Defect Notice*;
  - .2 if the Contractor fails to make good the *Defect* in the time specified in the *Defect Notice*, the provisions of clauses 45.3 and 45.4 will apply; and
  - .3 the Principal may instruct a *Variation* in connection with any *Defect* instead of requiring the *Defect* to be made good under clause 67.1.1.
- .2 Clause 67 does not reduce the Contractor's liability, whether arising under the Contract or otherwise. The Contractor's liability continues until any limitation period under statute expires.
- .3 Clause 67 does not affect the Principal's rights under clause 46.



## Claim and Issue resolution

**This section provides a step-by-step procedure for handling Claims and Issues.**

### Claim resolution

#### 68 Contractor's Claims

- .1 If the Contractor makes:
  - .1 a *Claim* under a provision of the Contract that does not specify a time for making the *Claim*; or
  - .2 a *Claim* in connection with the Contract or the Works, but not under a provision of the Contract,

the *Claim* must be submitted within 28 days after the later of the start of the event giving rise to the *Claim*; and the time the event should have become known to the Contractor, with reasonable diligence on its part.
- .2 If the Contractor fails to comply with the applicable time specified in the Contract for the making of any *Claim*:
  - .1 the Principal will not be liable (insofar as it is possible to exclude such liability) upon any *Claim* by the Contractor whatsoever; and
  - .2 the Contractor will be absolutely barred and completely disentitled from making any *Claim* against the Principal,

arising out of, or in any way in connection with, the relevant direction, fact, matter or thing (as the case may be) to which the *Claim* relates.
- .3 Each *Claim* must include information sufficient for the Principal to assess the *Claim*, including the factual and legal basis, detailed quantification and responses by the Contractor to the questions set out in paragraphs 1.1.1 and 1.1.2 of Schedule 5 (Expert Determination Procedure). The *Claim* must also include the effect of the event giving rise to the *Claim* on both the *Contract Price* and *Contractual Completion Date(s)*,
- .4 If a *Claim* does not comply with clause 68.3, the Principal may, but is not obliged to, give the Contractor an opportunity to make the *Claim* compliant. Clause 68.7 applies to a claim that does not comply with clause 68.3.
- .5 If a *Claim* complies with clause 68.3 and the Principal agrees that the Contractor is entitled to a money adjustment or an adjustment to *Contractual Completion Date(s)*:
  - .1 if the *Claim* involves money it must be valued in accordance with clause 47; and
  - .2 if the *Claim* involves adjustment to *Contractual Completion Date(s)* it must be dealt with under clause 50.
- .6 If the Principal agrees to a *Claim* involving money, the Contractor may claim the agreed amount only by including it in a *Payment Claim*.
- .7 If a *Claim* is rejected, not agreed or has not been referred to a Valuer within 28 days after the Contractor has provided the information specified in clause 68.3 it will become an *Unresolved Claim*, and the Contractor may notify the Principal of an *Issue* under clause 69.1.
- .8 The provisions of clauses 68.2 to 68.7 apply generally to all *Claims*, whether made under clause 68 or under another provision of the Contract, unless determination of the *Claim* is regulated by a separate procedure under any applicable legislation.

### Issue resolution

**Generally, the aim of the Contract is for the parties to resolve matters through discussions as soon as possible and within the times specified. Further steps are only needed if the representatives of the parties who are involved in day to day management of the Contract are unable to resolve matters themselves.**



## 69 Notification of Issue

- .1 The Contractor may dispute an assessment or instruction of the Principal, or seek resolution of an *Unresolved Claim*, by giving notice to the Principal (with a copy to the Principal's senior executive named in Contract Information item 7) of an *Issue* within 28 days after notification of the assessment or instruction, or within 28 days after it becomes an *Unresolved Claim*.
- .2 Either party may give notice to the other (with a copy to that party's senior executive) of an *Issue* (excluding an *Issue* referred to in clause 69.1, but including a claim by the Principal) about the meaning or effect of the Contract, or about any matter connected with the Contract, within 28 days after becoming aware of the *Issue*.
- .3 Subject to clause 69.6, the parties must follow the *Issue* resolution procedures in clauses 69, 70 and 71 before either commences litigation or takes similar action.
- .4 If notice of an *Issue* under clause 69.1 or 69.2 is given outside the time prescribed by those clauses, the party giving the notice is not entitled to claim or recover interest for the period before the notice was given. This clause does not affect the absolute time bar in clause 61.
- .5 The Principal is not liable to pay damages (whether in contract, for negligence or otherwise) for making an incorrect assessment or instruction.
- .6 The *Issue* resolution procedure in clauses 69, 70 and 71 does not prevent a party from seeking an urgent declaration or injunction from a court.

## 70 Resolution by senior executives

- .1 If a party gives notice of an *Issue* under clause 69, the senior executives named in Contract Information items 7 and 11 must promptly confer to try to resolve the *Issue*.
- .2 A party is not entitled to refer an *Issue* to *Expert Determination* until 28 days after giving notice of an *Issue*.
- .3 A party may only refer an *Issue* to *Expert Determination* by giving a notice specifying the *Issue* to the other party (with a copy to that party's senior executive) within the time stated in Contract Information item 51.
- .4 Subject to clause 69.6, an *Issue* for which notice has not been given in accordance with clause 70.3 is barred from *Expert Determination* or litigation or similar action.

## 71 Expert Determination

- .1 The representative of the Principal for the purposes of clause 71 is the person named in Contract Information item 52. This person may differ from the *Principal's Authorised Person*.
- .2 If an *Issue* is to be referred to *Expert Determination* under clause 70, the parties must endeavour to agree on the *Expert* to be engaged. If they cannot agree within 28 days after receipt of a notice under clause 70.3, the *Expert* will be nominated (on the application of either party) by the person named in Contract Information item 53. That person must not nominate:
  - .1 an employee of the Principal or the Contractor;
  - .2 a person who has been connected with the Works or the Contract; or
  - .3 a person who the Principal and the Contractor have already considered and not been able to agree on.
- .3 When the person to be the *Expert* has been agreed or nominated, the Principal, on behalf of both parties, must engage the *Expert* by a letter of engagement (with a copy to the Contractor) that sets out:
  - .1 the *Issues* referred to the *Expert* for determination;
  - .2 the *Expert's* fees;



- .3 the procedure for *Expert Determination* in Schedule 5 (Expert Determination Procedure); and
- .4 any other matters which are relevant to the engagement.
- .4 The Principal and the Contractor must share equally the *Expert's* fees and out-of-pocket expenses for the determination, and bear their own costs.
- .5 The procedure for *Expert Determination* is set out in Schedule 5 (Expert Determination Procedure).
- .6 In response to any *Issue* referred to the *Expert* by a party, the other party may raise any defence, set-off or cross-claim.
- .7 Subject to clauses 71.8 and 71.9, the parties must treat each determination of an *Expert* as final and binding and a party that owes money to the other pursuant to the determination must pay that amount to the other party within 28 days after receiving the determination.
- .8 Neither party may commence litigation in respect of the matters determined by the *Expert* unless the determination:
  - .1 does not involve paying a sum of money; or
  - .2 requires one party to pay the other an amount in excess of the amount stated in Contract Information item 54, calculated without having regard to:
    - .1 any interest that may be payable; and
    - .2 any amount that has been paid pursuant to the Building and Construction Industry Security of Payment Act 1999 (NSW).
- .9 Neither party may commence litigation in respect of the matters determined by the *Expert* unless they do so within 56 days after receiving the determination.

## 72 Parties to perform the Contract

- .1 The parties must continue to perform their obligations under the Contract at all times, regardless of any *Claim* or *Issue* or the conduct of any *Issue* resolution procedures under clauses 69 to 71.

# Termination

## 73 Termination for Contractor's Default or Insolvency

- .1 The Principal may terminate the Contractor's employment under the Contract for *Contractor's Default* or *Contractor's Insolvency* by giving notice in accordance with clause 73.
- .2 Nothing in clause 73 affects or negates the Principal's common law rights to terminate or for damages.
- .3 In the case of *Contractor's Default*, the Principal must first give the Contractor notice that it has 7 days after receipt of that notice to remedy the *Contractor's Default*.
- .4 If the Contractor fails to:
  - .1 give the Principal a notice containing clear evidence that it has remedied a *Contractor's Default*; or
  - .2 propose steps reasonably acceptable to the Principal to remedy the *Contractor's Default*,
 the Principal may give the Contractor a notice terminating its employment under the Contract.

*If a right to terminate exists at common law, a notice to terminate at common law may be given without first giving notice to remedy a Contractor's Default.*



- .5 In the case of *Contractor's Insolvency*, the Principal may give the Contractor a notice terminating its employment under the Contract.
- .6 If the Principal terminates the Contractor's employment under clause 73 it may, at its sole discretion, employ others to complete the Works and all the following will then apply:
  - .1 The Contractor must leave the Site as soon as reasonably practicable and remove all *Temporary Work* and *Materials* it has brought onto the Site, apart from any *Temporary Work* and *Materials* identified by the Principal as being necessary to have the Works completed.
  - .2 The Contractor must assign to the Principal the Contractor's rights and benefits in all its contracts and agreements in connection with the Works, warranties and unconditional undertakings, bank guarantees, insurance bonds, other security of a similar nature or purpose and retention held by the Contractor, with effect from the date of termination of its employment under the Contract.
  - .3 The Contractor must consent to a novation to the Principal or its nominee of all Subcontracts and its other contracts concerning the Works, as required by the Principal. The Principal may at any time make payments and may deduct, withhold or set-off any amounts to be paid under the novated contracts from amounts otherwise payable to the Contractor or from any *Undertakings* given on the Contractor's behalf.
  - .4 The Contractor must do everything and sign all documents necessary to give effect to clause 73, and it irrevocably appoints the Principal as its attorney to do this in its name if it fails to do so.
  - .5 If, on *Completion*, the cost to the Principal of completing the Works exceeds the amount that would have been paid to the Contractor to complete the Works, then the difference will be a debt due from the Contractor to the Principal.
  - .6 The Principal may make provisional assessments of the amounts payable to the Principal under clause 73.6.5 and may, without limiting any other right of recourse, demand them against the *Undertakings*.

#### **74 Termination for Principal's convenience**

- .1 The Principal may, at its absolute discretion, 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.
- .2 The Contractor must comply with any instructions of the Principal to wind down and stop work.
- .3 The Contractor must leave the Site by the date stated in the termination notice and remove all *Temporary Work*, *Materials* and other unfixed things it has brought onto the Site apart from *Materials* for which payment has been made or is due under clause 59 and any other items identified in the termination notice as to be retained on the Site.
- .4 After termination under clause 74.1, subject to its rights under the Contract (including clause 63), the Principal must pay the Contractor:
  - .1 the amount due to the Contractor for all work carried out (as determined under clauses 58 and 59) to the date the termination notice takes effect, after taking into account previous payments including any *Prepayments* and any deductions, retentions or set-offs under clauses 59, 60 and 63;
  - .2 the cost of *Materials* reasonably ordered by the Contractor for the Works which the Contractor is legally liable to accept, but only if on payment these unincorporated *Materials* become the property of the Principal, free of any *Encumbrance*;
  - .3 the reasonable, direct costs incurred by the Contractor for the removal of the *Temporary Work* and other things from the Site in accordance with



- clause 74.3, but only to the extent that the Contractor complies with a strict duty to mitigate costs; and
- .4 the costs reasonably incurred by the Contractor prior to receiving notice of termination in the expectation of completing the Works, where those costs have not been recovered through any other payment by the Principal, but only to the extent that the Contractor complies with a strict duty to mitigate costs.
- .5 The Principal must return the *Undertakings*, subject to its rights under the Contract.
- .6 The payments referred to in clause 74.4 are full compensation for termination under clause 74 and the Contractor has no *Claim* for damages or other entitlement, whether under the Contract or otherwise.

## 75 Termination for Principal's default

- .1 If the Principal:
  - .1 fails to pay the Contractor any amount in accordance with the Contract which is not in dispute;
  - .2 commits any fundamental breach of the Contract; or
  - .3 fails to give the Contractor access to the Site sufficient to start work required by the Contract within 3 months after the Date of Contract (or longer period specified in the Contract or agreed by the parties),
 the Contractor may give a notice requiring the Principal to remedy the default within 28 days after receiving the notice.
- .2 If the Principal fails to remedy the default, or to propose steps reasonably acceptable to the Contractor to do so, the Contractor may issue a notice terminating the Contract and clauses 74.3 to 74.6 will then apply. The Contractor's sole remedy for the Principal's breach will be the applicable amounts referred to in clause 74.4.

## 76 Termination notices

- .1 Notices under clauses 73, 74 and 75 must be in writing and be delivered by hand, registered post or equivalent, or facsimile.

## 77 Survival

- .1 Without limiting the survival of any clause by operation of law, clauses 23, 24 and 25 survive termination.

## GENERAL

### 77A PPSA

- .13 In this clause:
  - .1 **PPSA** means the *Personal Property Securities Act 2009* (Cth);
  - .2 **PPS Register** means the Personal Property Securities Register established under section 147 of the PPSA; and
  - .3 all capitalised terms not otherwise defined in this Contract have the meaning given to them in the PPSA.
- .14 The Contractor acknowledges and agrees that:
  - .1 the Contract constitutes a Security Agreement; and
  - .2 the Contract creates a Security Interest of the Principal including in relation to:
    - .1 any and all goods, materials, components and other things (whether fixed or unfixed) intended for use in the Works which are located on Site or off Site;



- .2 all construction plant, temporary works and other things on Site or off Site as are used by the Contractor or any Subcontractors;
- .3 the benefit of any Subcontracts or other contracts which the Principal requires to be novated to the Principal or the Principal's nominee; and
- .4 all *Data* used in, or prepared for, the Works,  
(**Collateral**).

.15 The Contractor consents to the Principal registering the Principal's Security Interest over the Collateral and shall ensure that each Subcontractor consents to registering the Principal's Security Interest in the Collateral, where applicable.

.16 The Contractor undertakes to:

- .1 promptly sign any further documents and provide any further information (such information to be complete, accurate and up-to date in all respects) which the Principal may reasonably require to:
  - .1 register a Financing Statement or Financing Change Statement on the PPS Register in relation to a Security Interest over the Collateral;
  - .2 register any other document on the PPS Register which is necessary to perfect the Principal's Security Interest over the Collateral; or
  - .3 correct a defect in any Contract Document;
- .2 not register, or permit to be registered by any third party including a Subcontractor, a Financing Statement or a Financing Change Statement in respect of the Collateral without the prior consent of the Principal; and
- .3 keep full and complete records of the Collateral.

.17 The Principal and the Contractor agree that:

- .1 to the extent permitted by law, the following provisions of the PPSA do not apply to this Contract: section 95; section 121(4); section 125; section 129; section 130; section 132(3)(d); section 132(4); section 135; section 142; and section 143;
- .2 unless otherwise agreed to by the Principal, the Contractor waives its right to receive a Verification Statement in accordance with section 157 of the PPSA; and
- .3 neither the Principal nor the Contractor will disclose information of the kind mentioned in section 275(1) of the PPSA and the Contractor will not authorise, and will ensure that no party authorises, the disclosure of such information, except where required by section 275(7) of the PPSA.

## **77B Further assurances**

Each party shall promptly execute all documents and do everything necessary or desirable to give full effect to the arrangements contained in the Contract.

## **77C Severance**

If any provision of the Contract or part of any provision of the Contract is in any way unenforceable, invalid or illegal, it is to be read down so as to be enforceable, valid and legal. If this is not possible, the provision (or where possible, the offending part) is to be severed from the Contract without affecting the enforceability, validity or legality of the remaining provisions (or parts of those provisions) which will continue in full force and effect.

## **77D Preservation of existing rights**

The expiration, termination or frustration of the Contract does not affect any right that has accrued to a party before the expiration, termination or frustration date.



**77E No merger**

Any right or obligation of any party that is expressed to operate or have effect on or after the expiration, termination or frustration of the Contract for any reason will not merge on the occurrence of that event but will remain in full force and effect.

**77F Counterparts**

The Contract may be executed in any number of counterparts. All counterparts taken together constitute one instrument.

**77G Indemnities**

- .1 Each indemnity contained in the Contract constitutes a separate and independent obligation of the party giving the indemnity from its other obligations under the Contract.
- .2 Any amount payable by the Contractor under any indemnity contained in the Contract is payable on demand being made by the Principal.
- .3 Any indemnity contained in the Contract survives the expiration, termination or frustration of the Contract.

**77H Amounts due**

Where no time is stated in the Contract for payment of an amount due from the Contractor to the Principal, that amount is payable on demand being made by the Principal.

**77I Contractor's responsibility**

The obligations and liabilities of the Contractor under this Contract shall not be released, diminished, or in any other way affected by:

- .1 any enquiry or inspection into any relevant matter which may be made or carried out by or on behalf of the Principal or the *Principal's Authorised Person* or any third party;
- .2 the Principal or the *Principal's Authorised Person* including the value of any design, work, materials or goods in any certificate or statement or any interim or final payment or (unless and to the extent otherwise expressly provided in the Contract) issuing any certificate, written statement or notice pursuant to the Contract;
- .3 any approval, admission, consent, comment, sanction, acknowledgement, confirmation or advice made or given by or on behalf of the Principal or the *Principal's Authorised Person* or, in any case, in the absence thereof; or
- .4 the appointment of, or failure to appoint, any supervisor or other person to inspect or otherwise report in respect of the Works or the design thereof, or by any act or omission of any supervisor or other person, whether or not such act or omission might give rise to an independent liability of such supervisor or other person to the Principal, the *Principal's Authorised Person* and/or any third party.

**77J Compliance with Damstra Plan**

- .1 This clause 77J applies only if so stated in Contract Information item 27.
- .2 The Contractor must:
  - .1 comply with all requirements of the Damstra Plan; and
  - .2 ensure that all persons undertaking work at the Site (except those persons expressly excluded in the Damstra Plan), are registered and inducted in accordance with the Damstra Plan prior to carrying out any works in connection with the Contract.
- .3 The Contractor's compliance with this clause is in addition to, and does not in any way limit, the Contractor's other obligations under this Contract or at law,



including in relation to WHS and for the induction, training or supervision of its workforce.

## MEANINGS

### 78 Interpretation

- .1 Words in the singular include the plural, and vice versa.
- .2 No legal interpretation applies to the disadvantage of any party on the basis that the party provided the *Contract Documents*, or any part of them.
- .3 “Including” and similar words are not words of limitation.
- .4 The word “day”, unless qualified, for example as “Working Day” or “Business Day”, has its common English meaning according to context, namely a period of 24 hours or a calendar day.
- .5 Headings and notes are provided to guide the parties and form part of the Contract.
- .6 Terms or phrases defined in a clause of this Contract shall take the meaning given to them by that clause where they are used elsewhere in the Contract, unless a contradictory definition is provided for in clause 79 or the context requires otherwise.

### 79 Definitions

**Some words and phrases have special meanings in the Contract. In some cases, the defined meaning is different from the meaning that the word or phrase might have in ordinary usage, or it might include conditions that don't normally apply. In order to understand the Contract, you need to take these special meanings into account.**

**All defined words and phrases have initial capitals and are in italics in the GC21 General Conditions of Contract unless they are one of the following basic terms, which appear too often for italics to be used:**

- |                        |                 |
|------------------------|-----------------|
| • Contract             | • Site          |
| • Contract Information | • Subcontract   |
| • Contractor           | • Subcontractor |
| • Consultant           | • Supplier      |
| • Date of Contract     | • Valuer        |
| • Principal            | • Works         |

Wherever the following words and phrases are used in this Contract with initial capitals, they have the special meanings set out in clause 79.

#### Acceleration Notice

A written instruction under clause 52.1, from the Principal to the Contractor, to accelerate progress of the Works, identified as an “*Acceleration Notice*”.

#### Actual Completion Date

The date on which *Completion* of the Works or a *Milestone* (as applicable) is achieved by the Contractor.

#### Approval

Means any certificate, licence, consent, permit, approval or requirement required by:

- .1 any legislative requirement arising out of or in any way connected with the Works;  
or
- .2 any:
  - .1 organisation; or
  - .2 Authority,  
having jurisdiction in connection with the carrying out of the Works.



**Authority**

Means any:

- .1 government;
  - .2 public, local or statutory authority including any Certification Authority; or
  - .3 utility or telecommunications provider,
- having jurisdiction in connection with the carrying out of the Works.

**Business Day**

Any day other than a Saturday, Sunday, public holiday in New South Wales, or 27, 28, 29, 30 or 31 December.

**Claim**

A claimed entitlement of the Contractor in connection with the Contract, in tort, in equity, under any statute, or otherwise. It includes a claimed entitlement to an extension of time or for breach of contract by the Principal.

**Claimed Amount**

The amount claimed by the Contractor in a *Payment Claim*.

**Completion**

The state of the Works or a *Milestone* being complete, with no *Defects* or omissions, except for *Defects* not known.

This includes:

- .1 the supply to the Principal of:
  - .1 all Subcontractor's Warranties, operation and maintenance manuals, licences, access codes, as-built drawings or work-as-executed drawings required by the Contract or required for the use and maintenance of the Works;
  - .2 certificates, authorisations, approvals and consents from statutory authorities and service providers;
  - .3 those certificates required for the occupation, use and maintenance of the Works; and
  - .4 all other documents;
- .2 *Testing* required by the Contract;
- .3 the provision of all training required by the Contract; and
- .4 all other requirements specified in the Contract.

**Completion Amount**

An amount stated in Contract Information item 47 and included in the *Contract Price*, which becomes payable only after *Completion* of the whole of the Works or, if applicable, a specified *Milestone*.

**Completion Undertaking**

The *Undertaking* required under clause 33.1, for the percentage of the *Contract Price* (at the Date of Contract) stated in Contract Information item 33.



**Confidential Information**

Means information of whatever nature and in whatever medium belonging to or held by a party (“the disclosing party”) (including, where relevant, information relating to that party’s customers, related bodies, or employees, or other third parties) whenever and however it is disclosed or comes to the knowledge of the other party (“the recipient”), including information that:

- .1 is by its nature confidential;
- .2 is designated by the disclosing party as confidential; or
- .3 the recipient knows or ought to know is confidential,

and in the case of the Principal, includes information concerning its business processes and customers.

**Conformance Records**

Records which show conformance by the Contractor with particular requirements of the Contract.

**Consultant**

A consultant engaged by the Contractor to design parts of the Works or to provide other professional services. It includes a consultant whose contract with the Principal is novated to the Contractor.

**Contract**

The agreement between the Contractor and the Principal constituted by the *Contract Documents*.

**Contract Documents**

All the documents listed or referred to in clause 7.1.

**Contract Information**

The document described as such in the *Contract Documents*, which sets out information for the purposes of the Contract.

**Contract Price**

The amount stated as such in Contract Information item 40, subject to adjustment in accordance with the Contract.

**Contract Program**

The program described in clause 22.

**Contractor**

The party named in Contract Information item 8, including its successors and permitted assignees.

**Contractor’s Authorised Person**

The person appointed to act on behalf of the Contractor under clause 2, named in Contract Information item 9 or as subsequently notified to the Principal.

**Contractor’s Default**

A substantial breach of the Contract by the Contractor, including any of the following:

- .1 abandoning the carrying out of the Works;
- .2 suspending progress of the carrying out of the Works in whole or part without the written agreement or instruction of the Principal, except for



suspension under clause 54;

- .3 significantly failing to achieve *Scheduled Progress*;
- .4 failing to comply with an instruction in writing or confirmed in writing by the Principal;
- .5 failing to carry out the Works with professional skill, care and competence;
- .6 failing to maintain any registration or licence required by law to carry on activities required under the Contract;
- .7 failing to provide *Undertakings* as required under clause 33; or
- .8 failing to effect and maintain insurance policies as required under the Contract.

### **Contractor's Documents**

Drawings, specifications, calculations and other documents and information, meeting the requirements of clause 39, which the Contractor must produce to design and construct the Works in accordance with the Contract.

### **Contractor's Insolvency**

Any of the following applying to the Contractor:

- .1 the Contractor is insolvent or fails to comply with a statutory demand within the meaning of s459F of the *Corporations Act 2001*;
- .2 the Contractor indicates it does not have the resources to perform the Contract;
- .3 an application for winding up is made which is not stayed within 14 days;
- .4 a winding-up order is made;
- .5 a controller, administrator, receiver, receiver and manager, provisional liquidator or liquidator is appointed;
- .6 a mortgagee enters into possession of any property of the Contractor;
- .7 notice is given of a meeting of creditors for the purposes of a deed of arrangement;
- .8 notice is served on the Contractor or proceedings taken to cancel its incorporation or to dissolve it as a legal entity; or
- .9 any actions having a similar effect to the foregoing are taken.

### **Contractor's Margin**

An amount added to the costs calculated under clauses 47.6.1 and 47.6.2, to allow for profit and overhead costs, but not overhead costs relating to delay or disruption.



**Contractual Completion Date**

The last day of the period stated in Contract Information item 13, by which the Contractor must achieve *Completion* of the Works or of a *Milestone* (as applicable), as adjusted under the Contract.

**Damstra Plan**

The document provided by the Principal to the Contractor which bears that name and sets out the Contractor's obligations in respect of workforce management, which may be included as part of a broader document (for instance, any specifications or preliminaries relating to the works).

**Data**

The *Contractor's Documents* and all other drawings, sketches, specifications, digital records, goods, documents, equipment, computer software (including source code and object code), data and information relating to the Contract, howsoever stored, and includes all copies and extracts of same.

**Date of Contract**

- .1 If a specific date is nominated in Contract Information item 12, Date of Contract means that date.
- .2 If no specific date is nominated in Contract Information item 12, Date of Contract is to be determined as follows:
  - .1 Unless the Principal expressly states, in the *Letter of Award* or any other document given to the Contractor before the *Letter of Award*, that no contract is formed until a formal agreement or deed is executed, Date of Contract means the date of the *Letter of Award*, irrespective of whether the *Letter of Award* is conditional or unconditional and irrespective of whether the Principal also requires execution of a formal agreement or deed.
  - .2 If the Principal has expressly stated that no contract is formed until a formal agreement or deed is executed, Date of Contract means the date the formal agreement or deed is signed by the Principal after the Contractor has executed it.

**Day**

A calendar day, including all *Business Days* and non-Business Days.

**Daywork**

Work carried out by the Contractor for which payment is made on the basis of daily time and cost records for labour, plant, *Materials*, services and other items as provided in Schedule 8 (Daywork).

**Deed of Final Release**

Means the document set out in Schedule 13 to this Contract.

**Defect**

An error, omission, shrinkage, blemish in appearance or other fault in the Works or which affects the Works, resulting from a failure of the Contractor to comply with the Contract.

**Defect Notice**

A notice issued by the Principal under clause 45.2 or 67.1.



**Encumbrance**

A mortgage, charge, lien, title retention, trust, power or other encumbrance.

**Expert**

A person engaged to determine *Issues* under clause 71.

**Expert Determination**

The process of determination of an *Issue* by an *Expert*, under clause 71 and the procedure in Schedule 5 (Expert Determination Procedure).

**Fault**

Ambiguity, inconsistency, error, mistake, inaccuracy, discrepancy or omission.

**Final Payment Claim**

A *Payment Claim* given by the Contractor to the Principal under clause 61.1.

**Final Payment Schedule**

A *Payment Schedule* given by the Principal to the Contractor under clause 61.2.

**Force Majeure**

Means fire, lightening, flood, or earthquake.

**Free Issue Material**

Any materials (including *Materials*), equipment or other thing for incorporation into the Works or use by the Contractor in the performance of its obligations under this Contract (including carrying out the Works).

**GIPA Act**

Means the *Government Information (Public Access) Act 2009* (NSW).

**High Risk Construction Work**

Has the meaning given to that term in the WHS Regulation.

**Intellectual Property Rights**

Any copyright (including rights in relation to phonograms and broadcasts), invention (including patent rights), plant varieties, registered and unregistered trademarks (including service marks), registered design, circuit layouts, moral rights, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

**Issue**

Any issue, dispute or difference raised by either party under clause 69.

**Letter of Award**

A letter from the Principal to the Contractor awarding the Contract to the Contractor.

**Materials**

Includes materials, plant, equipment and other goods.

**Milestone**

A part of the Works specified as such in Contract Information item 13.



**Payment Claim**

A claim for payment made by the Contractor to the Principal under clauses 58 or 61.

**Payment Schedule**

A schedule containing the Principal's assessment of a *Payment Claim* and stating the amount the Principal proposes to pay, as referred to in clauses 59 and 61.

**Personal Information**

Information or an opinion (including information or an opinion forming part of a database), whether true or not, and whether recorded in a material form or not, about a natural person whose identity is apparent, or can reasonably be ascertained, from the information or opinion.

**Post-Completion Undertaking**

The *Undertaking* required under clause 33.1, for the percentage of the *Contract Price* (at the Date of Contract) stated in Contract Information item 34.

**Preferred Subcontractor**

A Subcontractor, Supplier or Consultant listed in Contract Information item 31 for a specified trade or area of work.

**Prepayment**

The amount to be advanced by the Principal in accordance with clause 57 and Contract Information item 45.

**Principal**

The entity named in Contract Information item 4, including its successors and assignees.

**Principal Contractor**

Has the meaning given to that term in the WHS Regulation.

**Principal Contractor WHS Management Plan**

Has the meaning given to the term "WHS management plan" in the WHS Regulation.

**Principal's Authorised Person**

The person appointed to act on behalf of the Principal under clause 2, named in Contract Information item 5 or as subsequently notified to the Contractor.

**Principal's Documents**

**The drawings, specifications and other documents provided to the Contractor and containing the Principal's requirements in respect of the Works.**

**Profit, Overheads and Preliminaries****Means:**

- .1 the supply of all labour, equipment, and vehicles;
- .2 salaries, wages, overtime, premium payments, payroll tax, sick leave, annual leave, long service leave, public holidays, staff provident fund, staff benefits, staff bonuses, superannuation funds and the like;
- .3 insurance related costs (including in relation to workers compensation insurance), temporary facilities, administrative costs, supervisory and



- support staff, tools of the trade and consumables, administration and overheads, home office expenses (where incurred), travel, accommodation and living expenses, other overhead costs (site and office), profit, margins, and mark-ups of whatever nature;
- .4 attendance at any site inductions or training, contract meetings and the completion of any reports required under the specification or the Contract; and
  - .5 all general risks, liabilities and obligations set out or implied in the Contract and any costs associated with any extended or reduced periods of time required to perform its obligations under the Contract.

**Provisional Sum**

A sum included in the *Contract Price* and identified as a provisional, monetary, prime cost, contingency or other such sum or allowance for the work specified in the Contract against that sum.

**Safe Work Method Statement**

Has the meaning given to that term in the WHS Regulation.

**Schedule of Rates**

Any document included in the Contract identified as a *Schedule of Rates*, or which shows rates payable for carrying out items of work described in that document, which shall be taken to include the Contractor's profits, overheads and preliminaries.

**Scheduled Amount**

The amount of payment (if any) stated in a *Payment Schedule*, that the Principal proposes to make in relation to a *Payment Claim* as referred to in clause 59.1.2.

**Scheduled Progress**

The rate of progress consistent with carrying out the work required by the Contract expeditiously and without undue delay, so that the Works and all *Milestones* will be completed by their respective *Contractual Completion Dates*.

**Site**

The lands and other places to be made available by the Principal to the Contractor for the purpose of executing the Works, including any existing buildings, services or other improvements, as briefly described in Contract Information item 2.

**Site Conditions**

Any physical and other conditions of or affecting the Site (including sub-surface conditions, levels whether before or after demolition or obstructions, conditions and the existence and extent of any watercourses, channels, water table levels, contamination, hazardous materials, soft spots, voids, unexploded bombs, pipes, sewers, drains, cables or other conducting media, structures, underground services of any nature whatsoever, (including the location and existence thereof), and any other objects of any nature whatsoever under, in, on or over the Site, but excluding weather conditions or physical conditions which are a consequence of weather conditions) encountered in carrying out work in connection with the Contract.

**Statutory Requirements**

The statutes, regulations, codes (including, if applicable, the National Construction Code of Australia 2013), by-laws, Australian Standards, relating to the Works or the Site, or the lawful requirements of any authority or provider of services having jurisdiction over the Works, the Site, the environment or the Contract, or anyone or anything connected with the Works or the Site or the Contract.



**Subcontract**

An agreement between the Contractor and a Subcontractor or a Supplier.

**Subcontractor**

An entity (including one engaged in accordance with clause 29.3) engaged by the Contractor to carry out part of the Works or the *Temporary Work*, or both, other than a Consultant or a Supplier.

**Supplier**

An entity engaged by the Contractor to supply *Materials* in connection with the Works.

**Temporary Work**

Temporary structures, amenities, physical services and other work, including *Materials*, plant and equipment used to carry out the Works but not forming part of the Works.

**Test**

Examine, inspect, measure, prove and trial, including uncovering any part covered up, if necessary; *Testing* and other derivatives of *Test* have a corresponding meaning.

**Undertaking**

An unconditional undertaking to pay on demand, in the relevant form of Schedule 2 (Undertaking).

**Unresolved Claim**

A *Claim* rejected or not agreed under clause 68.7.

**Value Completed**

The value of work (including design work) carried out by the Contractor and included in a *Payment Claim*, as referred to in Schedule 3 (Payment Claim Worksheet).

**Valuer**

The entity engaged to determine time and value matters under clause 35.

**Variation**

Any change to the Works including additions, increases, omissions and reductions to and from the Works, but not including such changes in respect of the development by the Contractor of the design for the Works (including development of shop drawings and other *Contractor's Documents*) in accordance with the requirements of the Contract.

**WHS**

Means work health and safety.

**WHS Act**

Means the *Work Health and Safety Act 2011* (NSW).

**WHS Laws**

Means:

- .1 those Acts, regulations, by-laws, orders, awards, proclamations, standards and codes of the Commonwealth and the State or Territory in which the site is located relating to WHS (including the WHS Act and the WHS Regulation) with respect to the Works;
- .2 the requirements of any Authority relating to WHS with respect to the Works; and



.3 any directions on safety or notices issued by any relevant Authority or any code of practice or compliance code appropriate or relevant to the Works.

**WHS Management Plan**

Means a management plan for WHS that satisfies the requirements of clause 309(2) of the WHS Regulation.

**WHS Regulation**

Means the *Work Health and Safety Regulation 2011* (NSW).

**Works**

The works to be designed, constructed and handed over to the Principal on *Completion* by the Contractor, including all work and items of the types referred to in clause 8.1 and *Variations*, but excluding *Temporary Work*. The term applies to the Works as a whole and also to any part of the Works unless the context requires otherwise. Contract Information item 3 briefly describes the Works.



# CONTRACT INFORMATION

The Contract Information is part of the Contract. Words and phrases are defined in clause 79.

## Contract

### Item

#### 1 Contract name

The Contract name is:

High Voltage Network Upgrades

The Contract number is:

CS0603

#### 2 Site

*Defined in clause 79*

The Site is:

Hunter Water's High Voltage and Low Voltage Network at Tomago  
Hunter Water's High Voltage and Low Voltage Network at Nelson Bay (Tomaree)  
Hunter Water's Low Voltage Network at Belmont

#### 3 Description of the Works

*Mentioned in clause 8*

The Works are:

Upgrading Hunter Water's High Voltage and Low Voltage distribution and reticulation networks at Tomago, Nelson Bay (Tomaree) & Belmont

### Principal's details

#### 4 Principal

*Defined in clause 79*

The Principal is:

Hunter Water Corporation

#### 5 Principal's Authorised Person

*Mentioned in clause 2*

The Principal's Authorised Person is:

Varun Agashe

#### 6 Notices to the Principal

*Mentioned in clause 11*

**Notices must go to the Principal's Authorised Person named above, at the address or number shown here.**

Office address:  
(for delivery by hand)

36 Honeysuckle Drive  
Newcastle NSW 2300

Postal address:  
(for delivery by post)

PO Box 5171  
Hunter Region Mail Centre  
NSW 2300



Facsimile number:

02 4979 9414

e-mail address:

varun.agashe@hunterwater.com.au

**7 Principal's Senior executive***Mentioned in clauses 69 & 70*

The Principal's senior executive is:

Darren Cleary

Office address:  
(for delivery by hand)36 Honeysuckle Drive  
Newcastle NSW 2300Postal address:  
(for delivery by post)PO Box 5171  
Hunter Region Mail Centre  
NSW 2300

Facsimile number:

02 4979 9414

e-mail address:

darren.cleary@hunterwater.com.au

**Contractor's details****8 Contractor**

The Contractor is:

NJ Construction Pty Ltd  
ABN 11 066 157 391**9 Contractor's Authorised Person**

The Contractor's Authorised Person is:

*Mentioned in clause 2***10 Notices to the Contractor**

*Mentioned in clause 11*  
**Notices must go to the Contractor's Authorised Person named above, at the address or number shown here.**

Office address:  
(for delivery by hand)

99A Auburn Street Coniston NSW 2500

Postal address:  
(for delivery by post)

PO Box 1940 Queanbeyan NSW 2620

Facsimile number:

6232 9700

e-mail address:

**11 Contractor's senior executive***Mentioned in clause 70*

The Contractor's senior executive is:

Office address:  
(for delivery by hand)

As above



Postal address:  
(for delivery by post)

As above

Facsimile number:

As above

e-mail address:

As above

## Dates and times

### 12 Date of Contract

*Defined in clause 79*

The Date of Contract is:

The date of contract execution

### 13 Times for Site access and Completion

*Site access: Mentioned in clause 34*

*Contractual Completion Date and Completion: Mentioned in clause 65*

**Time periods for Site access and for calculating Contractual Completion Dates are as shown.**

Milestone number	Description	Time Period for giving Site access	Time Period for Completion
1	»Network Design including Earthing Design, fault and protection studies	1 week from Date of Contract	8 weeks after the Date of Contract
2	»Pole & Conductor Condition Assessment	1 week from Date of Contract	12 weeks after the Date of Contract
3	»Upgrade of Access Roads	6 weeks from Date of Contract	22 weeks after the Date of Contract
4	»Upgrade of individual feeder sections	4 weeks after Completion of Milestone 2	5 weeks after the section is issued
5	»	»	»

## Statutory and Government requirements

### 14 Fees, charges and approvals

*Mentioned in clause 12*

Approvals that have been obtained or will be obtained, and fees and charges that have been paid or will be paid, by the Principal are:

None obtained or paid by the Principal

### 15 Compliance with NSW Government guidelines

#### A - Work Health and Safety (WHS)

*Mentioned in clause 15.3*

Is the Contractor required to implement a Corporate WHS Management System

Yes



acceptable to the Principal? (Yes/No)

Is the Contractor required to submit a WHS Management Plan in accordance with the WHS Regulation 2011 (NSW)? (Yes/No)

If required, the WHS Management Plan must be provided:

Yes

At least 10 days before commencing work on site

## B - Workplace Relations

*Mentioned in clause 15.3*

Is the Contractor required to submit a Workplace Relations Management Plan? (Yes/No)

If required, the Workplace Relations Management Plan must be provided:

No

## C - Quality Management

*Mentioned in clause 15.3*

Is the Contractor required to implement a certified Quality Management System? (Yes/No)

Is the Contractor required to submit a Quality Management Plan? (Yes/No)

If required, the Quality Management Plan must be provided:

No

Yes

7 days before commencing design work

## D - Environmental Management

*Mentioned in clause 15.3*

Is the Contractor required to implement an accredited Environmental Management System? (Yes/No)

Is the Contractor required to submit an Environmental Management Plan? (Yes/No)

If required, the Environmental Management Plan must be provided:

No

Yes

no later than 10 days before construction work commences

## E - Training Management

*Mentioned in clause 15.3*

Is the Contractor required to implement an Enterprise Training Management Plan accepted by the Principal? (Yes/No)

No



Is the Contractor required to submit a Project Training Management Plan? (Yes/No)

No

If required, the Project Training Management Plan must be provided:

## F - Aboriginal Participation

*Mentioned in clause 15.3*

The Aboriginal Participation Project Category is:

Not applicable

Is the Contractor required to submit an Aboriginal Participation Plan? (Yes/No)

No

Is the Contractor required to submit a Statement of Opportunities for Aboriginal Participation? (Yes/No)

No

If required, the Statement of Opportunities for Aboriginal Participation and Aboriginal Participation Plan must be provided:

## 16 Requirements for Commonwealth Funded projects

### A - Building Code 2013

*Mentioned in clause 13.2*

Is the Contractor required to comply with the Building Code 2013?

No

### B - Fair Work (Building Industry – Accreditation Scheme) Regulations 2005

*Mentioned in clause 17*

Is the Contractor required to maintain accreditation under the scheme set out in the *Fair Work (Building Industry – Accreditation Scheme) Regulations 2005*?

No

## 17 Principal contractor

*Mentioned in clause 16*

Is the Contractor appointed as principal contractor? (Yes/No)

Yes

## 18 Working hours and working days



*Mentioned in clause 18*

Working hours and working days are:

Monday to Friday 7.00 AM to 5.00 PM  
Saturday 7.00 AM to 1.00 PM**Liability****19 Limitation of liability***Mentioned in clause 26.8*

Subject to clause 26.8, the limit of the Contractor's liability to the Principal in respect of any one occurrence in connection with loss or liability other than personal injury or death is:

The Contractor's liability is unlimited

**20 Proportionate liability***Mentioned in clause 26.12*

Is proportionate liability excluded from the Contract? (Yes/No)

Yes

**Insurance****21 Works insurance***Mentioned in clauses 27.1 & 27.2*

The party responsible for effecting Works insurance is:

the Contractor

Minimum cover is:

150% of the value of works

Period of cover is:

until issue of the *Final Payment Schedule*.**22 Public liability insurance***Mentioned in clauses 27.1 & 27.2*

The party responsible for effecting public liability insurance is:

the Contractor

Minimum cover is:



Period of cover is:

until issue of the *Final Payment Schedule*.**23 Workers compensation insurance***Mentioned in clause 27.3*

Minimum cover is:

as required by law.

Period of cover is:

until issue of the *Final Payment Schedule*.**24 Professional indemnity insurance***Mentioned in clause 27.3.2*

Is a professional indemnity insurance

Yes



policy to be held by the Contractor?  
(Yes/No)

Minimum cover is:

Period of cover is:

Six years from the date of *Completion*.

## 25 Marine liability insurance

*Mentioned in clause 27.3.3*

Minimum cover is:

Period of cover is:

NA

## Contract Documents

## 26 Other Contract Documents

*Mentioned in clause 7.1.5*

Other *Contract Documents* (not listed in clause 7) are:

1. the *Letter of Award*, or any formal agreement or deed constituting the Contract;
2. any written communications or clarifications between the parties listed in the *Letter of Award* or any formal agreement or deed as documents forming part of the Contract;
- 3.

## Principal's Documents

## 27 Copies of Principal's Documents

*Mentioned in clause 7.4*

The number of copies of the *Principal's Documents* to be provided to the Contractor is:

1 hard copy

*Mentioned in clause 77J*

Is the Contractor required to comply with clause 77J (the Damstra Plan) for these works?

No

## Contractor's Documents

## 28 Copies of Contractor's Documents

*Mentioned in clause 40.1*

The number of copies of the *Contractor's Documents* to be provided to the Principal is:

1 electronic copy in a format acceptable to the Principal



Subcontract work

29 Inclusion of consistent requirements in Subcontracts

The Subcontract value requiring inclusion of the provisions set out in Schedule 9 (Subcontract requirements) is:

Mentioned in clause 28.4

30 Payment period for Subcontracts

The maximum period before payment, for Subcontracts less than the value stated in Contract Information item 29, is:

Mentioned in clause 28.4.2

15 Business Days.

31 Preferred Subcontractors

The Preferred Subcontractors referred to in clause 29 are:

Mentioned in clause 29.3

32 Subcontractor’s warranty

Mentioned in clause 30.1

Trades or areas of work requiring a Subcontractor’s warranty are:

NA

Undertakings

33 Completion Undertaking

Mentioned in clause 33.1

The amount of the Completion Undertaking is:

5% of the Contract Price at the Date of Contract

34 Post-Completion Undertaking

Mentioned in clause 33.1

The Amount of Post-Completion Undertaking is:

5% of the Contract Price at the Date of Contract

35 Return of Post-Completion Undertaking

Mentioned in clause 33.3.2

The period at the end of which the Post-

12 months



Completion Undertaking must be returned is:

A1.1 Site information

36 Site information

Mentioned in clause 36

Information contained in the documents identified in Contract Information items 36A and 36B does not form part of the Contract.

11.1.1 A - Documents not guaranteed for completeness

Documents not guaranteed for completeness are:

All appendices and drawings

B - Documents not guaranteed for accuracy, quality or completeness

Documents not guaranteed for accuracy, quality or completeness are:

All appendices and drawings  
General Specification  
Technical Specification

37 Site Conditions

Mentioned in clause 37.2

Is the Contractor to bear the full risk, including cost and time implications, of encountering and dealing with materially adverse Site Conditions other than for Site Conditions arising out of an inaccuracy in the documents identified in Contract Information item 36A, and for compliance with Variations instructed for the benefit of the Principal? (Yes/No)

Yes

Design and documentation

38 Scope of design activities

Mentioned in clause 1.1.1

A - Design by the Contractor

Mentioned in clause 39

- .1

Design, development, documentation, workshop detailing and coordination of design and the interaction of the various disciplines

design
- .2

Items, services and components of the Works for which the Contractor is responsible for developing the design

In all respects.

none



provided by the  
Principal (clause  
39.1.2):

.3 Items, services and  
components of the  
Works which the  
Contractor must fully  
design (clause 39.1.3):

In all respect

.4 Items, services and  
components of the  
Works in respect of  
which the Contractor  
may depart from the  
design provided by the  
Principal (clause 39.7):

none

## B - Building Code of Australia

*Mentioned in clauses 39 & 43*

Does the Building Code of Australia  
apply? (Yes/No)

No

## C – Fitness for Purpose

*Mentioned in clauses 39.3*

Does sub-clause 39.3 of the Contract  
apply?

No

## 39 Not used

### Payments

## 40 Contract Price at the Date of Contract

*Mentioned in clauses 55.1 and 55.3*

The *Contract Price* at the Date of  
Contract is:

\$ 7 345 071.00

### Basis of payment:

The basis of payment is:  
(Lump sum / *Schedule of Rates* /  
*Schedule of Rates* and lump sums)

Schedule of Rates and Lump Sum

## 41 Rise or fall adjustments

*Mentioned in clause 55.2*

Are rise or fall adjustments applicable to  
the Contract (excluding *Daywork*)?

No



(Yes/No)

**42 Provisional Sums***Mentioned in clause 55.4*

*Provisional Sum* items referred to in clause 55.4 are:

Not applicable

**43 Provisional Sum margin***Mentioned in clause 55.8*The *Provisional Sum* margin is:

NA

**44 Contractor's Margin***Mentioned in clauses 47 and 55.7.3*

The *Contractor's Margin* includes profit and off site overheads:

on site overheads including attendance and administration

The percentage for *Contractor's Margin* is:

**45 Amount of Prepayment***Mentioned in clause 57.1.1*The amount of *Prepayment* is:

Nil

**46 Payment date and method****A - Date for Payment Claims***Mentioned in clause 58.1*

The date in the month for making *Payment Claims* is:

the 25<sup>th</sup> *Day* of each calendar month**B - Method of payment***Mentioned in clause 58.2*

*Milestones* for which payment will not be made until after they reach *Completion*:

NA

**47 Completion Amount***Mentioned in clause 60*The *Completion Amount* is:

NIL

The *Completion Amount* is payable after:  
(*Completion* of the whole of the Works/*Completion* of *Milestone* »)

NA

**48 Interest on late payments***Mentioned in clause 62*



The rate of interest per annum is:

Nil

Extension of time events, Delay costs, and liquidated damages

49 Delay costs and liquidated damages

Mentioned in clauses 50 & 51

AA1 – Additional causes of delay entitling the Contractor to claim an extension of time

The additional causes are:

1. legal challenge to the Principal’s right to undertake the Works, including native title claims, but not where due to breach by the Contractor;

2. delay or disruption caused by a suspension of the Contract, provided that the need for the suspension arises from the Principal’s own act or omission, an act or omission of its officers, employees or agents, or an act of a contractor, supplier or consultant of the Principal (other than the Contractor);

3. war or an invasion in Australia that affects the carrying out of the Works;

4. ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel not caused by the Contractor or the Contractor’s employees or agents; and

5. any other cause expressly stated in these General Conditions of Contract as entitling the Contractor to claim an extension of time.

A1 - Delay costs for delay in access to the Site

The rate in item 49A1 applies only if the Principal fails to give initial access to the Site as required by clause 34. The rate does not apply where the Principal fails to give Site access for a *Milestone* by the required time, unless that *Milestone* is the first to proceed after the Contractor has established on the Site.

The rate per day for delay costs due to the Principal’s failure to give the Contractor initial access to the Site in accordance with clause 34 is:

A2 - Delay costs for delay other than in access to the Site



The rate per day for delay costs for the whole of the Works only applies where there are no rates specified for delay costs for *Milestones* and is:

[REDACTED]

The rates per day for delay costs for *Milestones*\* are:

NA

*\*The rate for each Milestone is separate and distinct from the others.*

## B - Liquidated damages

*Mentioned in clauses 51.6 and 51.7*

Do liquidated damages apply to this Contract? (Yes/No)

Yes

The rate per day for liquidated damages for the whole of the Works only applies where there are no rates specified for *Milestones* and is:

[REDACTED]

The rates per day for liquidated damages for *Milestones*\* are:

NA

*\*The rate for each Milestone is separate and distinct from the others.*

## Engagement of Valuer

### 50 Engagement of Valuer

#### A - Engagement of Valuer

*Mentioned in clause 35*

Must a Valuer be engaged? (Yes/No)

Yes

#### B - Person to select the Valuer

*Mentioned in clause 35*

The person is:

Dean McInnes

Telephone number:

4979 9535

Facsimile number:

NA

#### C - Litigation Threshold

*Mentioned in clause 35*



The threshold amount for litigation  
following a Valuer's determination is:

## Expert Determination

### 51 Time to refer Issue to Expert Determination

*Mentioned in clause 70*

The time within which either party may  
refer an *Issue* to *Expert Determination* is:

28 days after becoming entitled under  
clause 70.2

### 52 Expert Determination representative

*Mentioned in clause 71*

The representative of the Principal for  
all of the purposes in clause 71, and  
under Schedule 5 (Expert Determination  
Procedure) is:

Dean McInnes

Office address:  
(for delivery by hand)

»  
("as shown in Contract Information item 7"  
applies if not filled in).

Postal address:  
(for delivery by post)

»  
("as shown in Contract Information item 7"  
applies if not filled in).

Facsimile number:

»  
("as shown in Contract Information item 7"  
applies if not filled in).

e-mail address:

»  
("as shown in Contract Information item 7"  
applies if not filled in).

### 53 Person to nominate an Expert

*Mentioned in clause 71*

The person is:

Chief Executive Officer  
Australian Commercial Disputes Centre  
Level 6  
50 Park Street  
Sydney NSW 2000

Telephone number:

(02) 9267 1000

Facsimile number:

(02) 9267 3125

### 54 Threshold amount for litigation

*Mentioned in clause 71*

The threshold amount for litigation  
following an *Expert's* determination is:



## Schedules

---

<b>Schedule 1</b>	<b>Subcontractor's Warranty</b>
<b>Schedule 2</b>	<b>Undertaking</b>
<b>Schedule 3</b>	<b>Payment Claim Worksheet</b>
<b>Schedule 4</b>	<b>Agreement with Valuer</b>
<b>Schedule 5</b>	<b>Expert Determination Procedure</b>
<b>Schedule 6</b>	<b>Combined Subcontractor's Statement and Supporting Statement</b>
<b>Schedule 7</b>	<b>Costs Adjustment Formula</b>
<b>Schedule 8</b>	<b>Daywork</b>
<b>Schedule 9</b>	<b>Subcontract requirements</b>
<b>Schedule 10</b>	<b>Principal Arranged Insurances</b>
<b>Schedule 11</b>	<b>Statement regarding Materials</b>
<b>Schedule 12</b>	<b>Compliance with Building Code 2013</b>
<b>Schedule 13</b>	<b>Deed of Final Release</b>



# SUBCONTRACTOR'S WARRANTY

The Contractor has entered into the Contract with the Principal for the carrying out of the Works.

The Subcontractor has entered into an agreement with the Contractor for the Subcontract Work or Products, which are to be used by the Contractor in performing the Contract.

In return for the Principal allowing the Subcontract Work or Products to be used in the Works, the Subcontractor agrees to give the warranties, indemnities and other promises in this Deed. The obligations created by this Deed are in addition to the obligations of the Subcontractor to the Contractor and do not affect any other rights or remedies available to the Principal against the Contractor or the Subcontractor.

Refer to clause 30.1 of the GC21 General Conditions of Contract.

---

## Definitions

Deed dated:	.....
	<b>between</b>
Subcontractor or Supplier:	.....
	.....
	ABN .....
	<b>And</b>
The Principal:	»
	<b>concerning</b>
The Contract:	The contract between the Principal and the Contractor
Contract Name:	»
Contract Number:	»
Works:	The works to be designed (to the extent specified) and constructed by the Contractor, as described in the Contract.
The Contractor:	.....
	ABN .....
Subcontract Work or Products:	.....
Warranty Period:	.....years from the <i>Actual Completion Date</i> of the whole of the Works.

**Other words and phrases in this Deed have the meanings given in the Contract.**

**In this Deed, the term Subcontractor includes Supplier. The terms Subcontractor, Contractor and Principal include their successors and permitted assignees.**

## Terms of Deed

### 1 Warranty

- .1 The Subcontractor warrants that all work performed and all *Materials* supplied by the Subcontractor as part of the Subcontract Work or Products will:
  - .1 comply in all respects with the requirements of the Contract;
  - .2 to the extent that the quality of *Materials* or standard of workmanship is not specified in the Contract, comply with the applicable industry standards, including (without limitation) the National Code (previously, the Building Code of Australia) and any applicable Australian Standards; and



- .3 be fit for the purposes for which they are required.
- .2 The Subcontractor warrants that it will use reasonable skill and care in performing all work associated with the Subcontract Work or Products.

## **2 Replacement or making good**

- .1 The Subcontractor promises to replace or make good, to the reasonable satisfaction of the Principal, any of the Subcontract Work or Products which are found, within the Warranty Period, to:
  - .1 be of a lower standard or quality than referred to in clause 1 of this Deed; or
  - .2 have deteriorated to such an extent that they are no longer fit for the purposes for which they were required.
- .2 The liability of the Subcontractor is reduced to the extent that deterioration is caused by:
  - .1 mishandling, damage before installation, or incorrect installation, in each case caused by others;
  - .2 normal wear and tear;
  - .3 incorrect operational procedures or maintenance, in each case not attributable to the Subcontractor; or
  - .4 any other cause beyond the control of the Subcontractor.
- .3 Nothing in this Deed affects the Subcontractor's liability with respect to the Subcontract Work or Products.

## **3 Costs**

- .1 The Subcontractor promises to undertake, and meet the reasonable cost of, any work necessary to:
  - .1 carry out any part of the Works to enable the requirements of clause 2 of this Deed to be met; or
  - .2 restore or make good the Works after meeting those requirements, whichever the Principal requires.

## **4 Indemnity**

- .1 The Subcontractor indemnifies the Principal against claims (including *Claims*, actions and loss or damage) arising out of breach by the Subcontractor of clauses 1 or 2 of this Deed.

## **5 Notice of Defects**

- .1 The Principal may notify the Subcontractor in writing if it considers there has been any breach of the warranty in clause 1 of this Deed or if the Principal requires the Subcontractor to replace or make good any of the Subcontract Work or Products under clause 2 of this Deed.

## **6 Time to remedy**

- .1 The Subcontractor must do everything to remedy any breach notified to it, or to carry out any replacement or making good required under clause 5 of this Deed, within a reasonable time after receiving the Principal's notice.

## **7 Failure to remedy**

- .1 If the Subcontractor fails to complete the work specified in the Principal's notice under clause 5 of this Deed within a period determined by the Principal to be reasonable in the circumstances, the Principal may give written notice to the Subcontractor that the Principal intends to have that work carried out by others. This notice must allow a reasonable period for the Subcontractor to respond.
- .2 If the Subcontractor fails to complete the work by the date specified in clause 7.1 of this Deed, or another date agreed by the parties, the Principal may have



the work carried out by others, and the Subcontractor indemnifies the Principal for the reasonable costs and expenses of doing so.

## 8 Urgent action by Principal

- .1 The Principal may take any urgent action necessary to protect the Works, other property or people as a result of a breach of clause 1 of this Deed.
- .2 The Subcontractor agrees that the Principal taking such action does not affect the warranty or any other obligation of the Subcontractor under this Deed.
- .3 The Subcontractor indemnifies the Principal for the reasonable costs and expenses paid or payable in taking that action.

## 9 Assignment

- .1 The Principal may assign its rights and benefits under this Deed to the owner or operating authority of the Works and must give notice of that assignment to the Subcontractor.

## 10 Operation of Deed

- .1 This Deed comes into effect when executed by the Subcontractor, and is effective whether or not executed by the Principal.

### Executed as a deed

The common seal of the Subcontractor was affixed in accordance with its Articles of Association in the presence of:

Signature of  
Director/Secretary: .....

Name of Director/Secretary: .....

Signature of Director: .....

Name of Director: .....

or (if the Subcontractor is not a corporation)

Signed, sealed and delivered on behalf of the Subcontractor by:

Signature of Authorised  
Person: .....  
Name of Authorised Person: .....

**and witnessed by:**

Signature of witness: .....

Name of witness (in full): .....

Signed, sealed and delivered on behalf of the Principal by:

Signature of Authorised  
Person: .....  
Name of Authorised Person: .....

**and witnessed by:**

Signature of witness: .....

Full name of witness: .....

Place: .....



## Schedule 2

# UNDERTAKING

Refer to clauses 33, 57 and 58 of the GC21 General Conditions of Contract.

### On behalf of the Contractor

Name of Financial Institution:

The Principal:

»

The Contractor:

»

ABN .....

Security Amount:

\$

The Contract:

The contract between the Principal and the Contractor

Contract Name:

»

Contract Number:

»

### Undertaking

- .1 At the request of the Contractor and the Financial Institution, and in consideration of the Principal accepting this *Undertaking* from the Financial Institution in connection with the Contract, the Financial Institution unconditionally undertakes to pay on demand any amount or amounts demanded by the Principal to the maximum aggregate sum of the Security Amount.
- .2 The Financial Institution unconditionally agrees that, if notified in writing by the Principal (or someone authorised by the Principal) that it requires all or some of the Security Amount, the Financial Institution will pay the Principal at once, without reference to the Contractor and despite any notice from the Contractor not to pay.
- .3 The Principal must not assign this *Undertaking* without the prior written agreement of the Financial Institution, which must not be unreasonably withheld.
- .4 This *Undertaking* continues until one of the following occurs:
  - .1 the Principal notifies the Financial Institution in writing that the Security Amount is no longer required;
  - .2 this *Undertaking* is returned to the Financial Institution; or
  - .3 the Financial Institution pays the Principal the whole of the Security Amount, or as much as the Principal may require overall.
- .5 At any time, without being required to, the Financial Institution may pay the Principal the Security Amount less any amounts previously paid under this *Undertaking* (or a lesser sum specified by the Principal), and the liability of the Financial Institution will then immediately end.

Dated .....

at .....

**Execution by the Financial Institution:**



### Schedule 3

# PAYMENT CLAIM WORKSHEET

Refer to clause 58 of the GC21 General Conditions of Contract.

The Contractor: .....  
 ABN .....  
 The Contract: The contract between the Principal and the Contractor  
 Contract Name: »  
 Contract Number: »

1	2	3	4	5
Activity (& Milestone) to suit schedule of prices and/or activities	Milestone & activity number	Value of activity (or Milestone) \$	Activity (or Milestone) <sup>c</sup> completed %	Activity (or Milestone) completed value \$ (col 3 x col 4)
Amount brought forward from previous sheet				\$
Amount carried forward to next sheet				\$

1	2	3	4	5
Item or activity to suit <i>Schedule of Rates</i>	Item or activity number	Price or rate for item or activity \$	Quantity completed	Item or activity completed value \$ (col 3 x col 4)
Amount brought forward from previous sheet				\$
Amount carried forward to next sheet				\$

**Complete this section on the last sheet only**

Subtotal for any <i>Schedule of Rates</i> items		\$
Subtotal for any lump sum items		\$
	\$	\$
	\$	\$
<b>Value Completed</b>		\$
Less payments already made		\$
Less retention for the <i>Completion Amount</i> under clause 60, if applicable		\$
<b>Claimed Amount</b>		\$



## Schedule 4

# AGREEMENT WITH VALUER

Refer to clause 35 of the GC21 General Conditions of Contract.

## Definitions

Agreement dated:	.....
	<b>between:</b>
The Valuer:	.....
	ABN .....
	<b>and:</b>
	.....
The Principal:	»
	<b>and:</b>
The Contractor:	.....
	ABN .....
	<b>concerning:</b>
The Contract:	The contract between the Principal and the Contractor
Contract Name:	»
Contract Number:	»
Dated:	.....
The Works:	The works to be designed and constructed by the Contractor, as described in the Contract.

**Unless the context requires otherwise, other words and phrases in this agreement have the meanings given in the Contract.**

**The terms Contractor and Principal include their successors and permitted assignees.**

## Terms of agreement

### 1 Request to determine and acceptance

- .1 The parties request the Valuer to determine the value and time associated with *Variations* and other matters referred to the Valuer under the Contract. The Valuer agrees to comply with this request in accordance with this agreement.

### 2 Determination by Valuer

- .1 When a matter is referred to the Valuer by either party, the Valuer must consult with both parties, determine the matter in accordance with this agreement and as specified in the Contract, and issue a certificate stating the determination within 28 days (or another period agreed by the parties) after the matter is referred to the Valuer.
- .2 If a certificate issued by the Valuer contains a clerical mistake, an error arising from an accidental slip or omission, a material miscalculation of figures, a mistake in the description of any person, matter or thing, or a defect of form, then the Valuer must correct the certificate.

### 3 Principles for valuation

- .1 The Valuer must determine all matters referred to it in accordance with the principles and procedures set out in the Contract.



#### 4 Meeting

- .1 The Valuer may meet with the parties together to discuss a matter referred under this agreement. The parties agree that such a meeting is not a hearing which would give anything under this agreement the character of an arbitration.

#### 5 Documents

- .1 The Valuer must take into consideration:
  - .1 documents, information and other written material which has been exchanged by the parties before the request to the Valuer;
  - .2 any submission or submission in reply made by a party to the Valuer (which must be copied to the other party); and
  - .3 information or material provided under clause 6.1.2 of this agreement.
- .2 The Valuer must fix appropriate times for the provision of any submissions and submissions in reply.
- .3 The parties acknowledge that when a matter referred to the Valuer involves a claim from a Subcontractor, Supplier or Consultant's, the Valuer will give the relevant Subcontractor, Supplier or Consultant the opportunity to be involved in the valuation process. The Valuer must wherever possible include in the certificate details of the entitlement determined for each Subcontractor, Supplier or Consultant.

#### 6 Role of Valuer

- .1 The Valuer:
  - .1 acts as an expert and not as an arbitrator;
  - .2 is not expected or required to obtain or refer to any information or material relating to trade information or other third party material but may do so if the Valuer wishes; and
  - .3 must issue a certificate in a form the Valuer considers appropriate, stating the Valuer's determination, with reasons.

#### 7 Certificate final

- .1 Subject to clause 35.1.3 of the GC 21 General Conditions of Contract Edition 2, the parties agree to accept the determination in the Valuer's certificate as final and binding.

#### 8 Liability of Valuer

- .1 The Valuer is not liable for anything done or omitted by the Valuer under this agreement, other than fraud.

#### 9 Fees and expenses

- .1 The Principal and the Contractor must share equally the fees and out-of-pocket expenses of the Valuer for the determination. However, the Principal alone must pay all such fees and out-of-pocket expenses related to any *Variation* which the Principal proposes but does not later instruct.
- .2 The fees payable to the Valuer under this agreement are:
  - .1 An administration fee of \$» for reviewing the *Contract Documents*
  - .2 An amount for the time involved in performing the Valuer's duties under this agreement based on these hourly rates:
 

Director	\$...../hour
Associate	\$...../hour
Senior Quantity Surveyor / Engineer	\$...../hour
Quantity Surveyor / Engineer	\$...../hour
Technician	\$...../hour
  - .3 Substantiated out-of-pocket expenses.



## 10 Confidentiality

- .1 The parties and the Valuer must keep confidential all proceedings and submissions relating to a determination by the Valuer. They must not divulge information to any other person except with the prior written consent of the other party, or as required by law, or in order to enforce a determination of the Valuer.

## 11 Termination of agreement

- .1 This agreement may be terminated by a written notice to the Valuer signed by both the Principal and the Contractor. The Principal and the Contractor may then, separately or together, recover all documents each had provided to the Valuer. They must then pay all the Valuer's outstanding fees and expenses in accordance with clause 9 of this agreement.

## 12 Payment

- .1 The Principal and the Contractor must pay the Valuer within 14 days after receiving an invoice which complies with this agreement.
- .2 The Principal and the Contractor must advise the Valuer of the necessary details for invoicing if they have agreed that one of them will make payments to the Valuer on behalf of both.

## 13 Period of engagement of Valuer

- .1 Unless this agreement is terminated under clause 11 of this agreement, the Valuer is engaged until the time of issue of the *Final Payment Schedule*, plus any further period of time required for any referred matter which has not been determined by the Valuer by the time the *Final Payment Schedule* is issued.

Signature of Authorised Person:	<b>Signed by the Contractor:</b> .....
Name of Authorised Person:	.....
Date:	.....
Signature of Authorised Person:	<b>Signed by the Principal:</b> .....
Name of Authorised Person:	.....
Date:	.....
Signature of Valuer:	<b>Signed by the Valuer:</b> .....
Name of Valuer:	.....
Date:	.....



# EXPERT DETERMINATION PROCEDURE

Refer to clause 71 of the GC21 General Conditions of Contract.

---

## 1 Questions to be determined by the Expert

- .1 For each *Issue*, the *Expert* must determine the following questions, to the extent that they are applicable to the *Issue* and unless otherwise agreed by the parties:
  - .1 Is there an event, act or omission which gives the claimant a right to compensation, or assists in otherwise resolving the *Issue* if no compensation is claimed:
    - .1 under the Contract,
    - .2 for damages for breach of the Contract, or
    - .3 otherwise in law?
  - .2 If so:
    - .1 what is the event, act or omission?
    - .2 on what date did the event, act or omission occur?
    - .3 what is the legal right which gives rise to the liability to compensation or resolution otherwise of the *Issue*?
    - .4 is that right extinguished, barred or reduced by any provision of the Contract, estoppel, waiver, accord and satisfaction, set-off, cross-claim or other legal right?
  - .3 In light of the answers to the questions in clauses 1.1.1 and 1.1.2 of this Expert Determination Procedure:
    - .1 what compensation, if any, is payable by one party to the other and when did it become payable?
    - .2 applying the rate of interest specified in the Contract, what interest, if any, is payable when the *Expert* determines that compensation?
    - .3 if compensation is not claimed, what otherwise is the resolution of the *Issue*?
- .2 The *Expert* must determine, for each *Issue*, any other questions identified or required by the parties, having regard to the nature of the *Issue*.

## 2 Submissions

- .1 The procedure for submissions to the *Expert* is as follows:
  - .1 The party to the Contract which referred the *Issue* to *Expert Determination* must make a submission in respect of the *Issue*, within 15 *Business Days* after the date of the letter of engagement of the *Expert* referred to in clause 71.3 of the GC21 General Conditions of Contract.
  - .2 The other party must respond within 15 *Business Days* after receiving a copy of that submission or such longer period as the other party may reasonably require, having regard to the nature and complexity of the *Issue* and the volume of the submission. If the parties do not agree on that longer period, the party desiring the longer period may make a submission on the point to the *Expert*, within the time specified by the *Expert*, and the *Expert* will promptly determine any extra time permitted. The response to the submission in clause 2.1.1 may include cross-claims.
  - .3 The party referred to in clause 2.1.1 may reply to the response of the other party, but must do so within 10 *Business Days* or such longer period as



that party may reasonably require (in the same terms as in clause 2.1.2) after receiving the response, and must not raise new matters.

- .4 The other party may comment on the reply, but must do so within 10 *Business Days* or such longer period as that party may reasonably require (in the same terms as in clause 2.1.2) after receiving the reply, and must not raise new matters.
- .2 The *Expert* must ignore any submission, response, reply, or comment not made within the time given in clause 2.1 of this Expert Determination Procedure, unless the Principal and the Contractor agree otherwise.
- .3 The *Expert* may request further information from either party. The request must be in writing, with a time limit for the response. The *Expert* must send a copy of the request and the response to the other party, and give the other party a reasonable opportunity to comment on the response.
- .4 All submissions, responses, replies, requests and comments must be in writing. If a party to the Contract gives information to the *Expert*, it must at the same time give a copy to the other party. All documents to be sent to the Principal under this Expert Determination Procedure must be sent to the relevant person at the relevant postal or other address stated in Contract Information item 52.

### 3 Conference

- .1 The *Expert* may request a conference with both parties to the Contract. The request must be in writing, setting out the matters to be discussed.
- .2 The parties agree that such a conference is not to be a hearing which would give anything under this Expert Determination Procedure the character of an arbitration.

### 4 Role of Expert

- .1 The Expert:
  - .1 acts as an *Expert* and not as an arbitrator;
  - .2 must make its determination on the basis of the submissions of the parties, including documents and witness statements, and the *Expert's* own expertise; and
  - .3 must issue a certificate in a form the *Expert* considers appropriate, stating the *Expert's* determination and giving reasons, within 16 weeks, or as otherwise agreed by the parties, after the date of the letter of engagement of the *Expert* referred to in clause 71.3 of the GC21 General Conditions of Contract.
- .2 If a certificate issued by the *Expert* contains a clerical mistake, an error arising from an accidental slip or omission, a material miscalculation of figures, a mistake in the description of any person, matter or thing, or a defect of form, then the *Expert* must correct the certificate.



Schedule 6

## COMBINED SUBCONTRACTOR'S STATEMENT AND SUPPORTING STATEMENT

Refer to clause 58.6.1 of the GC21 General Conditions of Contract

For the purposes of this Statement the terms "principal", "head contractor", "subcontractor", and "construction contract" have the meanings given in section 4 of the Building and Construction Industry Security of Payment Act 1999.

The Contractor is both a "head contractor" in terms of the Building and Construction Industry Security of Payment Act 1999, and a "subcontractor" in terms of the Workers Compensation Act 1987, Payroll Tax Act 2007, and Industrial Relations Act 1996, and makes relevant statements below accordingly.

This Statement must be signed by the Contractor (or by a person who is authorised, or held out as being authorised, to sign the statement by the Contractor).

Relevant legislation includes Workers Compensation Act 1987, s175B, Payroll Tax Act 2007, Schedule 2 Part 5, Industrial Relations Act 1996 s127, and Building and Construction Industry Security of Payment Regulation 2008 cl 4A.

Information, including Notes, Statement Retention, and Offences under various Acts is included at the end of this Schedule.

---

### Main Contract

Contractor:

*(Business name of the Contractor)*

ABN

:

*of*

*(Address of Contractor)*

*has entered into a  
contract with*

*(Business name of the Principal)*

ABN

:

*Contract number/identifier*

### Subcontracts

*The Contractor has entered into contracts with the subcontractors listed in the  
attachment to this Statement  
Period*

*This Statement applies for work*

*an*

*inclusive,*

*between:*

*d*

*subject of the payment claim dated:*

I, \_\_\_\_\_ a director or a person authorised by the Contractor on whose behalf this declaration is made, hereby declare that I am in a position to know the truth of the matters that are contained in this statement and declare that, to the best of my knowledge and belief:

- (a) The abovementioned Contractor has either employed or engaged workers or subcontractors during the above period of this contract. Tick ☐ if true and comply with



(b) to (h) below, as applicable. If it is not the case that workers or subcontractors are involved or you are an exempt employer for workers compensation purposes tick ☐ and only complete (e), to (h) below. You must mark one box.

- (b) All workers compensation insurance premiums payable by the Contractor in respect of the work done under the contract have been paid. The Certificate of Currency for that insurance is attached and is dated
- (c) All remuneration payable to relevant employees for work under the contract for the above period has been paid.
- (d) Where the Contractor is required to be registered as an employer under the Payroll Tax Act 2007, the Contractor has paid all payroll tax due in respect of employees who performed work under the contract, as required at the date of this statement.
- (e) Where the Contractor is also a principal contractor to subcontracts in connection with the work, the Contractor has in its capacity of principal contractor been given a written Subcontractor's Statement by its subcontractor(s) in connection with that work for the period stated above.
- (f) All amounts due and payable to subcontractors have been paid (not including any amount identified in the attachment as in dispute).

(g) Signature

Full name

(h) *Position/Title*

*Date*

**NOTE: Where required above, this Statement must be accompanied by the relevant Certificate of Currency to comply with section 175B of the Workers Compensation Act 1987.**

**Attachment**

Schedule of subcontractors paid all amounts due and payable				
Subcontractor	ABN	Contract number/identifier	Date of works (period)	Payment claim dated (head contractor claim)

Schedule of subcontractors for which an amount is in dispute and has not been paid				
Subcontractor	ABN	Contract number/identifier	Date of works (period)	Payment claim dated (head contractor claim)



---




## Notes

1. This form is prepared for the purpose of section 175B of the Workers Compensation Act 1987, Schedule 2 Part 5 Payroll Tax Act 2007, section 127 of the Industrial Relations Act 1996 and sections 13(7) and 13(9) of the Building and Construction Industry Security of Payment Act 1999. If this form is completed in accordance with these provisions, a principal contractor is relieved of liability for workers compensation premiums, payroll tax and remuneration payable by the subcontractor.

A principal contractor can be generally defined to include any person who has entered into a contract for the carrying out of work by another person (or other legal entity called the subcontractor) and where employees of the subcontractor are engaged in carrying out the work which is in connection with the principal contractor's business.

2. ***For the purpose of this Subcontractor's Statement, a principal contractor is a person (or other legal entity), who has entered into a contract with another person (or other legal entity) referred to as the subcontractor, and employees/workers of that subcontractor will perform the work under contract. The work must be connected to the business undertaking of the principal contractor.***
3. ***Provide the unique contract number, title, or other information that identifies the contract.***
4. In order to meet the requirements of s127 Industrial Relations Act 1996, a statement in relation to remuneration must state the period to which the statement relates. For sequential Statements ensure that the dates provide continuous coverage.  
  
Section 127(6) of the Industrial Relations Act 1996 defines remuneration 'as remuneration or other amounts payable to relevant employees by legislation, or under an industrial instrument, in connection with work done by the employees.'  
  
Section 127(11) of the Industrial Relations Act 1996 states 'to avoid doubt, this section extends to a principal contractor who is the owner or occupier of a building for the carrying out of work in connection with the building so long as the building is owned or occupied by the principal contractor in connection with a business undertaking of the principal contractor.'
5. Provide the date of the most recent payment claim.
6. For Workers Compensation purposes an exempt employer is an employer who pays less than \$7500 annually, who does not employ an apprentice or trainee and is not a member of a group.
7. In completing the Subcontractor's Statement, a subcontractor declares that workers compensation insurance premiums payable up to and including the date(s) on the Statement have been paid, and all premiums owing during the term of the contract will be paid.
8. In completing the Subcontractor's Statement, a subcontractor declares that all remuneration payable to relevant employees for work under the contract has been paid.
9. In completing the Subcontractor's Statement, a subcontractor declares that all payroll tax payable relating to the work undertaken has been paid.
10. It is important to note that a business could be both a subcontractor and a principal contractor, if a business 'in turn' engages subcontractors to carry out the work. If your business engages a subcontractor you are to also obtain Subcontractor's Statements from your subcontractors.

## Statement Retention

The principal contractor receiving a Subcontractor's Statement must keep a copy of the Statement for the periods stated in the respective legislation. This is currently up to seven years.

## Offences in respect of a false Statement

In terms of s127(8) of the Industrial Relations Act 1996, a person who gives the principal contractor a written statement knowing it to be false is guilty of an offence if:

- (a) the person is the subcontractor;
- (b) the person is authorised by the subcontractor to give the statement on behalf of the subcontractor; or
- (c) the person holds out or represents that the person is authorised by the subcontractor to give the statement on behalf of the subcontractor.

In terms of s175B of the Workers Compensation Act 1987 and clause 18 of Schedule 2 of the Payroll Tax Act 2007 a person who gives the principal contractor a written statement knowing it to be false is guilty of an offence.



In terms of s 13(8) of the Building and Construction Security of Payment Act 1999 a head contractor who serves a payment claim accompanied by a supporting statement knowing that the statement is false or misleading in a material particular in the particular circumstances is guilty of an offence.

### **Further Information**

For more information, visit the WorkCover website [www.workcover.nsw.gov.au](http://www.workcover.nsw.gov.au), Office of State Revenue website [www.osr.nsw.gov.au](http://www.osr.nsw.gov.au), or NSW Industrial Relations, <http://www.industrialrelations.nsw.gov.au>. Copies of relevant legislation can be found at [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au).



**Schedule 7**

# COSTS ADJUSTMENT FORMULA

**Refer to clause 55.2 of the GC21 General Conditions of Contract.**

---



# DAYWORK

Refer to clause 48.4 of the GC21 General Conditions of Contract.

---

## 1 Daywork procedure and determination

- .1 If the Principal instructs that a *Variation* be carried out as *Daywork*, the Principal and Contractor must agree the amount, type and conditions of use of labour, plant and materials to be used in the *Variation*.
- .2 Contractor must record the particulars of all resources used by the Contractor each day in carrying out the *Variation*. The method of recording the resources and their hours must be agreed by the Contractor and Principal.
- .3 When submitting a claim for payment for the *Variation* in a *Payment Claim* under clause 58, the Contractor must submit records including all time sheets, wages sheets, invoices, receipts and other documents that are necessary to support this *Payment Claim*.
- .4 The Principal must assess the value of the *Variation* amount to be paid to the Contractor in respect of each *Payment Claim* and in making its assessment under clause 59 must have regard to the following:
  - .1 the amount of wages and allowances for labour paid or payable by the Contractor at the rates obtaining on the Site at the time, as approved by the Principal;
  - .2 the amount paid or payable by the Contractor in accordance with any statute or award applicable to day labour additional to the wages paid or payable under 1.4.1 of this *Daywork* procedure;
  - .3 the amount of hire charges for construction plant approved by the Principal for use on the work;
  - .4 the reasonable actual mobilisation and demobilisation costs of construction plant and vehicles (where brought for the sole purpose of the instructed *Daywork*);
  - .5 the reasonable amounts paid by the Contractor for Subcontracts and for Consultant work involved in carrying out the *Variation*;
  - .6 the reasonable actual cost to the Contractor at the Site of all materials supplied and required for the *Variation* work.
- .5 In addition to the amounts assessed for the items under clause 1.4 above, the value of the *Variation* will include an additional amount for overheads, administrative costs, site supervision, establishment costs, attendance and profit calculated as 22.5% of the total of the assessed costs under clause 1.4.
- .6 The amounts payable for *Daywork* will not be subject to adjustment for rise and fall in costs notwithstanding that the Contract may provide for adjustment for rise and fall in costs.

## 2 Amounts included in and excluded from Daywork

- .1 Assessment by the Principal of the valuation of a *Variation* carried out as *Daywork* will include valuation of all reasonable and necessary costs incurred of personnel, plant, vehicles, Subcontractor, Consultant and *Materials* used by the Contractor in carrying out the *Variation* as instructed by the Principal, subject to:
  - .1 the valuation of the *Variation* will only include costs for actual time of any resources which are employed on the *Variation*; and
  - .2
    - .1 the costs of supervisory, technical and administrative personnel that are normally engaged on the Works and continue to be so during the *Daywork*



will not be included in the Principal's assessment of the valuation of the *Variation*.

### **3 Principles for calculating time**

- .1 If the parties do not agree on the effect on the time for *Completion* of the *Variation* carried out as *Daywork*, the extension of time for *Completion* due if any, must be dealt with under clauses 68 to 71 based on the principles contained in clause 50.



**Schedule 9**

# SUBCONTRACT REQUIREMENTS

**Refer to clause 28.4.1 of the GC21 General Conditions of Contract.**

**1 General requirements for specified subcontracts**

In addition to its obligations under clause 28.3, for all Subcontracts valued at or over the amount stated in Contract Information item 29, the Contractor must include requirements consistent with the provisions of the following clauses and schedules of this Contract:

1. clause 3 - Co-operation
2. clause 4 - Duty not to hinder performance
3. clause 5 - Early warning
4. clause 6 - Evaluation and monitoring
5. clause 10 - Governing law of the Contract
6. clause 13 - Compliance with Code of Practice for Procurement
7. clause 14 - No collusive arrangements
8. clause 15.1.1 - Work Health and Safety management, except that the submission and implementation of the Safe Work Method Statements is subject to the decision of the Contractor as principal contractor for work health and safety matters.
9. clause 15.1.6 - Aboriginal Participation in Construction
10. clause 23 - Intellectual Property
11. clause 24 - Confidentiality
12. clause 25 - Media releases and enquiries
13. clause 26 - Care of people, property and the environment, indemnities and limitations
14. clauses 27.5, 27.10.1.1, 27.10.1.2, 27.10.1.5 and 27.10.1.6 - Insurances
15. clause 28 - Subcontractor relationships
16. clause 58 - Payment Claims
17. clause 59 - Payments
18. Schedule 1 (Subcontractor's Warranty) together with an obligation to execute and deliver the Warranty to the Principal (only if the Subcontractor is required by clause 30 to provide the warranty)
19. Schedule 9 (Subcontract requirements)



**Schedule 10**

# PRINCIPAL ARRANGED INSURANCES

Not used



# STATEMENT REGARDING MATERIALS

Refer to clause 58.7 of the GC21 General Conditions of Contract.

---

I am a representative of *[name of company/entity with custody of the Materials or on whose land the Materials are stored]* in the capacity of *[insert position]* and I am authorised to make this statement on behalf of the Company. I confirm that the Company has no lien, charge or other encumbrance over the *Materials* listed in the schedule to this statement (“Materials”). I acknowledge that the *Materials* are the property of the Principal named in the schedule to this statement (“Principal”) and I hereby irrevocably authorise the Principal or its officers or others acting with its authority to enter the premises where the *Materials* are stored at any reasonable hour to inspect or remove the *Materials*. I undertake to make no claim or charge against the Principal in respect of the storage of the *Materials*.

## SCHEDULE

### Materials

*[list the Materials]*

Principal

*[insert name of the Principal]*

SIGNED.....

DATE:.....



# COMPLIANCE WITH BUILDING CODE 2013

Refer to clause 13.15 of the GC21 General Conditions of Contract.

---

1. The Contractor must comply with the *Building Code 2013* (Building Code). Copies of the Building Code are available at [www.employment.gov.au/BuildingCode](http://www.employment.gov.au/BuildingCode).
2. Compliance with the Building Code shall not relieve the Contractor from responsibility to perform the Contract, or from liability for any *Defect* in the works arising from compliance with the Building Code.
3. Where a change in the Contract is proposed and that change would affect compliance with the Building Code, the Contractor must submit a report to the Commonwealth specifying the extent to which the Contractor's compliance with the Building Code will be affected.
4. The Contractor must maintain adequate records of the compliance with the Building Code by:
  - (a) the Contractor;
  - (b) its Subcontractors;
  - (c) consultants; and
  - (d) its Related Entities (refer Section 8 of the Building Code).
5. If the Contractor does not comply with the requirements of the Building Code in the performance of this Contract such that a sanction is applied by the Minister for Employment, the Code Monitoring Group or the Commonwealth, without prejudice to any rights that would otherwise accrue, those parties shall be entitled to record that non-compliance and take it, or require it to be taken, into account in the evaluation of any future tenders that may be lodged by the Contractor or a related entity in respect of work funded by the Commonwealth or its agencies.
6. While acknowledging that value for money is the core principle underpinning decisions on Government procurement, when assessing tenders, the Contractor may give preference to subcontractors and consultants that have a demonstrated commitment to:
  - (a) adding and/or retaining trainees and apprentices;
  - (b) increasing the participation of women in all aspects of the industry; or
  - (c) promoting employment and training opportunities for Indigenous Australians in regions where significant indigenous populations exist.
7. The Contractor must not appoint a subcontractor or consultant in relation to the Project where:
  - (a) the appointment would breach a sanction imposed by the Minister for Employment; or
  - (b) the subcontractor or consultant has had an adverse Court or Tribunal decision (not including decisions under appeal) for a breach of workplace relations law, work health and safety law, or workers' compensation law and the tenderer has not fully complied, or is not fully complying, with the order.
8. The Contractor agrees to require that it and its subcontractors or consultants and its related entities provide the Commonwealth or any person authorised by the Commonwealth, including a person occupying a position in the Fair Work Building Industry Inspectorate, with access to:
  - (a) inspect any work, material, machinery, appliance, article or facility;



- (b) inspect and copy any record relevant to the Project the subject of this Contract; and
  - (c) interview any person
- as is necessary to demonstrate its compliance with the Building Code.
9. Additionally, the Contractor agrees that the Contractor and its related entities will agree to a request from the Commonwealth or any person authorised by the Commonwealth, including a person occupying a position in the fair Work Building Industry Inspectorate, to produce a specified document within a specified period, in person, by fax or by post.
10. The Contractor must ensure that all subcontracts impose obligations on sub-contractors equivalent to the obligations under these Contract Clauses.



## Schedule 13

## DEED OF FINAL RELEASE

Refer to clause 61 of the GC21 General Conditions of Contract.

TO: **Hunter Water Corporation** (ABN 46 228 513 446)

of 36 Honeysuckle Drive, Newcastle NSW 2300.

("the Principal")

CONTRACTOR: [insert Contractor]

(ACN ) (ABN )

of [Insert Address]

("the Contractor")

CONTRACT: Agreement made between the Principal and the Contractor on ...../...../.....  
("the Contract").

PROJECT: The construction of [insert description of the Works] as further described in the  
Contract ("the Works").

## DEED POLL

1. Subject to clause 2 below, to the extent permitted by law, the Contractor waives, releases and forever discharges the Principal from all or any claims, actions, suits, proceedings, demands and the like (whether direct, indirect or consequential, past, present or future, certain or contingent, ascertained or not ascertained) which the Contractor has now or might have against the Principal in the future whether arising under or in connection with the Contract or in any way connected with the execution of the Works or for the work performed or materials supplied at the Site and further acknowledges that this Deed of Release may be pleaded as a complete and unconditional bar to any proceedings of whatever nature sought to be instituted, filed or maintained against the Principal by the Contractor after the date of this Deed of Release.
2. Nothing in clause 1 of this deed releases or otherwise affects any Claim which the Contractor may have against the Principal which is identified in the *Final Payment Claim* in accordance with clause 61.1 of the Contract or any defence which the Contractor raises or brings, or may raise or bring, against the Principal in respect of proceedings issued by the Principal against the Contractor.
3. The Contractor certifies that:



- (a) all wages and allowances, including in respect of overtime and loadings due and payable as required by law to persons who have at any time been employed by the Contractor in relation to the Works have been paid in full;
- (b) all entitlements which have or should have accrued in respect of all persons who have at any time been employed by the Contractor in relation to the Works, including in relation to annual leave, personal leave and RDOs, have been properly accounted for in accordance with legislation and any applicable and legally binding agreement, award, workplace agreement or workplace policy;
- (c) all subcontractors engaged by the Contractor in relation to the Works and all suppliers to the Contractor of plant, equipment and material for the Works have been paid in full; and
- (d) all contributions and payments to any scheme for superannuation, long service leave, redundancy and severance pay or the like as required by legislation and any applicable and legally binding award or workplace agreement have been paid in full.

Executed as a DEED POLL on this                      day of                      20

Executed by **[Insert Contractor]**  
(ABN **[insert]**) in accordance with section 127 of  
the *Corporations Act 2001*:

-----  
Signature of director/company secretary

-----  
Signature of director

-----  
Name of director/company secretary  
(BLOCK LETTERS)

-----  
Name of director  
(BLOCK LETTERS)



# Attachments

---

Attachments 1, 2, 2A and 3 do not form part of the Contract.

<b>Attachment 1</b>	<b>GC21 Start-up Workshop</b>
<b>Attachment 2</b>	<b>Performance Evaluation (Example)</b>
<b>Attachment 2A</b>	<b>Performance Evaluation</b>
<b>Attachment 3</b>	<b>Performance Evaluation Record</b>



## Attachment 1

# THE GC21 START-UP WORKSHOP

The start-up workshop is held to encourage the parties and others concerned with the Contract and the Works to work co-operatively to achieve a successful contract. This Attachment 1 is intended as a guide for the participants.

The workshop takes place within 28 days after the Date of Contract. The workshop should take half a day, although large or complex contracts may require longer.

Refer to clause 32 of the GC21 General Conditions of Contract.

## Participants

The workshop participants include representatives of the Principal, the Contractor and others concerned with the Works. This might include representatives of authorities, eventual users of the Works, the local community, Consultants, Subcontractors and Suppliers.

## Agenda

The agenda should include:

- welcome by the facilitator;
- introduction of participants;
- workshop purpose and, guidelines;
- review of the proposed workshop agenda;
- overview of the Contract;
- co-operative contracting - overview;
- co-operative contracting applied to the Contract;
- monitoring and evaluation;
- development of a communications framework and directory;
- identification of key concerns and solutions;
- opportunities for innovation;
- closing comments and feedback; and
- close of workshop.

A copy of the Procurement Practice Guide *GC21 meetings and workshops* may be obtained from the NSW Government Procurement System for Construction on the ProcurePoint website.



# PERFORMANCE EVALUATION (EXAMPLE)

Refer to clause 6 of the GC21 General Conditions of Contract.

Evaluation and monitoring meetings should focus on achievable improvements in contract communication and management. Attachments 1 and 2 provide a structure for evaluation and discussion

Attachment 2 indicates topics that are suitable for assessing performance and monitoring progress as the Contract proceeds.

They are provided for guidance only, and the topics are suggestions only. Each evaluation team should choose its own topics to reflect issues specific to the Contract. Use Attachment 2A on the next page to develop a Contract-specific Performance Evaluation form

Contract name: .....

Contract number: .....

Date: .....

## Rating system

- 5 excellent
- 4 above expectation
- 3 meeting expectation
- 2 below expectation
- 1 unsatisfactory

Topic	Objectives	Your rating (this period)	Team rating (this period)	Main Issue & Agreed Action
Communication	<ul style="list-style-type: none"> <li>co-operation between parties</li> <li>duty not to hinder performance</li> <li>early warning</li> <li>evaluation and monitoring</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
Time	<ul style="list-style-type: none"> <li>issues affecting time</li> <li>extensions of time</li> <li>expected completion dates</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
Financial	<ul style="list-style-type: none"> <li>issues affecting the budget</li> <li>extra work</li> <li>payments</li> <li>additional information required</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
Quality	<ul style="list-style-type: none"> <li>quality standards</li> <li>design requirements</li> <li>fitness for purpose, innovation</li> <li>Faults, Defects rectification</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
Safety	<ul style="list-style-type: none"> <li>issues affecting safety on the Site</li> <li>safety outside the Site.</li> <li>safety risks</li> <li>safety equipment</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
Relationships	<ul style="list-style-type: none"> <li>open discussion</li> <li>actions effective</li> <li>working together</li> <li>attendance</li> </ul>			



		<input type="checkbox"/>	<input type="checkbox"/>
<i>Environment</i>	<ul style="list-style-type: none"> <li>• <i>issues affecting the environment</i></li> <li>• <i>noise and dust issues</i></li> <li>• <i>healthy environment</i></li> <li>• <i>waste management,</i></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Contract Relations</i>	<ul style="list-style-type: none"> <li>• <i>Subcontractor and Supplier issues</i></li> <li>• <i>industrial relations and Site amenities</i></li> <li>• <i>interaction of workers with others</i></li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> <li>• <b>IMPORTANT:</b> During each meeting, the evaluation team should decide on an action plan for items needing improvement.</li> </ul>			



# PERFORMANCE EVALUATION

Insert in the form below topics that are important to the Contract.

Contract name: .....

Contract number: .....

Date: .....

## Rating system

- 5 excellent
- 4 above expectation
- 3 meeting expectation
- 2 below expectation
- 1 unsatisfactory

Topic	Objectives	Your rating (this period)	Team rating (this period)	Main Issue & Agreed Action
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	





---

Suggested topics are: Communication, Time, Relationships with others affected by the Works, Budget and Financial Issues, Scope Management, Quality, Safety, Environment, Contract Relations, Community Consultation, Aboriginal Participation, Maintenance of Asset Operation.

- **IMPORTANT:** During each meeting, the evaluation team should decide on an action plan for topics needing improvement.
-



### Attachment 3

## Performance Evaluation Record

**Insert the Contract-specific topics. Record the participants' ratings for each topic to illustrate trends in the Team's performance.**

Contract name: .....

Contract number: .....

Date: .....

#### Rating system

- 5 excellent
- 4 above expectation
- 3 meeting expectation
- 2 below expectation
- 1 unsatisfactory

Meeting	Number Month Year	1	2	3	4	5	6	7	8	9	10	11	12

TOPIC													
Communication	1												
	2												
	3												
	4												
	5												
	1												
	2												
	3												
	4												
	5												
	1												
	2												
	3												
	4												
	5												
	1												
	2												
	3												
	4												
	5												
	1												
	2												
	3												
	4												
	5												
	1												
	2												
	3												
	4												
	5												
	1												
	2												
	3												
	4												
	5												



1 unsatisfactory



## Improving Performance

[illegible]



## Annexure 2 – Technical Specification

### B1. DEFINITIONS AND ABBREVIATIONS

Throughout this specification, the following terms, appreciations, definitions and acronyms will be used:

**Table 1 - Definitions**

Abbreviations	Definitions / Meanings
ABS	Air Break Switch
AS/NZS	Australian Standards / New Zealand Standards
CA	Condition Assessment
Contractor	The head contractor undertaking the works
ENA	Energy Network Association
EPR	Earth Potential Rise
FLS	Fault Level Study
FO	Fibre Optic cable
HV	High Voltage
HV ISMP	High Voltage Installation Safety Management Plan
THE PRINCIPAL	Hunter Water Corporation
THE PRINCIPALPP	Hunter Water Corporation Power Pole
ITP	Inspection and Test Plan
LV	Low Voltage
MSDS	Material Safety Data Sheets
OHEW	Overhead Earth Wire
OPGW	Optical Ground Wire – an OHEW containing Fibre Optic cores
REF	Review of Environmental Factors
SCADA	System Control and Data Acquisition
SKM PTW	SKM Power Tools for Windows
SP	Separable Portion
Sub-contractor	A subcontractor working under the control of the 'Contractor'
UGOH	Underground Overhead connection



## **B2. REFERENCED DOCUMENTS**

### **A2.1 Drawings**

The reference drawings may not detail the information to the extent that they can be “Issued For Construction”. In such cases, it will be Contractor’s responsibility to develop required details to use the drawings for Construction.

Detailed design, construction methods and temporary works are the responsibility of the Contractor. Obtain requirements for interconnection the Principals exiting powerline and other relevant assets (e.g. pipelines and fences with respect to earthing) by liaising with the Principal. Drawings do not show details of all fixtures, attachments or connections etc. required.

Build, fabricate and procure only from drawings and associated design documents produced under this contract and approved by the Principal as ‘Issued for Construction’. Keep on site a complete set of contract documents (including drawings and specifications) and site instructions. Supply relevant notes, drawings and specifications etc. to sub-contractors.

### **A2.2 Mapping**

The Principal supplied Geospatial Shape files and Google Earth ‘.kmz’ network mapping plans are deemed to form part of the Specification.

### **A2.3 Standards and Standard Technical Specifications**

#### **A2.3.1 General**

Ausgrid Network Standards and associated reference drawings are considered to be normative standards under this Contract.

Contractors and work shall comply with the following:

- Legislated Acts, Statutory Rules and Regulations,
- National Electricity Rules,
- Electricity supply act,
- NSW Service and Installation Rules,
- Rules regulations and codes of practice.

#### **A2.3.2 Australian Standards**

Conform to the relevant standards where applicable, including:

- AS 1033 – High voltage fuses (for rated voltages exceeding 1000 V)
  - AS 1319 - Safety signs for the occupational environment
  - AS/NZS 1429 - Electric cables - Polymeric insulated
  - AS/NZS 1768 - Lightning protection
  - AS 1931 - High-voltage test techniques
  - AS 2024 - High voltage a.c. switchgear and control gear – switch-fuse combinations
  - AS 2067 – Substations and high voltage installations exceeding 1kV a.c.
  - AS/NZS 2947 - Insulators - Porcelain and glass for overhead power lines - Voltages greater than 1000 V a.c.
-



- AS/NZS 3000 - Electrical installations (known as the Australian/New Zealand Wiring Rules)
  - AS/NZS 3008 - Electrical installations – Selection of cables – Cables for alternating voltages up to and including 0.6/1kV
  - AS/NZS 3439 - Low-voltage switchgear and control gear assemblies
  - AS/NZS 3560 - Electric cables - Cross-linked polyethylene insulated - Aerial bundled - For working voltages up to and including 0.6/1(1.2)kV
  - AS/NZS 3599 - Electric cables - Aerial bundled - Polymeric insulated - Voltages 6.35/11(12) kV and 12.7/22(24) kV
  - AS 3608 - Insulators - Porcelain and glass, pin and shackle type - Voltages not exceeding 1000Va.c.
  - AS 3609 - Insulators - Porcelain stay type - Voltages greater than 1000 V a.c.
  - AS/NZS 3675 - Conductors - Covered overhead - For working voltages 6.35/11(12) kV up to and including 19/33(36) kV
  - AS 3766 - Mechanical fittings for low voltage aerial bundled cables
  - AS/NZS 3835 - Earth potential rise - Protection of telecommunications network users, personnel and plant
  - AS 4435 - Insulators - Composite for overhead power lines - Voltages greater than 1000 V a.c.
  - AS 4741 - Testing of connections to low voltage electricity networks
  - AS/NZS 4805 - Accessories for electric cables - Test requirements
  - AS/NZS 4836 - Safe working on or near low-voltage electrical installations and equipment
  - AS 4899 - Pin insulators - Porcelain and glass for overhead power lines - Voltages greater than 1000 V a.c.
  - AS/NZS 5000 - Electric cables - Polymeric insulated - For working voltages up to and including 0.6/1 (1.2) kV
  - AS 5804 - High-voltage live working
  - AS 60076 - Power transformers
  - AS/NZS 60137 - Insulated bushings for alternating voltages above 1000 V
  - AS/NZS 60265 - High-voltage switches - Switches for rated voltages above 1 kV and less than 52 kV
  - AS 60270 - High-voltage test techniques - Partial discharge measurements
  - AS 60305 - Insulators for overhead lines with a nominal voltage above 1000 V - Ceramic or glass insulator units for a.c. systems
  - AS 60433 - Insulators for overhead lines with a nominal voltage above 1000 V - Ceramic insulators for a.c. systems - Characteristics of insulator units of the long rod type
  - AS/NZS 60947 - Low-voltage switchgear and controlgear
  - AS/NZS 61000 - Electromagnetic compatibility (EMC)
  - AS 62217 - Polymeric insulators for indoor and outdoor use with a nominal voltage > 1000 V
  - AS 62231 - Composite station post insulators for substations with a.c. voltages greater than 1000 V up to 245 kV
  - AS 62271 - High-voltage switchgear and controlgear - Common specifications
-



- AS/NZS 7000 - Overhead line design - Detailed procedures

### **A2.3.3 Hunter Water Standard Technical Specifications**

The Hunter Water Corporation Standard Technical Specifications that are referenced are deemed to form part of this Contract. The Contractor shall confirm to the following:

- General Electrical Specification Contract CS0603 (Replaces all references to STS500 in the below Standard Technical Specifications)
- STS550 - General Requirements for SCADA and Automation Systems
- STS904 - Preparation of Electrical Engineer Drawings
- STS906 - Operation and Maintenance Manual Requirements
- STS906 - Template - STS906 O&M Manual

### **A2.3.4 Normative Ausgrid Network Standards**

Conform normatively to relevant Ausgrid standards where applicable including:

- NS104 - Specification for Electrical Network Project Design Plans
  - NS116 - Design Standards for Distribution Equipment Earthing
  - NS122 - Pole Mounted Substation Construction
  - NS124 - Specification for Overhead Service Connections up to 400 Amps
  - NS125 - Construction of Low Voltage Overhead Mains
  - NS126 - Construction of High Voltage Overhead Mains
  - NS127 - Specification for Low Voltage Cable Joints and Terminations
  - NS128 - Specification for Pole Installation and Removal
  - NS130 - Specification for Laying Underground Cables up to and Including 11kV
  - NS135 - Specification for the Construction of Overhead Sub-transmission Lines
  - NS145 - Pole Inspection and Treatment Procedures
  - NS146 - Safety Inspection Procedure for Working on Poles
  - NS156 - Working Near or Around Underground Cables
  - NS158 - Labelling of Mains and Apparatus
  - NS161 - Specification for Testing of Underground Cables
  - NS166 - Line Inspection
  - NS167 - Positioning of Poles and Lighting Columns
  - NS168 - Specification for the Design and Construction of Underground Sub-transmission Lines
  - NS177 - 11kV Joints (including Transition Joints) & Terminations -Polymeric Insulated Cables
  - NUS199 - Safe Electrical Working on Low Voltage Assets - Mar 2013
  - NS201 - All Dielectric Self Supporting Fibre Optic Cabling for Installation on Distribution Assets, Feb 2008
  - NS209 - Guide to Operating Plant and Cranes Near Overhead Power Lines
  - NS211 - Working with Asbestos Products
  - NS215 - Telecommunications Design – Work Instruction Allocation and Recording of Fibre Use, Nov 2011
  - NS220 - Overhead Design Manual
-



- NS262 - Private Mains Bushfire Risk Inspection

### **A2.3.5 Electricity Network Association Guidelines**

Conform to the relevant ENA guidelines where applicable, including:

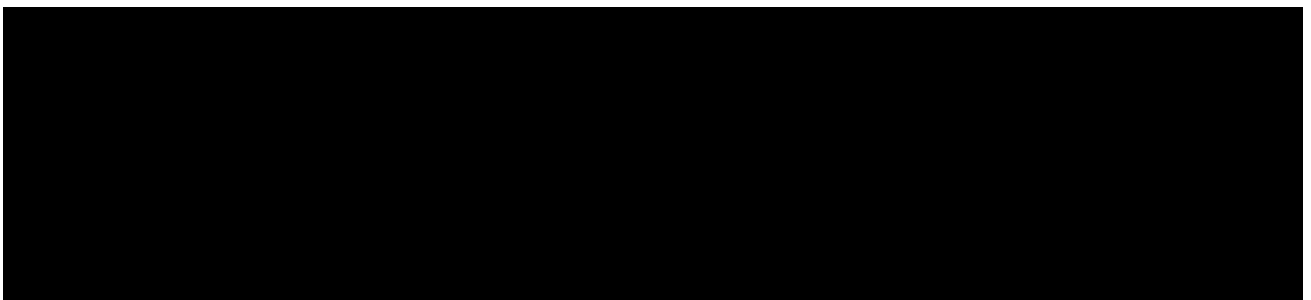
- ENA Doc 001 - National Electricity Network Safety Code
- ENA Doc 011 - Pole Supply and Performance Specification
- ENA Doc 012 - Cross-arm Supply and Performance Specification
- ENA Doc 013 - Network Passport Guideline
- ENA Doc 017 - ENA Industry Guideline for the Inspection, Assessment and Maintenance of Overhead Power Lines
- ENA Doc 019 - ENA Land Management Guidelines
- ENA Doc 023 - ENA Guidelines for Safe Vegetation Management Works Near Overhead Lines
- ENA Doc 024 - National Guideline for Management of Tools and Equipment Used in the Electricity Supply Industry
- ENA DOC 025 - (EG-0) Power System Earthing Guide - Part 1: Management Principles, Version 1
- ENA Doc 026 - ENA Guideline for the Management of Burning and Fire-damaged CCA Impregnated Poles and Cross arms
- ENA Doc 027 - ENA Technical Report - Guide for the Selection and Management of Poles to Reduce Damage and Loss when They are Exposed to Bushfires
- ENA Doc 031 - ENA National Guideline for Mobile Plant Earthing
- ENA Doc 032 - Guideline for the Selection, Installation, Identification, Performance, Inspection and Maintenance of Pole Reinforcement Methods
- ENA EG1 - Substation Earthing Guide
- ENA NENS 03 - National Guidelines for Safe Access to Electrical and Mechanical Apparatus
- ENA NENS 04 - National Guidelines for Safe Approach Distances to Electrical and Mechanical Apparatus
- ENA NENS 05 - National Fall Protection Guidelines for the Electricity Industry
- ENA NENS 07 - National guidelines for Manual Reclosing of High Voltage Electrical Apparatus Following a Fault Operation (Manual Reclose Guidelines)

## **B3. REVIEW OF AVAILABLE DATA, INFORMATION, REPORTS AND STUDIES**

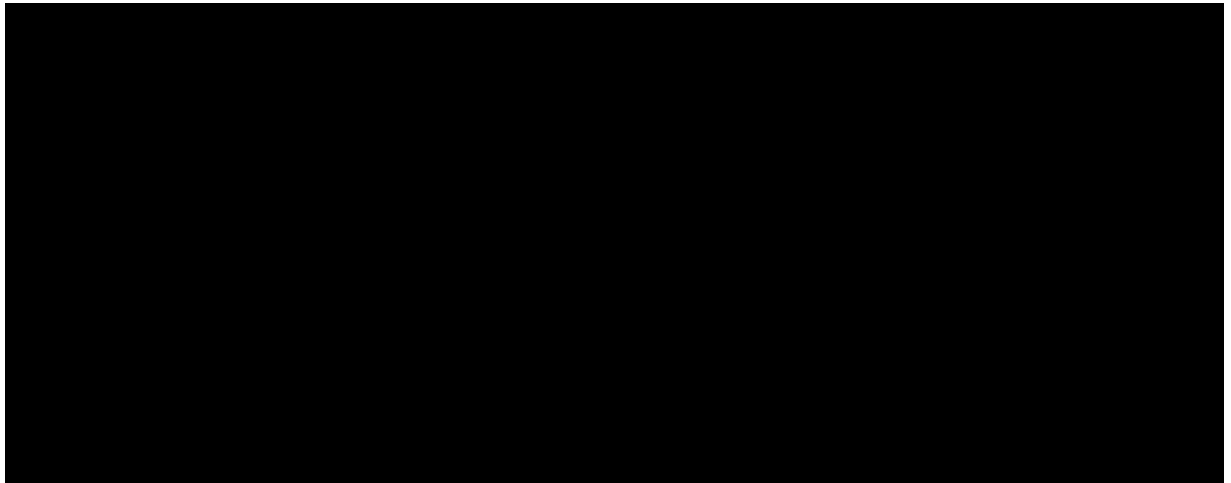
### **A3.1 General**

Review all available data, information, reports and studies provided by the Principal.

### **A3.2 Documents to be provided to the Contractor**







#### **B4. INSPECTION OF THE EXISTING POWER POLES AND CONDUCTORS**

Undertake an inspection of the existing HV and LV network of power poles and conductors to:

- Confirm the accuracy of available records,
- Confirm suitability for installation of a bracket and OHEW
- Verify and record particulars of each pole and pole top assembly to complete the pole attributes database provided. The Principal will provide a file “Network\_Pole\_Attributes.xls” with details of poles partially completed. Complete the database and submit the completed file as part of the Design Report.

Undertake the inspections on a feeder by feeder basis.

Submit an Inspection Report for all existing poles, assemblies and powerlines in accordance with Ausgrid Network Standards NS 145 and NS166.

Undertake fungal treatments in accordance with NS145.

Provide summarised exception reports to the Principal which identifies;

- defective poles,
- termite infested poles,
- minimal tree clearances,
- general pole condition problems,
- defect Priority,
- recommended remedial work for approval by the Principal. The recommended repairs shall include preliminary design details and costs to carry out the repairs

The inspection and exception reports shall be submitted for review at the conclusion of each powerline section.

Report within 24 hours, any unsafe poles, pole assemblies and/or overhead wires identified.

#### **B5. DEFECT REPAIRS**

The Principal will review the reported unsafe poles, pole assemblies and/or overhead wires and advise of which defects to rectify as a high priority.

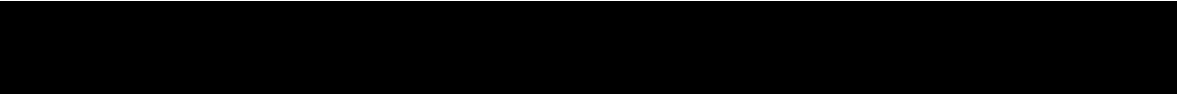
Rectify high priority defects (deemed unsafe) to poles and powerlines in each section of the network.

The defect repairs cover all aspects of the repair works including:

---



- Detailed design to verify the suitability of the repair for sustained operation and (where possible), to avoid any unnecessary rework at a later time when the main project task to upgrade the network feeder section takes place

- 
- Updating of all of the Principals relevant network documentation to record the defect repair.

## **B6. UPGRADING OF POWERLINES**

### **A6.1 General**

Design, supply, replace and commission the existing 3 phase HV with new conductors.

Design, supply, replace and commission the existing 3 phase LV cables with new conductors,

Re-use existing poles where suitable and replace existing poles with new poles where required. Install additional poles where necessary to suit the above changes to conductor and OHEW. The Contractor shall detail which poles and the defect that warrants pole to be replaced for comment.

Re-use existing pole-top switchgear and protection devices where fitted, replace with new hardware where required to suit the above changes. Submit details of the switchgear which is recommended to be replaced.

Supply and install new labelling for every pole. The labelling shall identify equipment identification of each pole and the equipment identification of any switchgear installed on the pole.

Replace all droppers and tapings to existing transformers and switchgear; minimum rating of the transformer.

Reconnect all existing switchgear and equipment not included in the contract to replace.

### **A6.2 Design of poles and wires**

Develop a detailed design for poles and wires in accordance with AS7000 and AS3000, including but not limited to following:

- Powerline capacity.
- New powerline and OHEW span profiles to verify sufficient clearances.
- Updated / new pole specifications to suit new pole tip loads.
- Required earthing design to suit new earthing arrangement.
- Required protection design to suit general specification.
- Access / right of way to powerlines and poles.

### **A6.3 LV Mains and Service Cables Requirements**

Assess the LV service cables from the LV Overheads to the pump switchboard's main switch. If the cables are assessed as unsound (as per AS3000) then supply the Principal with a price to replace. The price shall include design, supply install and commission.

---



LV service fuses shall be tested and assessed for appropriate discrimination for both upstream and downstream protection. The contractor shall replace the fuses with appropriately sized fuses as directed.

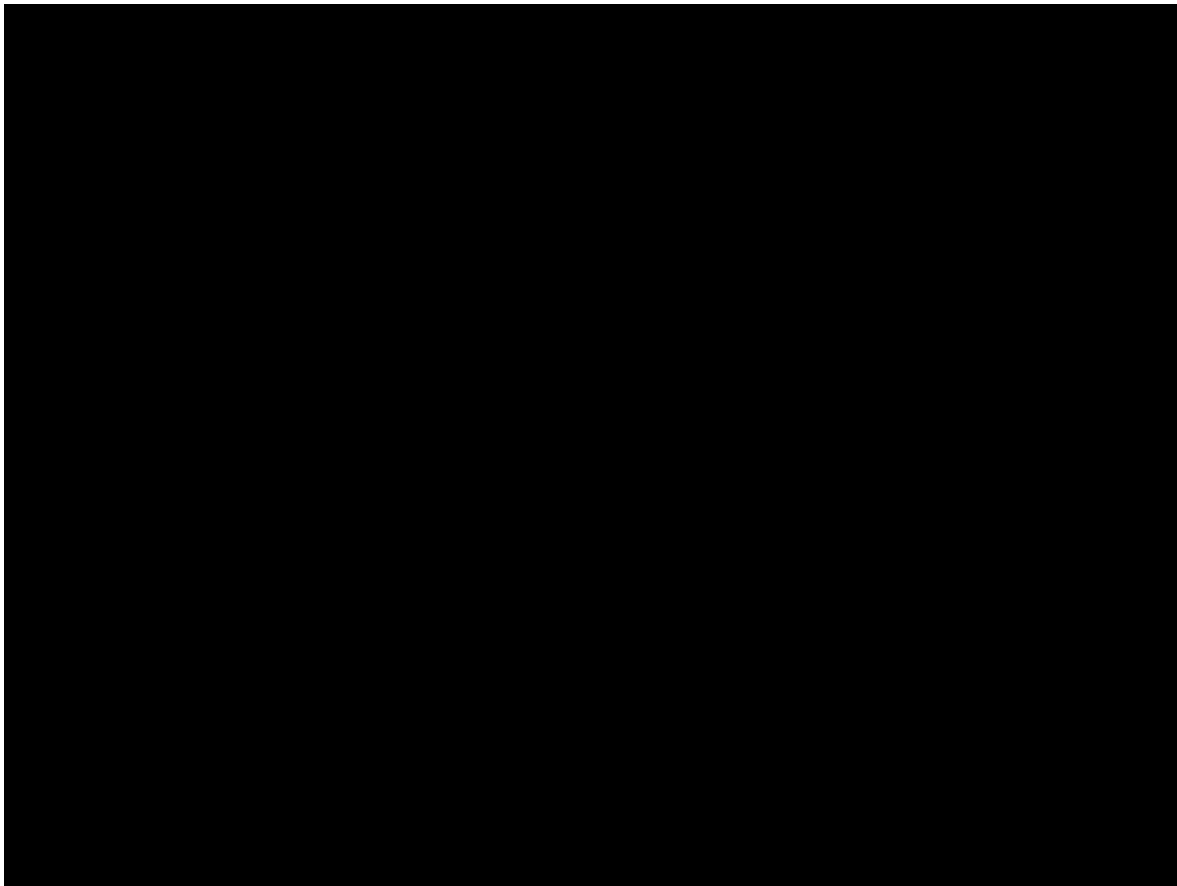
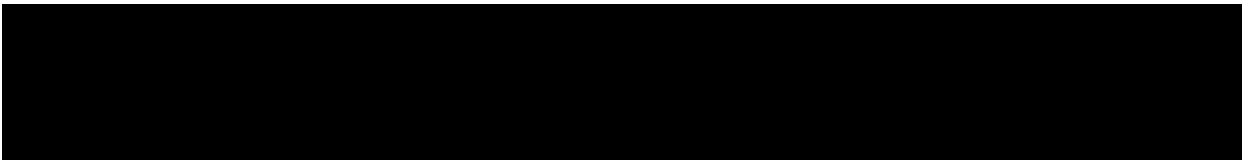
Where LV services are connected to LV overheads and where there is no OHEW, replace or install surge diverters as close as practical to the load side of the service fuse holder. Connect the surge diverter to an earth stake.

Where multiple services, eg 33,000V AC and 433VAC, are installed on the same pole, bare aerial conductor may be used for LV in lieu of ABC type cables. Where only LV is installed on poles ABC type cables are to be used.

Install all underground LV cables in conduit.

Where ABC cables are specified, select the cable to minimise the number of additional poles required to maintain clearances.

#### **A6.4 Tomago Distribution**



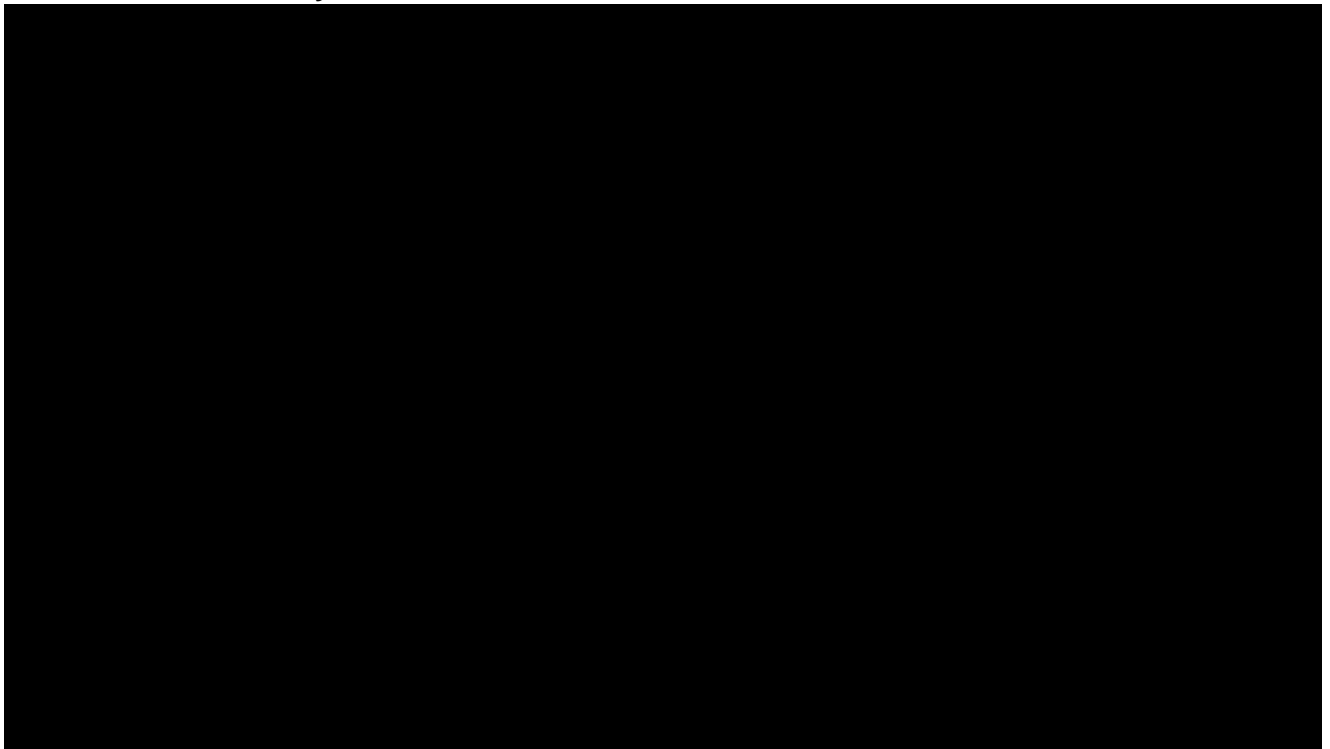




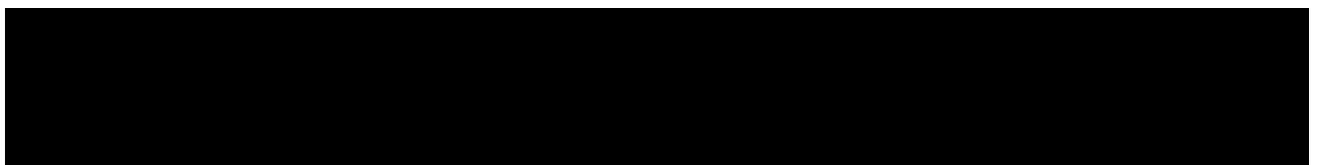
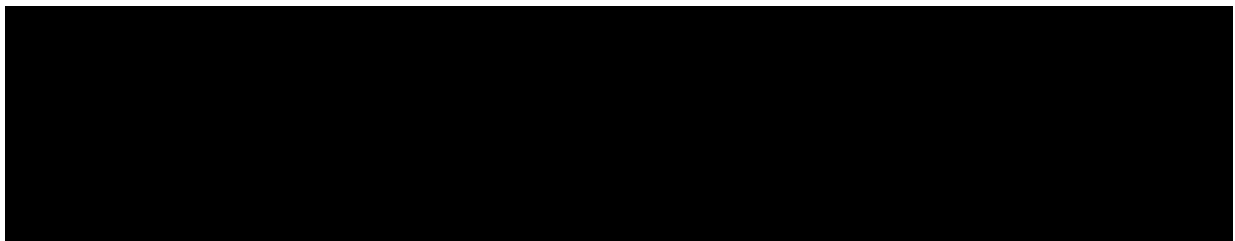
The cables from the main feeder to the ABS for each spur shall be the same rating as the feeder. Where there is no ABS for the spur rate the cable the same as the main feeder to the HV Fuses.

## **A6.5 Tomaree Peninsula**

### **A6.5.1 Nelson Bay Boreline:**



### **A6.5.2 Fingal Bay Boreline:**





**A6.6 Reliability**

The electrical system Detail Design shall be robust to provide long term reliability with enough built in redundancy to ensure down time is minimised. The electrical system shall be designed to allow for maintenance and ease of fault finding.

**A6.7 Environmental Conditions**

For the purposes of design, assume the following environmental conditions:

Outdoor ambient temperatures	50 Deg C to 0 Deg C
Relative Humidity	Max 100% Min 33%
Dust Conditions	Moderate
Site Elevation	Not exceeding 1000 metres
Basic Design Wind Velocities (Region A)	
Vs	38ms
Vp	41ms
Vu	50ms
Rainfall	
Annual Mean	1135mm
Monthly Mean Max	120mm (March)
Monthly Mean min	70mm (November)
Seismic Information (From AS/NZS 1170.4)	
Acceleration Co-efficient	0.085
Site factor	1.0

**A6.8 Fault Levels**

High Voltage equipment shall be suitable to withstand the short circuit rating for one second. The Contractor shall be responsible to determine the fault levels at each individual site and document the results in a Power Study and on the Single Line Diagrams. The design and selection shall be in accordance with the findings from the Power Study.

The equipment position, rating and values shown on single line diagrams and other documentation, including this specification, which have been prepared as part of the Concept Design and are to be treated as indicative only.

**A6.9 Distribution Line Design**

Undertake a Detail Design where necessary of all works associated with the distribution lines including, but not limited to, the following where applicable:



- (a) Finalisation of proposed route.
- (b) Desktop Services Search.
- (c) Field Location of Services.
- (d) Verification of depths of existing services crossed by the proposed distribution lines.
- (e) Verification of depths of existing services which run parallel to the proposed distribution lines where constructability may be an issue.
- (f) Constructability considerations e.g. proximity to parallel services and structures.
- (g) Ground conditions.
- (h) Full power surge analysis including impact on the existing distribution network.
- (i) Selection of suitable materials.
- (j) Design of distribution line supports, including consideration of; grading, alignment, sagging and or tensioning of overhead lines.
- (k) Switching requirements including air break switches, circuit breakers and earth switches and the like.
- (l) Design distribution line support and foundation.
- (m) Pegging of the route and a complete long-section for the distribution line.
- (n) Detail survey of the route.
- (o) Design of connections with other distribution lines.
- (p) Prepare drawings showing location, size, switches and other electrical equipment.
- (q) Measures to maintain the existing system in operation during construction of the new Works.
- (r) Restoration requirements. Clearly indicate restoration requirements (e.g.: road, turf, bush, etc) either on the long section or with a table with relevant chainages in the specification.

#### **A6.10 Cut-in Plans**

A key detail of the design shall be to ensure the minimisation or elimination of disruption to the existing operation of the network during construction of the new Works.

Where it is proposed to connect to the existing system, the methodology for the connection is to be clearly specified in the cut-in plan. This may include drawings of cut-ins, exploded / enlarged views of connections, and/or specification of necessary bypass arrangements.

Prepare plans showing each proposed cut-in.

In consultation with the Principal's operational staff, develop a detailed cut-in plan. The cut in plan shall include but not limited to the following sections:

- (a) An hour by hour work plan. This plan is to identify both the worst case and best case scenarios.
  - (b) If the work has optional stages, a time where no new work is to be commenced.
  - (c) Detailed risk assessment, including consideration of OHS, environmental and operational risks.
-



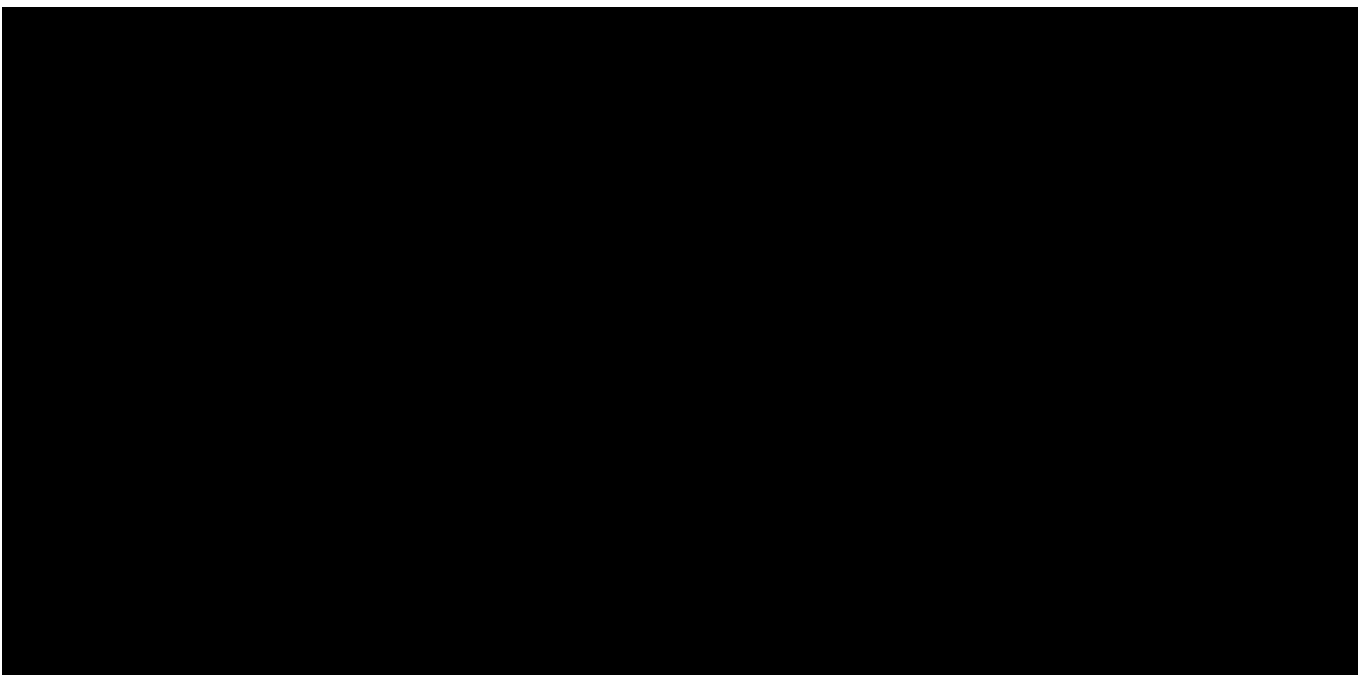
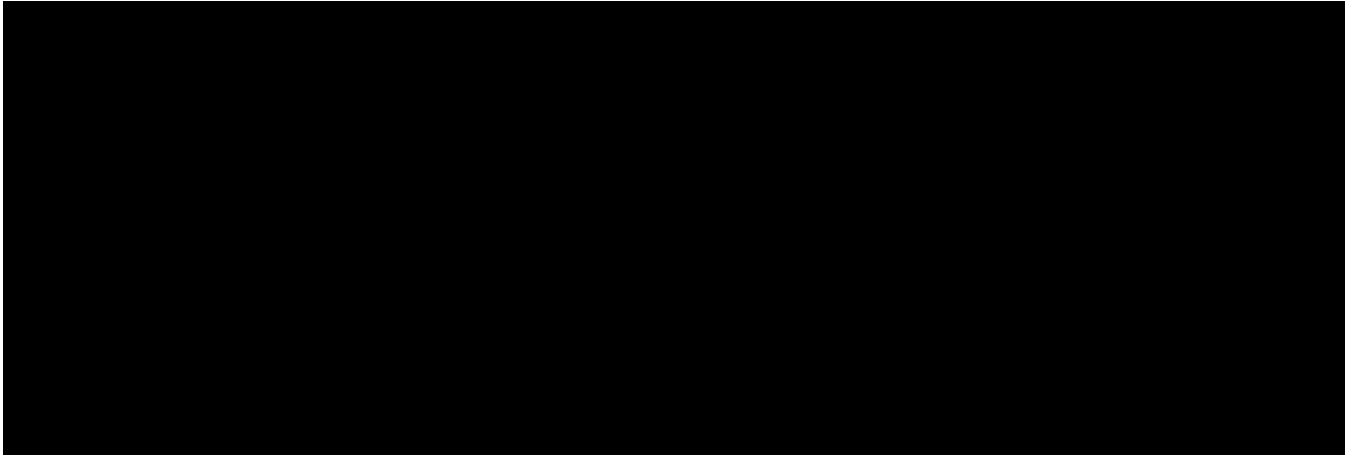
- (d) Materials list.
- (e) Communication lines.
- (f) Resource list.
- (g) Equipment and machinery list including spares. and
- (h) Contingency Plan

#### **A6.11 Design Considerations**

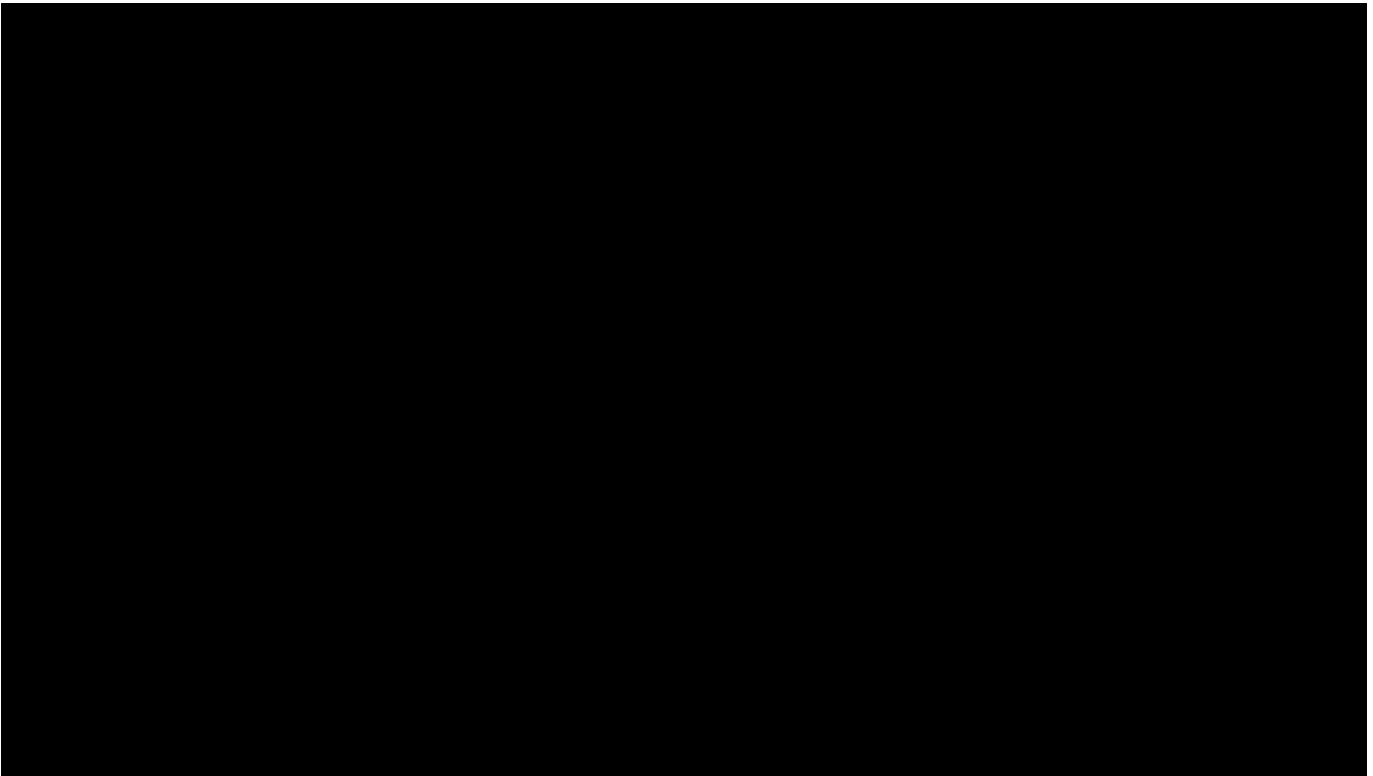
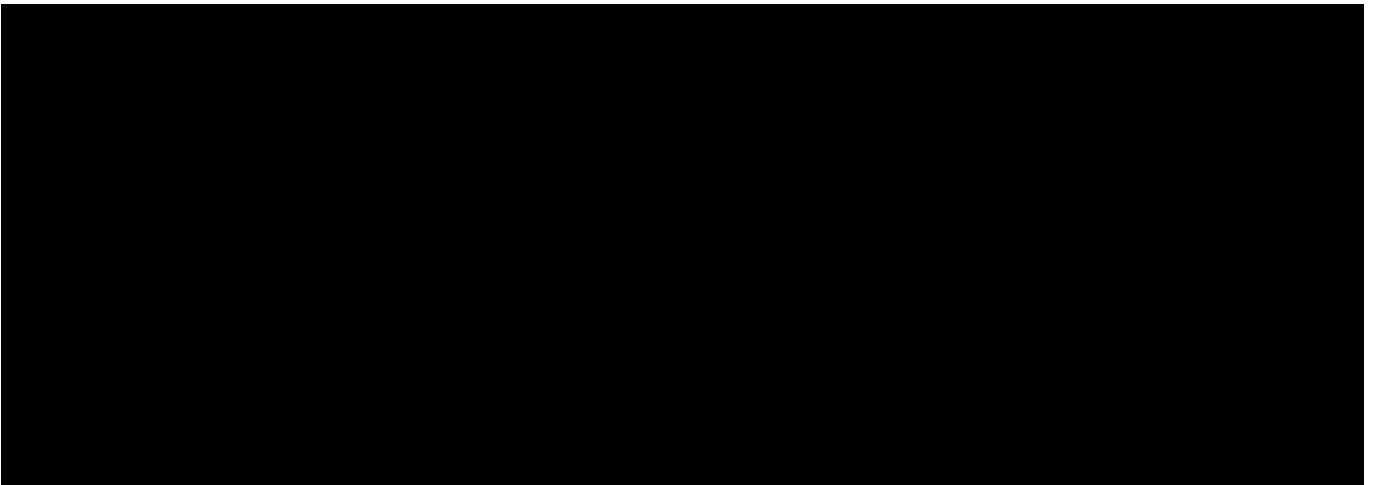
The information in this clause is provided to assist the contractor. Below is a list of locations where special consideration will need to be given in the design of the conductors and/or OHEW that cross either an existing road or other powerlines. This list is of locations have been identified by Hunter Water electrical personnel. The list should not be considered to identify all locations where special design consideration will be required and it is likely there will also be other locations. It is the contractors responsibility to verify all design and construction limitations of the works.

##### **A6.11.1 Road and Powerline Crossings**

###### **611.1.1 Anna Bay Boreline**





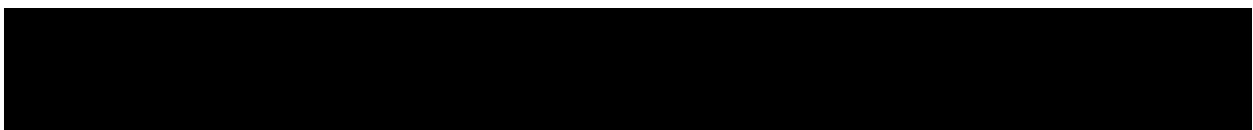


**A6.12 Zone of Influence**

All works shall be installed with due consideration to other services ensuring works being outside of the 'zone of influence'. If a service which is to be removed is currently within the zone of influence of other services, then the new service must be replaced outside the zone of influence regardless of the position of existing services.

**B7. EARTHING AND LIGHTNING PROTECTION SYSTEM**

**A7.1 General**



Design, supply, install and commission a new Overhead Earth Wire (OHEW).



Install a new overhead earth wire above the HV conductor on all 33kV overhead powerlines unless minimum clearances to other overhead services are violated. In which case propose an alternative solution.

The OHEW shall:

- be an OPGW,
- include minimum 60 fibre in the centre of the earth wire,
- be rated minimum Earth fault as determined by the earthing report
- supported by specifically designed mounting brackets (utilising existing poles where possible).
- provide minimum 60 degrees of protection, an additional bracket and/or reconfiguration of pole assembly maybe required to be undertaken to achieve this.
- Provide a maximum Line to Ground impedance of 10ohms/km. Where the OHEW is installed within 2km of a switchyard or ground based substation the Line to Ground impedance shall not exceed 5ohm/km. Calculate impedance using dry summer conditions.
- be installed so that tapings/links can be removed to isolate each section every 2km to enable testing.
- have a 20m coil of spare cable every 1km. Terminate the fibre optic cables in a specifically designed stainless steel enclosure, minimum IP56. Mount the OPGW on a specifically design "H" bracket. The centre of the bracket shall be mounted 2.4m from the ground. Do not install the coil shall on a pole that has other switchgear installed on it.

Where feeders are run in parallel and where poles are in close proximity, do not connect the OHEWs together.

The droppers shall be minimum 70mm<sup>2</sup> and insulated for the initial 1m penetration into the soil and mechanically protected up to 2.4m up the pole.

Either driven electrodes, minimum 5.4m 15mm diameter copper, or core drill direct buried copper conductor, backfilled with bentonite, to an equivalent electrode depth are acceptable.

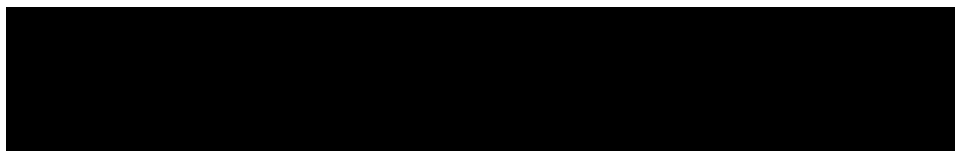
Extend the fibre optic cores and terminat them in the communications cabinets on a FBOT located in switchrooms at: Masonite Rd Switchyard, Schroeder WPS, Tomago WPS, Grahamstown WTP, Campvale WPS, and Balickera WPS. At the borestation transformer pole, have a coil of 20m of spare cable. The fibre optic cables shall be capped and shall be mounted on a specifically design "H" bracket. The centre of the bracket shall be mounted 2.4m from the ground.

## **A7.2 Connection to Earth grids**

Where an OHEW is to be installed:

- Design and reconfigure existing substation segregated earth grids to a combined configuration.
- As part of the detail design report, outline in detail the process of:
  - changing the configuration of each segregated earth grid to combined earth grid,
  - connection of each substation / switchyard earth grid to the OHEW, and
  - what modifications need to be made to the protection systems (if any) to manage the changes in fault levels during this process.

Segregated Earth grids have been installed at:





### **A7.3 Electrical Design and Analysis**

The Electrical Design and Analysis is mainly applicable to the design of overhead earth wire and protection system. Detail Design must be fit to allow construction and operation of the Works in accordance with the design requirements.

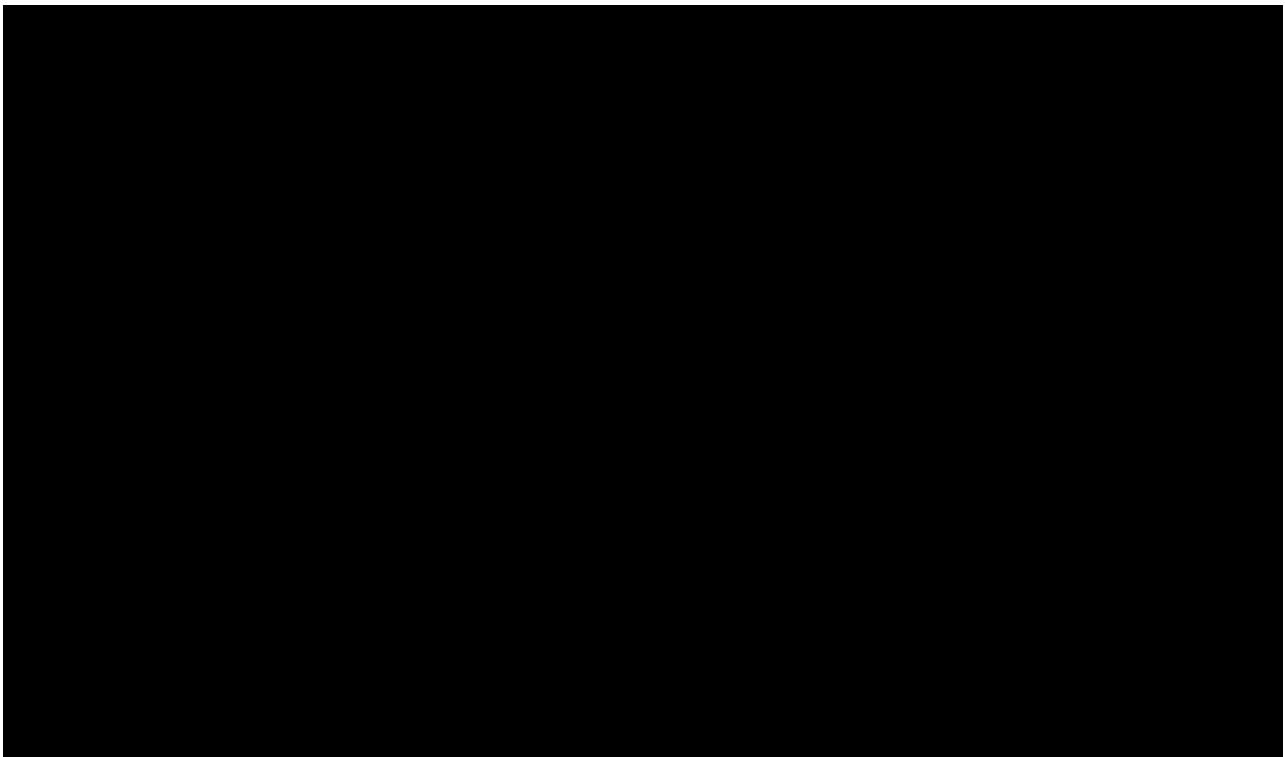
Submit for review all electrical designs and an Electrical Design Report (this is to form part of the Detail Design Report). The electrical design shall include, but not be limited to, the following:

- (a) All Detail Design considerations;
- (b) All design calculations;
- (c) Requirements for interfacing with the existing telemetry/SCADA system.

Where electrical modifications are required, incorporate the following into the Detail Design Drawings:

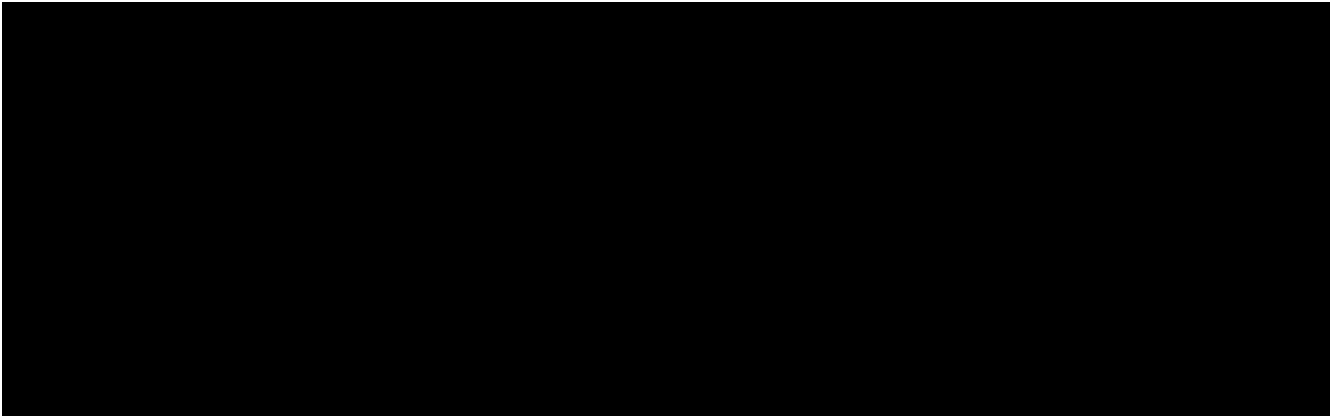
- (a) Symbols;
- (b) Legends for different equipment types;
- (c) Single Line Diagrams (HV & LV);
- (d) Cable Schedules;
- (e) Termination Drawings and Schedules;
- (f) Earthing Arrangements;
- (g) PLC Automation Network Diagram;
- (h) Telemetry;

### **B8. MONITORING AND SCADA**





## **A8.2 Monitoring ABS Position at Tomago Distribution**



## **A8.3 Tomago Power Distribution SCADA page**



## **B9. SOFTWARE**

Supply all licensed and unlicensed programming and diagnostic software and programming leads used to set-up and monitor all configurable devices. For programming and diagnostics purposes, supply leads for each site. Any licences shall be for up to 20 users.

## **B10. EARTHING DESIGN**

Develop Detailed Earthing System Design for the entire networking including each substation and switchyard at Tomago and Tomaree.

The earthing system design shall be prepared by a person who is qualified and experienced at preparing earthing designs.

The earthing system design shall incorporate the following (but not limited to):

- Confirmation of existing earthing and earth grid configuration
  - Testing of onsite earthing grid performance at each substation, pole top transformer and switchyard
  - incorporate proposed changes to the network including: OHEW and new cables and lightning protection
-



- Identify the changes at substations and switchyards to step and touch potentials, fault currents and EPR during construction, which allow for new overhead power lines, OHEW, connections to earth grids and configuration changes to earth grids and assess its impacts in accordance with EG-0 and EG-1.
- Allow for all network switching configurations

Ensure that the earthing system performs adequately to eliminate any touch and voltage potential.

Consideration must be given to underground pipes, soil resistivity and metallic fencing in the vicinity of powerlines.

Undertake on site testing to verify the performance of the earthing systems.

### **B11. PROTECTION REPORT**

Develop Detailed Protection System Report and submit, with the detail design report, a new protection report for the Tomago distribution network and Tomaree distribution networks. The protection report shall:

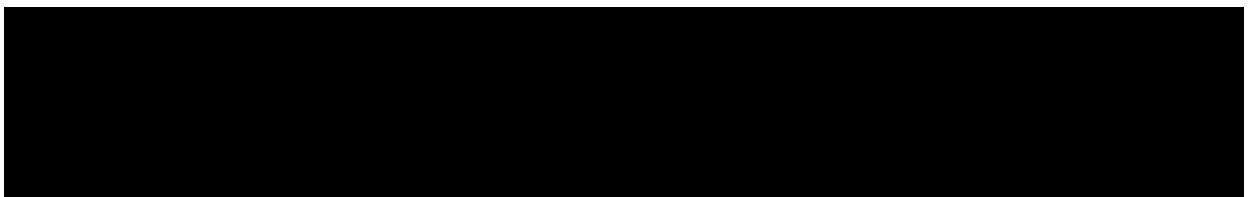
- confirm existing protection configuration,
- incorporate changes to the network, including new CB59BA, OHEW and cables so that discrimination is achieved.
- Incorporate the earthing report findings
- state required changes to protection during construction to allow for new overhead power lines and OHEW connected to earth grids and configuration changes to earth grids.
- Allow for all network switching configurations

### **B12. POWERLINE NETWORK MODELLING AND EARTHING SYSTEM DESIGN**

The Principal has a network models of the existing Tomago 33kV Network using the powerline network modelling software SKM Power Tools for Windows (PTW). These models will be issued to the Contractor by the Principal

- Use the existing SKM Power Tools For Windows (PTW) files to prepare network protection models, confirmation of conductor size, powerline route lengths, fault levels, confirmation of loadflow and the earthing system design
- Check and update the models to confirm they accurately represent the existing network in terms of powerline route lengths, fault levels and protection settings.
- Submit a preliminary network modelling report to the Principal at the end of the review of the existing model. The Contractor shall consider the Principals comments and submit a revised version of the model along with the report for review.
- Revise the SKM PTW network models with consideration of the Principals comments.
- Issue the final network modelling report to the Principal and highlight the changes that were made to the preliminary network modelling.
- Then model the proposed design of the distribution network, complete with new circuit breaker CB59BA, aerial cables and OHEW. The model shall incorporate the earthing and protection reports

### **B13. ABS'S COMPLETE WITH POLES**








## **B14. CIRCUIT BREAKER AT 59BA**

### **A14.1 General**



### **A14.2 Circuit Breaker monitoring**

Integrate all Trips, Alarms, Power Monitoring data, Circuit Breaker status, fault and trip log data for the circuit breaker and controller into the PLC/SCADA system. Monitoring shall be via the communications port.



---



## **B16. DESIGN**

### **A16.1 General**

With respect to the overhead earth wire, network protection system, earthing and lightning protection system and some power poles where a standard construction drawing is not available, prepare a detail design and drawing. The final Detailed Design drawings shall be “Issued For Construction” specifying detailed information to enable construction and commissioning the electrical system.

Design the Works, including modifications to but not limited to switchboards and controls, telemetry, protection relays, indoor switchgear, outdoor switchgear, auxiliary transformers, power transformers, current transformers, voltage transformers, kiosk transformers, substations, air break switches, circuit breakers, PLC panels and code, SCADA, earthing, terminations, earth grid, lightning protection, battery supplies / chargers, electrical cables, aerial line, power poles, switchyards, decommissioning / demolition plans, site surveys, civil works, electrical distribution lines, stormwater management, landscaping and access etc. Designs shall comply with the Contract and be consistent with best practice and current standards.

In addition to conforming to the Contract Specifications and standards, the key objectives of the Detail Design include but are not limited to the following:

- (a) OH&S risk mitigation, considering but not limited to the following:
    - i. Arc Flash Hazards
    - ii. Ease of operation and maintenance (including lifting and removal of equipment)
    - iii. Safe access / egress
    - iv. Height access Hazards
    - v. Fire and Explosion Hazards
  - (b) Environmental risk mitigation, considering but not limited to the following:
-



- i. Contamination due to Oils
  - ii. Hazardous substances, such as Asbestos
  - iii. Fire Hazards
  - iv. Heritage values
  - v. Social impacts
- (c) Operability & Maintainability, considering but not limited to the following:
- i. Upgrades must be fit for purpose
  - ii. Reliable operation and control across the full range of operating conditions
  - iii. Minimising interruptions to the Principal's operations
  - iv. Minimising the number of assets without compromising redundancy
  - v. Known and trusted technology
  - vi. Spares and service availability
  - vii. Predictable life cycles, which can span beyond twenty (20) years
  - viii. Robustness in design & construction
- (d) Compliance to relevant standards

The Contractor is responsible for suitability for purpose of the Works. The Detail Design must ensure that the Works will perform as required and are suitable for the purposes expressly stated or which can reasonably be inferred from information provided by the Principal. The Principal is relying on the Contractor's knowledge, skill and judgment in carrying out this responsibility.

The design output from this Contract shall include, but not be limited to:

- Detailed Design Reports such as Network protection studies, lightning protection, earthing system design report, network span calculations and any other report as required;
- Sufficient Detailed Design documentation including detailed drawings for overhead power and earthing cable, Design Drawings for poles which require special design, installation specification for successful construction and commissioning of the Works;

## **A16.2 Design Commencement Meeting**

### **A16.2.1 General**

A Design Commencement Meeting (including a site inspection) shall be held within 15 working days following the issue of a batch of work.. The purpose of the commencement meeting is to discuss the proposed design work under the Contract and for the Principal and the Contractor's design personnel or consultant to provide documentation as required.

At the Design Commencement Meeting, provide the Principals Representative with a program in Gantt chart format identifying the proposed duration for each task of the Detail Design development as well as key milestones. The Gantt chart shall generally follow the program submitted by the

---



Contractor in its tender for the work and shall identify the timing of submission of all draft documents for review. The program shall also show the estimated value of work to be completed for each month.

#### **A16.2.2 Documentation to be provided at design commencement meeting**

Documentation provided to the Contractor by the Principal at the design commencement meeting shall include the following:

- (a) Protection settings for the Network Design
- (b) Previous earthing study reports
- (c) previous lightning protection reports
- (d) previous Geotech reports
- (e) Previous condition assessment reports
- (f) Existing SKM PTW files

All supplied documentation shall remain the property of the Principal and be returned within 2 weeks of the date of Completion.

#### **A16.2.3 Detail Design Drawings**

Prepare Detail Design Drawings including, but not necessarily limited to, the following drawings in A3 size:

- (a) Index sheet showing drawing numbers and titles, standard drawings that are applicable as well as general construction information.
- (b) Locality plan.
- (c) Site plan.
- (d) Access Road plans and long sections where required
- (e) Detail route surveys for distribution line routes.
- (f) General arrangement plan.
- (g) Cable and pole schedules detailing the type and size of all cables installed.
- (h) Equipment list.
- (i) Parts list.
- (j) Any other drawings necessary to fully detail the construction works required.

Provide all information and details required for construction of the proposed Works.

In addition, meet the following requirements:

- (a) Drawings shall be suitable for the construction of the new Works.
  - (b) All details on the drawings shall be readable.
  - (c) Drawing numbers will be issued by the Principal upon request prior to commencement of Detail Design. Drawing numbers shall be used on all drawings. The drawings shall show equipment numbers, which will be issued during the draft review stage.
  - (d) The location of all new structures including distribution lines shall be shown. The location of existing structures shall also be shown where they may impact on the construction.
  - (e) The Principal's Standard Technical Specifications are available from the
-



Principal's website at [www.hunterwater.com.au](http://www.hunterwater.com.au). Where these standards are to be used, it is necessary to ensure these standards are applicable and relevant.

#### **A16.2.4 Drawing Standards**

Hunter Water Drawing Standards are detailed in STS903 – Work As Constructed Information, STS 904 – Preparation of Electrical Engineering Drawings, and STS911 – Preparation of Civil, & Structural Engineering Drawings. Updates to existing drawings shall comply with these standards.

All drawings provided to the Hunter Water's Representative are to include a Drawing List and Locality Plan. Supply the drawings with relevant Hunter Water drawing number references in digital and hard-copy format.

Issue final detail design drawings as "Final Issue – For Construction". Detail design drawings shall not include the word "Tender".

Provide on CD a single individual electronic AutoCAD drawing file for each drawing. Each individual file shall contain all necessary data to use and view the file and not be dependent on other files such as reference files or standard borders.

CDs containing final drawings are to be secured such that further data cannot be added to them.

A Technical Information Package is available on CD for distribution. The Technical Information Package contains:

- 1) Drawing standards.
- 2) Drawing Summary Sheet to record the details of the drawings for the Drawing Index.
- 3) Standard Border for A1, A2, A3 and B1 drawing sheets.

#### **A16.2.5 Detail Design Considerations**

The Detail Design shall consider and address, but not be limited to, the following:

- (a) Constructability;
  - (b) Maintainability;
  - (c) Consultation with authorities, stakeholders and affected landowners;
  - (d) Available easements;
  - (e) Construction techniques;
  - (f) Safety aspects;
  - (g) Impact on the public;
  - (h) Restoration requirements;
  - (i) Design constraints (e.g. wetlands, subsurface conditions) and design guidelines for the subject Works;
  - (j) Telemetry requirements;
  - (k) Voltage drops through distribution lines;
  - (l) Impact of upgrade works on existing infrastructure;
  - (m) Site security;
  - (n) Assessment to ensure that the Works and construction will not conflict with existing services (including required distances from power supplies).
  - (o) Decommissioning. Where decommissioning works are proposed, liaise with the Principal to determine requirements for return of redundant equipment such as
-



motors.

Include all outcomes and correspondence regarding the above issues in the Detail Design Report.

#### **A16.2.6 Detail Design Report**

Prepare a Detail Design Report detailing the results and recommendations of the detail design.

The Detail Design Report shall incorporate:

- (a) Electrical and civil design reports;
- (b) Copies of all formal approvals obtained during Detail Design;
- (c) Any other relevant documents or information that will provide a complete record for the Principal of the Detail Design process.

A suggested Table of Contents for the Detail Design Report is listed below:

### **1 Introduction**

### **2 General**

The Detail Design for the high voltage upgrades comprised the following output requirements:

- Detail Design Drawings
  - Specifications
  - Geotechnical investigation reports
  - Detailed survey of the sites
  - Documentation
- (Include drawing number references, geotechnical investigation report references.)

### **3 Electrical Design**

#### **3.1 General Reference to Electrical Calculations**

#### **3.2 Each Site**

##### **3.2.1 General**

##### **3.2.2 Maximum Demand**

##### **3.2.3 Cable Sizes**

##### **3.2.4 Fault Levels**

##### **3.2.5 Power studies, load flow studies and other associated studies**

### **4 Civil and Structural Design**

#### **4.1 General**

#### **4.2 Design Aids**

#### **4.3 Pole embedment and strength design, pole strength rating**

#### **4.4 earthing works**

Appendix A Correspondence

Appendix B Electrical Design Calculations

Appendix C Civil and Structural Design Calculations

---



## Appendix D Pole strength and design calculations

Submit the draft Detail Design Report with the draft Detail Design Drawings and specifications as a complete package.

### A16.2.7 Required Documentation

In addition to requirements stated elsewhere and for each of the design, submit to the Principal the following:

Report	Number of Copies
Geotechnical Report	<p>Draft - Provide 1 electronic copy of the report including all plans and borelogs on CD.</p> <p>Final - Provide 1 electronic copy of the report including all plans and borelogs on CD.</p>
Detail Design Drawings, Report and Specification	<p><b>Draft</b> - Provide 1 electronic copy of the draft Detail Design report including all reports and Specifications on CD.</p> <p>2 identical CDs containing electronic copies of drawing files. Each CD shall contain the following files for all drawings:</p> <ul style="list-style-type: none"> <li>• AutoCAD drawing files.</li> <li>• .pdf drawing files. All civil drawings shall be contained within a single .pdf file.</li> </ul> <p>1 CD containing the Operation and Maintenance Manual package.</p> <p><b>Final</b> – 2 bound hard copies, 1 unbound hard copy and 1 electronic copy on CD. Provide 2 full size copies of all final plans and long sections where required for readability.</p> <p>2 identical CDs containing electronic copies of drawing files. Each CD shall contain the following files for all drawings:</p> <ul style="list-style-type: none"> <li>• AutoCAD drawing files.</li> <li>• .pdf drawing files. All civil drawings shall be contained within a single .pdf file.</li> </ul> <p>1 CD containing the Operation and Maintenance Manual package.</p>



At the completion of the design, submit to the Principal a copy of all documents, reports, photographs, drawings, figures, spreadsheets etc produced as part of the design in digital format on CD.

### **A16.2.8 Project Specific Design Plan**

Prepare a project specific Design Plan.

At the design commencement meeting, submit a Design Plan that is project specific and includes:

- (a) An organisation chart showing key personnel and design verification personnel;
- (b) Design inputs;
- (c) Design output documents;
- (d) A verification procedure and checklists to assure that all design requirements and brief requirements (including consultation) have been incorporated in the design and all drawings from all disciplines are fully co-ordinated;
- (e) A copy of the detailed risk assessment, including consideration of OHS, environmental and operational risks;
- (f) An index of the Contractor's design personnel or consultant's quality procedures and proposed inspection and test plans and associated checklists.

Supporting information identified in the initial plan is to be submitted progressively during the design and before beginning work on the relevant part of the design. For each design submission, submit an updated copy of the Design Plan with the draft Detail Design, and a completed copy of the Design Plan with the final Detail Design.

Document transmittal sheets are to be supplied with all Detail Design Documentation.

### **A16.2.9 Review of Documentation**

All draft reports, drawings, specifications and documentation submitted by the Contractor shall be to a standard that the Contractor considers to be a final document and is suitable for use. Review draft documentation prior to submission to ensure that documentation is free from errors, omissions and discrepancies as far as possible.

A measure of the completeness of the draft Detail Design documentation is that the work specified in the documents is professionally designed, specific to the job, free of discrepancies, and constructible.

Complete and submit with the design report copy of any design review checklists signed by the Contractor's design personnel or consultant and the design reviewer.

Should the submitted draft documentation not be considered to be of acceptable standard, the Principal may return the documentation to the Contractor for correction prior to undertaking a full review. The review period will be deemed to commence upon receipt of the corrected documentation. The Contractor shall not be entitled to any claim for additional time or costs should this occur.

### **A16.2.10 Response to Review Comments**

Respond in writing to each individual review comment provided by the Principal (electronic responses are required).

Address all comments on the draft Detail Design Report, Drawings and documentation and resubmit the final Detail Design Report, Drawings and documentation within 2 weeks of receiving the comments.

---



**A16.2.11 Specifications**

Review the specifications provided by the Principal. Determine the extent of additional specifications required for the project. Complete the additional specifications required. Notify the Principal immediately of any changes required to the specifications provided by the Principal.

**B17. OPERATION AND MAINTENANCE INFORMATION****A17.1 General**

Prepare draft Operation and Maintenance Information and submit one hard copy and one digital copy on CD/DVD for review at least four weeks prior to Pre commissioning.

The Superintendent may provide comments within three weeks of having received the draft manuals.

Make any necessary amendments and submit for approval one hard copy and one digital copy on CD/DVD of the final Operation and Maintenance Information at least one (1) week prior to commencing the Commissioning.

Submit one hard copy and two digital copies on CD/DVD of the final approved O&M Information one (1) week prior to Practical Completion. Submission of final approved O&M Information is a prerequisite for Practical Completion.

The Operation and Maintenance Information shall include:

- (e) contents page;
- (f) description of the work under the contract;
- (g) operational requirements, settings and constraints for the work (refer below);
- (h) listing of installed components, including pumps, motors, valves, flowmeters;
- (i) draft Maintenance Schedules for all components of the work;
- (j) copies of test certificates for components of the work;
- (k) copies of performance curves or capability statements for components (particularly pump curves);
- (l) proposed Spare Parts list;
- (m) Work-As-Constructed drawings (refer to clause B18);
- (n) supplier documentation and warranties; and
- (o) Programmable Logic Controller (PLC) information (refer below).

**A17.2 Format**

Hard copy of the Manuals shall be bound in A4-size four-ring hard cover folders and the electronic format (Microsoft Word) in CD.

Ensure all documentation and information is in English.

**A17.3 Operational Requirements**

This section of the manual(s) shall include initial values and working range of programmable settings. These may include timer/level/current settings used in PLC programs or dosing system requirements or valve positions.

**A17.4 PLC Information**

Submit in electronic form on a CD:

---



- (p) operational version of PLC programs associated with the contract;
- (q) complete Labels file for any PLC programs;
- (r) complete Register file for any PLC programs; and
- (s) functional specification for the operational version of the PLC program in Microsoft Word format, expressed such that it is easily understood and does not rely on technical jargon.

## **B18. WORK-AS-CONSTRUCTED INFORMATION**

Prepare WAC Information in accordance with Hunter Water's Standard Technical Specification STS903 Work-As-Constructed (WAC) Information, and/or STS911 Preparation of Civil and Structural Engineering Drawings, and/or STS904 Preparation of Electrical Engineering Drawings as applicable.

Prior to commencing work on site attend a meeting of up to two hours duration with the approved WAC subcontractor and Hunter Water at Hunter Water's head office at Newcastle West. The purpose of the meeting is to confirm the Contractor's and subcontractor's understanding of the requirements of the Contract relating to the preparation and submission of WAC Information.

The Principal will provide a full set of construction drawings in electronic version on CD.

Prepare WAC Information progressively with the Work under the Contract.

Submit with each payment claim a WAC Progress Report comprising a table prepared and certified by the approved subcontractor, showing:

- design and actual levels of all pipelines and fittings,
- design and actual chainages of all pipelines and fittings,
- design and actual coordinates of all pipelines and fittings,
- design and actual grades of all pipelines,
- tolerances for the above (where specified).

Notwithstanding that portion/s of the WAC Information may have been previously submitted, submit for review two hard copies and one electronic copy (CD) of the complete WAC Information for the entire contract at least four weeks prior to Practical Completion.

The Superintendent may provide comments within 3 weeks of the date of receipt of the submission.

Make amendments if necessary and submit one hard copy, one electronic copy in CAD format (on disk), and one electronic copy in 'pdf' format (on disk) of the final WAC Information which complies with the Contract.

Submission of the complying WAC Information for the entire contract is a prerequisite for Practical Completion.

## **B19. GEOTECHNICAL INVESTIGATIONS**

### **A19.1 General**

Nominal geotechnical codes for the areas of pole modifications can be sourced by the contractor from the relevant Soil Landscape Maps for each area, accessible from the NSW Office of Environment and Heritage's website. These soil codes are recognised by the Ausgrid Pole Embedment Calculator

---



(NS220), publically available on Ausgrid's website and may be used for preliminary pole embedment design evaluation.

The contractor is responsible to confirm the geotechnical parameters used in the detailed design stage to verify pole embedment depths suit the site conditions for all poles, using site-based borehole testing and geotechnical analysis. Tenderers should allow for up to 5 geotechnical boreholes drilled to a nominal depth of a nominal 4 meters per feeder section. Actual borehole depths used for detailed design need to cover the depth of the embedment required.

Where geotechnical investigation work under the Contract in roadways and reserves are required, liaise with Council or the RMS as appropriate to obtain prior approval and identify relevant requirements. All authority fees will be paid by the Principal.

Prior to geotechnical consultants entering private property and land not part of road reserves, consent must be obtained from property owners in accordance with the access clauses outlined in this specification (Notification of Entry).

The following requirements are to be satisfied when excavating test pits, drilling boreholes or hand auguring:

- (a) Keep all open excavations or boreholes safe at all times until surface restoration is satisfactorily completed;
- (b) Undertake due care when carrying out investigations near existing services.

### **A19.2 Other testing**

Include any other testing such as standard penetration and chemical tests considered relevant and necessary to the design and/or construction of the Works.

Design of additional foundation supports or alternative methods of support may be required in areas of poor ground conditions to ensure the integrity of structures as well as any existing adjacent structures. In this case other geotechnical investigations may be required and shall be sufficient to identify ground conditions to the full depth of supports. Areas of poor ground conditions shall be clearly identified on the Detail Design drawings and relevant calculations and assumptions shall be incorporated in the Detailed Design report.

### **A19.3 Geotechnical Report**

Provide a geotechnical report as a part of the Detailed Design documentation. The report shall include all results of all relevant geotechnical investigations and the geotechnical consultant's interpretation of these geotechnical investigations.

Mark on the Detail Design drawings the location (including surface level and co-ordinates) of all boreholes and test pits

## **B20. MATERIALS**

### **A20.1 General**

Obtain all materials necessary for construction of the Works. Comply with all recommendations of the manufacturers regarding the storage and handling of the materials. Undertake all handling, transport and storage such that no damage occurs to the materials.

### **A20.2 Poles**

To undertake these works, the following equipment will be required:

---



### **A20.2.1 Poles**

Refer to the schedules in appendix for pole materials used.

### **A20.2.2 Pole Assemblies**

Refer to the schedules in appendix for pole assembly materials used.

### **A20.2.3 Conductors**

Refer to the schedules in appendix for conductor materials used.

### **A20.2.1 Earthing**

Refer to the schedules in appendix for pole assembly materials used.

## **A20.3 On-site Materials Storage**

Only store sufficient materials on site as necessary to allow timely and efficient progress of the work. Locate stockpiles of excavated or imported material where they cause no interference to the public, drainage routes or vehicular or pedestrian traffic. Clear lines of sight for drivers must not be obstructed. Do not stack materials against structures, fences, trees or other property improvements. Leave a clear path at least 600 mm wide between the edge of any excavation and the inner toe of any stockpile or spoil banks.

## **B21. EXISTING SERVICES**

### **A21.1 Services Location Plan**

Services are to be located adequately for the completion of the work. Undertake a “desktop” identification of services and requesting Dial Before You Dig information relevant to individual Work Package.

Prepare a Services Location Plan based on information obtained in the desktop location of services. The Services Location Plan is include all services that present risk to the location of the works under the Contract. The plan is to pay particular attention to the construction risk and related issues.

### **A21.2 Field Location of Services**

Engage and manage a field locator for the field location (alignment and depth) of services based on the ‘Services Location Plan’.

Following completion of the field location of services, advice the Principal should it appear that a significant powerline alignment change is required.

## **B22. CLEARING**

Do not destroy, remove or clear vegetation or surface improvements to an extent greater than necessary for the execution of works. Keep clearing along any cable routes to a maximum width of 4 metres.

Give notice and where necessary, obtain approval of the relevant authority prior to removal of any trees.

Take any steps necessary to prevent damage to trees that are not to be removed.

Dispose of all rubbish and surplus material within 24 hours of clearing.

Stockpile topsoil separate from other excavated material and use it to make good the surface after backfilling.

---



Clearing of all groundcover and vegetation along perimeter of the line shall be in accordance with the REF.

Implement erosion and sedimentation control works prior to commencement of clearing.

Retain aquatic habitat features such as in-stream woody snags. Relocate all woody snags that are within the corridor proposed for trenching to adjacent areas upstream or downstream.

## **B23. EXCAVATION**

### **A23.1 Safety**

Do not commence any excavation until all materials necessary to make the excavation safe are on Site and available for use. This includes any necessary fencing and barriers as well as excavation support systems.

### **A23.2 Limits of Excavation**

Keep the extent of excavation to the minimum possible to allow efficient construction of the Works. Keep cable conduit trench widths within the maximum widths recommended by the cable conduit manufacturer.

Keep the sides of excavations for cable routes vertical to at least 150 mm above the conduits.

Ensure that the minimum cover requirements will be satisfied following any earthworks which may occur in the area of the cable conduits and services to the switchrooms. Preferably lay services after formation of surfaces to finished levels. If minimum cover requirements cannot be achieved submit a proposal to overcome the problem.

### **A23.3 Improved Surfaces**

Where excavation is required under improved surfaces such as pavements, driveways and kerb and gutter, use tunnelling or boring where the surfaces cannot be satisfactorily reproduced and under existing concrete footway areas and concrete driveways. Ensure backfilling is to a standard to fully support the surface and any likely applied load.

If open excavations are used in improved surfaces, keep the excavation width to the minimum allowed. Saw cut neat straight lines at the outer limits of the excavation through bitumen, asphalt and concrete. Remove pavers, blocks or brick pavements by hand, clean them and set them aside for later replacement.

### **A23.4 Explosives**

Use of explosives is not permitted.

### **A23.5 Support of Excavations**

Adequately support all excavations as the work proceeds to meet the requirements of the WorkCover Authority of NSW. Ensure that adjacent structures and services are not subject to disturbance by the excavation support system.

When removing, raising or withdrawing supports, exercise every precaution necessary to prevent slips or falls and ensure that no damage, disturbance or displacement occurs to the installations. Backfill simultaneously with the raising or withdrawal of supports. Ensure that compaction of cable conduit embedment and backfill material occurs below such excavation support and against native ground.

When directed or specified, leave the excavation support system in place as permanent support. Cut off the support system at a depth below ground surface that will satisfy the structural requirements of the site.

---



**A23.6 Drainage and Dewatering**

Keep all excavations free of water. Provide, maintain and operate intercepting works to prevent surface water from entering the excavations; and all equipment necessary for dewatering the excavations and keeping the Works free from water.

Lowering of the water table by well points or other external dewatering methods may only be used if no damage is likely to be caused to adjacent structures and services.

Ensure that all downstream works that are under construction, completed or in use are protected at all times against the effects of any drainage which is discharged or likely to be discharged from the work.

**A23.7 Foundations and Foundation Stabilisation**

As part of the detail design, prepare a specification for the Works required to produce a stable foundation for all structures (including cable trenches) where the bottom of an excavation is soft or considered to provide an unacceptable foundation. The specification is to include, where applicable:

- Use of geotextile surround
- Extra depth excavation
- Grading and use of ballast
- Engineered fill
- Piles
- Dewatering
- Compaction methods
- Compaction and Density Testing

Submit the specification as part of the design package.

Give 7 days notice prior to commencing any foundation stabilisation.

**A23.8 Extra Depth Excavation**

If extra excavation is required to reach a firm foundation or if excavation has extended deeper than necessary to meet the design requirements, place and compact to the required level with the engineered fill material complying with the specification developed during detail design.

**A23.9 Surplus Excavated Material**

Promptly remove and dispose of excavated material which is not required for reuse. Surplus material is the property of the controlling authority or owner of the excavation site. Do not dispose of the surplus material without the prior written consent of the dump site's owner, owner's agent, lessee or controlling authority.

**B24. COMMISSIONING OF OVERHEAD POWERLINE UPGRADES****A24.1 Requirements**

All materials, equipment, installation and workmanship included in the Works covered by this Specification shall be tested and/or inspected to prove compliance with the Specification requirements.

Tests and inspections of all overhead powerline upgrades shall comply with current relevant Australian Standards and guidelines. Ausgrid Network Standard testing and inspection requirements relevant to the workscope shall be considered to be normative.

---



Testing shall include pre-commissioning, field testing and performance testing of each section of the whole installation, as a precondition to completion of that section of the Works.

Pre-commissioning and Commissioning will be undertaken in stages to enable the network to remain functional for the greatest amount of time possible during the project. Submit a commissioning plan at least 4 weeks prior to commissioning and/or pre-commissioning activities commence.

#### **A24.2 Inspection and Test Plan**

The contractor shall produce an Overhead Powerline Upgrade installation Inspection and Test Plan (ITP) for each powerline section at the start of the respective project section, to follow throughout the installation works.

The ITP should contain completed copies of all relevant manufacturers test documentation and certificates plus the original site installation work check sheets. The format of the ITP and site installation work checksheets shall be submitted to The Principal for approval 2 weeks prior to site works commencing. the ITPs shall ensure compliance with the relevant Australian and the Principals standards as well as with normative Ausgrid standards deemed by The Principal to be applicable.

At the completion of the key stages of site work, arrange for the works to be inspected and tested and witnessed as detailed below. The contractor is responsible for completing the commissioning of the overhead powerline upgrade installation and documenting including making the necessary coordination arrangements for other parties required such as the supply authority (Ausgrid) and The Principal witness and SCADA designers.

Notify the Principal a minimum of 10 working days prior to any site tests being carried out. The Principal may elect to be present at any of the tests however, if the Principal does not elect to be present, proceed and carry out all tests and inspections.

Submit, within 3 days of completion of any site checks and tests, the relevant check sheets and reports of all tests and inspections.

Tests shall include but not be limited to:

- a. Insulation resistance of upgraded sections of the powerline prior to reconnection  
Resistance shall be greater than 1000 M ohm, measured with a 1000V insulation tester.
  - b. Powerline transpose or phase change (cross-over) visual verification prior to reconnection.
  - c. Earthing resistance tests (where required).
  - d. Earthing step and touch potential tests (where required).
  - e. Powerline protection system verification tests (where required).
  - f. Switchgear functional tests
  - g. Switchgear ductor testing (across closed contacts)
  - h. Switchgear SCADA position detection and status system operational tests
  - i. General inspections, photographing and marking up of drawings ("As Built") of the completed installation for compliance with the specification and standards.
-



#### **A24.3 Pre-commissioning of power lines**

Pre-commissioning is the preparation of plant or equipment so that it is in a safe and proper condition and ready for commissioning and operation. It includes all aspects of plant operation such as safety, electrical, mechanical and instrumentation.

The contractor shall create pre-commissioning checklists and make all necessary arrangements prior to commencing testing and issue ITP's for witness/hold points for The Principal attendance and review.

Pre-commissioning shall be conducted in a logical sequence in accordance with the Pre-Commissioning Checklist. Pre-commissioning tests shall be carried out under the Supervision and to the satisfaction of The Principal and shall be recorded on the appropriate Pre-commissioning Checklist.

Prior to Commissioning submit 1 signed copy of each completed Pre-commissioning Checklist countersigned by the Principals Representative who witnessed the pre-commissioning.

#### **A24.4 Commissioning of power lines**

Commissioning is the running of the plant and equipment to ensure normal powerline operation, carrying out any necessary testing and adjustments until it is ready and suitable for use under service conditions.

The Principal will participate in the tests and may elect to record an independent set of test results for evaluation. The Principal may appoint independent parties to witness and / or verify aspects of the commissioning. The Principal may invite Ausgrid to witness the commissioning as the statutory authority responsible to ensure compliance of HV and LV installations in the Hunter Valley.

The Principal shall require a period of 10 working days notice to undertake testing.

Commissioning shall be conducted in a logical sequence in accordance with the Commissioning Checklist Throughout commissioning the Contractor shall be responsible for the test program.

Provide continuous supervision by personnel experienced in the operation of the equipment and have qualified personnel in attendance to carry out all necessary adjustments and/or remedial work during the commissioning tests.

Submit 1 signed copy of each completed Commissioning Checklist countersigned by the Principal's Representative who witnessed the test. Provision of completed Commissioning Checklists is a prerequisite of Completion.

#### **B25. CERTIFICATE OF COMPLETION - ELECTRICAL WORK**

Provide to the Principal with manufacturer's test reports, together with the signed "Certificate of Completion - Electrical Work" (CoCEW) covering the installation work. Submit signed CoCEW's to Ausgrid when requested to do so by the Principal.

Submit the Customer Copy of all signed documents.

#### **B26. PERFORMANCE TESTING PERIOD**

The works must operate reliably and continuously over a performance test period of two weeks. Notify the Principal 1 week in advance the commencement date of Performance Testing Period. During the test period the Works shall:

- operate in all automatic modes whenever required by the plant operation
-



- have no equipment failures requiring repairs or manual restarting of equipment
- have no control system failures or loss of availability
- comply with the specification requirements or performance guarantees.

The performance test period shall restart if the above requirements are not achieved or any other significant defects affecting normal operation occur.

Completion of commissioning including the performance test period is a pre-requisite of Completion.

When complete, submit a report to the Principals Representative on satisfactory completion of commissioning. Include all records to confirm compliance of the process and equipment with the requirements of the Contract. Records shall include actual measurements etc. compared with the Contract requirements, operating flowrates, power consumption and process settings/setpoints used throughout the 14 consecutive days of operation.

Include in the commissioning report a summary of operator training delivered, verifying the workplace skills that have been provided to the trainees.

Satisfactory commissioning and the submission of the report and relevant quality records is a requirement for Completion.

## **B27. DISPOSAL OF REDUNDANT MATERIAL AND EQUIPMENT**

Dispose of all materials and equipment which is made redundant as a part of the works under this contract.

Remove from site and dispose of at a licenced facility all materials and equipment made redundant (except where this is not a requirement as stated elsewhere within this document) as part of this upgrade. Pay all fees and charges and submit documentary evidence of the removal and disposal.

The existing electrical equipment to be made redundant may contain asbestos and/or PCB's. Refer to the Environmental Management section in the General Specification for contamination management requirements.

## **B28. ACCESS ROADS**

### **A28.1 Condition Assessment**

Assess the condition of the existing access roads to each pole from the main access track to determine whether the access road in its existing condition is suitable for the proposed construction and maintenance traffic loads.

Notify the Principal of access roads that require upgrading and/or relocation. Include in the notification a description of the work proposed.

Within 5 days the Principal will advise whether it agrees with the proposed work or otherwise. If the Principal agrees, proceed with the proposed work.

### **A28.2 Design**

Access roads shall include longitudinal drainage as well as cross drainage (i.e. culverts and / or weirs). All drainage shall be designed to accommodate the 1 in 10 Average Recurrence Interval (ARI) rainfall event.

---



The minimum road width shall be 3.5m with a finished surface crossfall of 3%.

The maximum road shoulder slope is 3H:1V.

Descriptions of gravel road pavement types are listed below:

### **A28.3 Type A**

Type A access roads shall be at least 500mm thick made up of:

- 100mm thick base course (DGB20) compacted to a minimum of 98% modified compaction as per AS1289
- 100mm thick sub-base course (DCS20) compacted to a minimum of 93% modified compaction as per AS1289
- 300mm thick bridging layer (Class 1, 75mm free draining aggregate) compacted to a density index of 70% as per AS1289

The bridging layer shall be under laid by geofabric with a minimum tensile strength of 40 kN / m for the full width of the bridging layer. At the edge of the bridging layer, the geofabric shall wrap around the bridging layer and up the shoulder slope for a minimum length of 1m. Pin the geofabric as required to keep in place. Where possible, the geofabric shall be placed to capture sediment runoff from the road. Install and pin the geotextile in accordance with manufacturer's recommendations.

Where an existing road does not exist, compact the subgrade (typically sand) to a density index of 70% as per AS1289.

### **A28.4 Type B**

Type B access roads shall be at least 200mm thick made up of:

- 100mm thick base course (DGB20) compacted to a minimum of 98% modified compaction as per AS1289
- 100mm thick sub-base course (DCS20) compacted to a minimum of 93% modified compaction as per AS1289

The sub-base layer shall be under laid by geofabric with a minimum tensile strength of 40 kN / m for the full width of the sub-base course. At the edge of the sub-base layer, the geofabric shall wrap around the sub-base course and up the shoulder slope for a minimum length of 0.3m. Pin the geofabric as required to keep in place. Where possible, the geofabric shall be placed to capture sediment runoff from the road. Install and pin the geotextile in accordance with manufacturer's recommendations.

### **A28.5 Type C**

Type C access roads shall be at least 300mm thick, made up of:

- 300mm base course (Class 1, 75mm free draining aggregate)

The base course layer shall be fully enveloped by geofabric with a minimum tensile strength of 40 kN / m. Pin the geofabric as required to keep in place. Install and pin the geotextile in accordance with manufacturer's recommendations.

### **A28.6 Testing**

Undertake testing of fill compaction and/or density in accordance with AS 1289 Part E. Engage an approved body registered by NATA for the particular tests to be undertaken. Submit test results.

For Access Roads Type A and B, undertake 2 tests for each layer (base course, sub-base course, bridging layer and subgrade as applicable) for every 100 lineal meters of road constructed. If a test

---



fails, the relevant section of work shall be considered defective. Elect to either rectify the work or undertake 2 further tests for each layer in the defective section within 1 week of the failed test. Submit the proposed locations of the additional tests 1 week prior to undertaking those tests. If both additional tests pass, the section shall be accepted. If 1 or both of the additional tests fail, rectify the work.

Within 2 weeks of the completion of any rectification work, perform 2 more tests along the rectified work. If 1 or both tests fail, rectify the work and continue to retest each layer and rework until all test results are satisfactory.

## **B29. LANDSCAPING AND REHABILITATION**

Landscaping at the site is to be undertaken to the extent and in accordance with this Specification.

The rehabilitated site is to be left with an even grade and be free draining. Batter and finish is to be suitable for mowing by ride on mower, i.e (1:5 maximum slope) where possible.

All areas disturbed during construction, or where equipment has been removed (due to redundancy) shall be “reseeded”: All grass replacement shall be native to the environment and it is the Contractors responsibility to establish the grass.

Levels shall be evenly formed, with no ruts, hollows, or uneven spots. Levels are to be entirely suitable for ongoing maintenance requirements including mowing with a ride-on mower and free of surface debris in any direction, such as rocks larger than 30mm, pieces of timber, roots, rubbish, rubble and the like.

Do not leave small grassed islands between sealed areas as these can be difficult to maintain. Provide a concrete, paver or bitumen seal for such small areas.

## **B30. ACIDIC SOILS AND GROUND WATER**

### **A30.1 General**

Implement a plan to monitor for and treat acidic soils and ground water.

Training staff in the undertaking of soil and water monitoring, audits and inspections of all construction activities in known acidic soil areas.

### **A30.2 Acidic Soil Management**

Monitor stockpiled soils and the trenches for pH using a hand-held probe. Monitor the soil oriro to and following treatment (if required).

Take a sub-sample from a bulk soil sample representative of the full depth of the stockpile being tested for pH measurements. Mix the sub-sample (approximately 10g) with approximately 50mL of deionised or tap water to make a soil paste from which a pH reading can be taken. A minimum of five locations per 1000m<sup>3</sup> of stockpile shall be tested.

Mix the soil paste with approximately 5 mL of 30% hydrogen peroxide (pH adjusted to 4.5-5.5) and take a pHox reading to assess if unoxidised pyrite is still present.

If the average pH and average pHox of the soil is below pH 5.0, add hydrated lime to neutralise the soil. Calculate lime quantities as detailed in the ASSMAC Guidelines (1998).

If the average pH and average pHox of treated stockpile soils is below pH 5.0, undertake sPOCAS laboratory testing to determine how much additional lime will be required to neutralise the acidity to



below 18 mol H<sup>+</sup>/tonne soil (Note: the pH of treated soil should not exceed 8.5). A minimum of 5 bulk core soil sub-samples from every 1000m<sup>3</sup> of excavated soil shall be mixed together to form 1 bulk sample to be analysed for sPOCAS. If sPOCAS tests indicate that stockpiled soils have not been adequately neutralised, re-work stockpiles and add additional lime until the minimum required standard is met. This minimum standard is no greater than the action limit of 18 mol H<sup>+</sup>/tonne soil. Calculate lime quantities as detailed in the ASSMAC Guidelines (1998). Stockpile excavated soils as described above while undertaking sPOCAS analysis.

If the average soil pH exceeds 5.0 (but below pH 8.5), further sPOCAS testing is not required as the soil is considered neutralised and suitable for re-use / disposal.

Classify the treated soils that are not reused onsite in accordance with the NSW DECC Waste Classification Guidelines (NSW DECC, 2008) and the National Environment Protection (Assessment of Site Contamination) Measure (NEPC, 1999) to determine offsite disposal/reuse options.

If at any time during the construction works acidic soils are thought to have been encountered in areas thought not to be affected by acidic soils, undertake field pH and peroxide testing to assess the need for mitigation measures.

### A30.3 Acidified Water Management

All water discharged from the site shall comply with the relevant ANZECC guidelines. POEO target values for pH and EC will match the natural pH and any other parameters required of the receiving waters. Ensure that waters are not released until pH consistently remains within the specified targets.

Store water removed from excavations or stockpile areas in appropriate containment structure/basin(s). Monitor water for pH, electrical conductivity (EC) and turbidity using a hand-held probe. Monitor the water prior to and following treatment (if required). Monitor adjacent waterways where release of treated waters may occur at least on a weekly basis. Monitor the receiving water prior to release to establish background water quality conditions.

Where the pH of the collected water falls below the natural pH of the receiving waters, add hydrated lime. If EC exceeds the natural EC levels of the receiving waters, dilute the stored water prior to release.

If the pH of stored water “overshoots” the desired pH range, collect a sample and undertake laboratory analysis to determine the quantity of acid that will be required to neutralise excess alkalinity.

Monitor pools of water collected within a bund for pH. Treat the water to keep the pH in the range of the natural pH of receiving waters.

### A30.4 Volume of Hydrated Lime Required to Neutralise one ML of Water

Current Water pH	(H <sup>+</sup> ) (mol/L)	H <sup>+</sup> in 1 ML (mol)	Hydrated Lime (kg pure Ca(OH) <sub>2</sub> )
0.5	0.316	316 228	11 716
1.0	0.1	100 000	3705
1.5	0.032	32 000	1185
2.0	0.01	10 000	370
2.5	0.0032	3200	118
3.0	0.001	1000	37
3.5	0.00032	320	12



Current Water pH	(H <sup>+</sup> ) (mol/L)	H <sup>+</sup> in 1 ML (mol)	Hydrated Lime (kg pure Ca(OH) <sub>2</sub> )
4.0	0.0001	100	4
4.5	0.000032	32	1.18
5.0	0.00001	10	0.37
5.5	0.0000032	3.2	0.12
6.0	0.000001	1	0.037
6.5	0.00000032	0.32	0.012

Source: Ahern et al., 1998.

### A30.5 Contingency Plan

If the above procedures fail to prevent impacts caused by the excavation of acidic soil at the site:

- Notify the principal immediately.
- Implement the following contingency plan, which includes remedial and restoration action.

#### A30.5.1 Remedial Action

Undertake Immediate Remedial Action if monitoring results indicate that the performance indicators or quality requirements as specified in this Contract and other project requirements (eg. ANZECC (2000) and POEO Act) are not being achieved.

Store sufficient additional lime (both fine agricultural grade and hydrated lime) in a dry location on site in order to treat unexpected declines in soil or water pH. Increase the frequency of monitoring to determine the effectiveness of this remedial treatment, and add more lime where and when necessary.

#### A30.5.2 Restoration Action

When the specified remedial actions fail or if monitoring results identify severe failure of the management strategy to meet the specified criteria, cease the construction works and contain the affected soils or water to minimise the possible spread of acidity to non-impacted areas. If additional liming fails to treat the generated acidity, implement a Restoration Action Plan, which will restore conditions back to a pre-construction equivalent.

### A30.6 Lime Handling

Prior to the delivery of any chemicals the supplier must provide a MSDS that identifies all of the safety precautions that must be taken when handling the lime.

Make all workers involved in the handling of the lime aware of these safety precautions and adequate safety equipment and training must be provided.

### A30.7 Lime Spillage

Immediately contain and clean up any spillage of lime during transport to the site, transfer or handling.

Where lime is being used or stored provide adequate spill containment and clean-up equipment.

Only use authorised contractors for the delivery of lime. Contractors must be able to show that they have adequate safeguards in place to contain any spill events.



### **A30.8 Lime Storage**

Store all neutralising agents on site in large secure shipping containers or equivalent. The neutralising agents must be kept in a dry location and protected from vandalism. Do not store quantities in excess of the projected requirement (allowing for contingencies) on site.

## **B31. STAKEHOLDER SPECIAL CONDITIONS**

### **A31.1 General**

Where required, the Contractor shall liaise with stakeholders regarding impacts on the land surrounding the proposed work areas. This includes, but is not limited to, incoming water supply, vehicle access, and construction of access ways.

Stakeholders and their related services shall be observed associated. Relevant stakeholders shall include but not limited to:

- RAAF
- NPWS
- RMS
- PSSC
- NCC
- LMCC, and
- Property Owners

## **B32. RESTORATION**

### **A32.1 General**

Restore as near as practicable to their pre-existing condition, all surfaces, services and/or improvements disturbed, destroyed, removed or damaged during construction of the Works and during installation of temporary works such as access roads. Improvements shall be deemed to include trees and shrubs, mulched areas, gardens, paving, flagging, proprietary finished areas, retaining walls, fences and all other structures.

When necessary for the restoration of surfaces, stockpile existing topsoil separately and replace it over the areas where it was previously located when completing backfilling operations. Where there is a shortfall of existing topsoil use approved imported topsoil.

### **A32.2 Timing of Restoration**

Undertake restoration to surfaces, services and improvements progressively as the work proceeds. At all times ensure that services are maintained. Complete restoration and repair work within 5 calendar days after completion of backfilling of each section of the Works unless specifically stated otherwise elsewhere.

Undertake any maintenance of the restoration within 2 calendar days of the need for such maintenance becoming apparent.

### **A32.3 Turf**

Restore areas of established well maintained lawns to the full limits of the disturbed area with approved imported turf. Restoration using sods removed prior to construction will only be approved if



the sods are of equivalent standard to imported turf. Also use turf to restore areas where there is significant risk of erosion such as on steep or long slopes.

Following backfilling and initial settlement spread and grade topsoil to achieve a smooth surface free from lumps, stones or other debris and blending into the levels and shapes of the adjoining undisturbed ground allowing for the turf. Mix an approved fertiliser of N:P:K ratio of 10:4:6 (equivalent to "Mulitgro") into the topsoil at a rate of 40g/m<sup>2</sup>.

Lay the turf without gaps on the prepared topsoil surface and lightly top dress and compact. Water regularly until regrowth is established. If regrowth fails to occur within 6 weeks of restoration, re-turf and maintain until regrowth is established.

#### **A32.4 Grassed Areas**

For grassed areas not requiring restoration with turf, restore by replacing the pre-existing topsoil or approved imported topsoil, to a minimum thickness of 50 mm. Seed the affected area with grass seeds of the varieties prevalent in the immediate area. Water and maintain the disturbed area until regrowth is established.

If regrowth fails to occur within 6 weeks of restoration, reseed and maintain until regrowth is established.

#### **A32.5 Provision for Settlement**

Make good any settlement of the trench during the Defects Liability Period by placing additional approved fill such that the finished surface level conforms with the adjacent surface.

For trenches through other than pavements, turf areas, grassed areas or other improved surfaces, backfill may be placed sufficiently high to compensate for expected settlement unless it would create a hazard or inconvenience to the public. At the end of the Defects Liability Period, trim back such excess material to conform with the adjacent surface and dispose of the surplus.

#### **A32.6 Maintenance of Restored Surfaces**

Maintain all restored surfaces and improvements in a satisfactory condition until expiry of the Defects Liability period, notwithstanding that any deterioration, and the need for their maintenance, may or may not be due to defects which become apparent or arise from events which occur during that period.

#### **A32.7 Site Restoration**

Stockpile existing topsoil separately and replace it in the correct sequence over areas where it is previously located when completing backfilling operations to aid in site restoration. Any requirement to import topsoil to aid site restoration shall be subject to approval by the Principal.



## Annexure 3 – General Specification

---

### **B1. BACKGROUND**

Hunter Water currently owns and maintains a High Voltage and Low Voltage overhead powerline network through Tomago to Tomaree and Belmont. The network was predominantly constructed in the 1960's with the development of the Grahamstown Scheme. The network supplies 33kV, 11kV and 415VAC and is approximately 100km in length.

The network powerlines and poles/cross arms have deteriorated and carry a risk of failure (collapse) when increased stresses are incurred, through either high winds, lightning strikes or other type of failure.

The network repair and upgrade works are defined into the main areas which are:

- Tomago Sandbeds & Balikera [33kV HV distribution and 400V LV reticulation network]
- Nelson Bay (Tomaree Peninsula) [11kV HV distribution and 400V LV reticulation network]
- Belmont [11kV HV distribution network].

### **B2. SCOPE**

This Contract involves the upgrading of Hunter Water's overhead High Voltage and Low Voltage distribution and reticulation networks at Tomago, Balikera, Nelson Bay & Belmont. The network consists of approximately 100 kilometres of overhead power conductors and approximately 900 power poles.

The works will generally include (but not be limited to) the review of existing information, investigation, assessment, design, improvement, planning upgrade and/or replacement, supply of materials and commissioning of overhead HV and LV distribution and reticulation network assets, including power poles, crossarm assemblies, conductors, earthing, protection, monitoring and associated components not specified here but are essential.

The Contractor shall undertake, but not limited to, the following activities:

- Review of all available relevant information supplied by the Principal.
  - Inspection and condition assessment of all existing Hunter Water power poles and pole assemblies,
  - Undertake urgent defect repairs of unsafe poles, pole assemblies and overhead spans (some defects may require detailed design);
  - Review and upgrading of feeder protection design, modelling of the existing and proposed upgrades to the feeder networks Including earthing design (existing PTW files provided),
  - Investigation, assessment and upgrade of Access Road to access the power poles.
  - Vegetation clearing where required
  - Planning and scheduling, detailed design and construction of the work for feeder sections in all work packages.
  - All co-ordination with The Principal and associated stakeholders.
  - Obtaining necessary approval for the works.
-

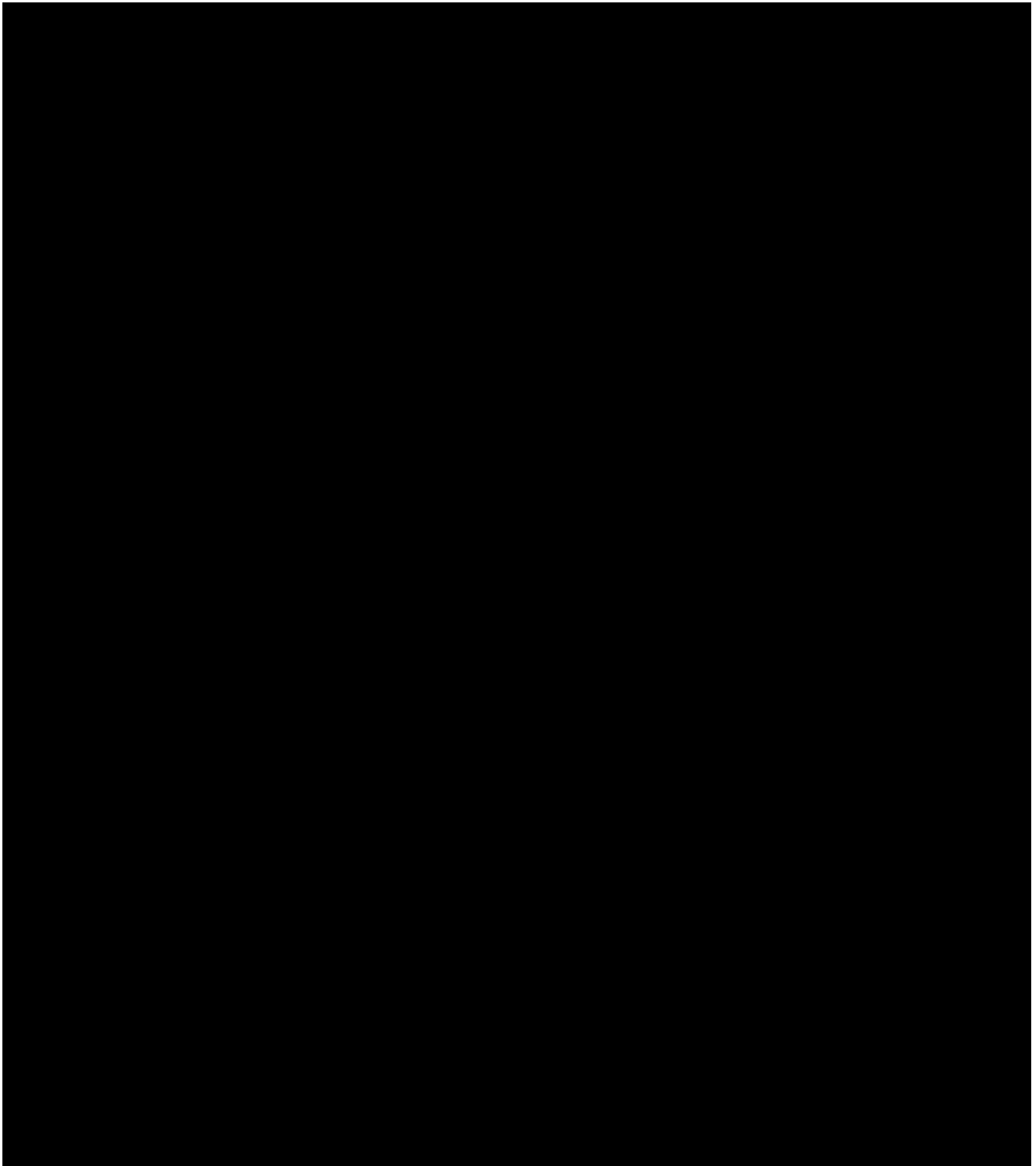


- Testing and commissioning of the repaired and upgraded feeder sections.
- Removal and disposal of redundant assets
- Updating of all network documentation to reflect the progressive modifications as completed.
- Preparation of O&M manual/s and Work As Constructed documents

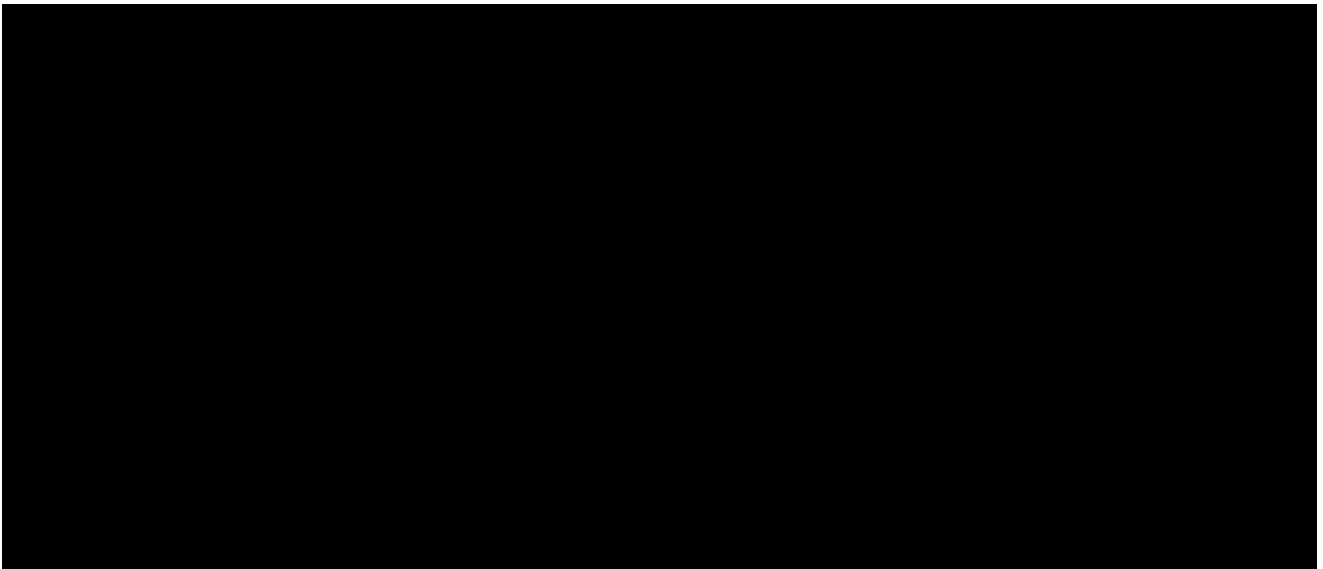
The Pole and Power conductor rectification works is divided into 65 sections.

The names of each section are shown in the tables below.

**Table 1** – Tomago Overhead Conductor Sections

The table content is completely redacted, appearing as a solid black rectangle. No data or structure is visible within this area.





**Table 2** – Belmont Overhead Conductor Sections

A black rectangular box redacting the content of Table 2.

**Table 3** – Tomaree Overhead Conductor Sections (11kV Feeder)

A black rectangular box redacting the content of Table 3.A large black rectangular box redacting a table or figure.

ns)

A large black rectangular box redacting a table or figure.



### **B3. ORDER OF WORK**

Commence the review of available data provided by Hunter Water within 2 weeks of Execution of the Contract.

Commence the condition assessment of the networks power poles and conductors within 2 weeks of Execution of the Contract.

Commence the condition assessment of the access roads conductors within 2 weeks of Execution of the Contract.

Commence geotechnical investigations within 4 weeks of execution of the Contract.

Within 4 weeks from Execution of the Contract, verify and update the electrical power network model (SKM PTW) provided by the Principal. Once the power network model is finalised, commence the Earthing System Design within 2 weeks.

Commence the design of the conductors and new overhead earthing wire within 1 week of completing the update of the electrical power network model.

Allow 20 days from the submission of Draft Detailed Design for each Overhead Conductor Section to commence construction and commissioning.

The Pole and Power conductor upgrade works cannot commence until the design and condition assessment work is complete. Do not commence site work for the Pole and Power conductor rectification until the section has been issued in a batch of work by the Principal.

### **B4. ISSUING OF WORK**

The Pole and Power conductor upgrade works will be issued in sections in a rolling program of work. The priority of the sections released will take into account the findings from the Condition Assessment of the networks power poles & conductors and operational constraints.

The length of each section will be approximately 25 poles.

Each section will have its own start and finish date and liquidated damages.

Within 2 weeks of receiving a section of work arrange and undertake with the Principal a site inspection to review the section to be upgraded.

Following the site inspection, submit details of the scope of work including design drawings, nomination of poles and/or switchgear to be replaced, a methodology to undertake the work and the cost (based on the relevant items contained in the schedule of rates). The Principal will review and provide comment prior to the section being issued for construction.

The Principal reserves the right to withdraw any section after the Contractors review and submission of the required information.

Completion of a section is deemed to be when the construction work is complete, the section has been commissioned, WAC information has been submitted and all restoration works have been completed.

---



## **B5. QUANTITIES**

Powerline network consists of approximately 100 kilometres of overhead power conductors and approximately 900 poles.

The quantity of overhead wires, will be dependant on the overhead powerline alignment.

The quantity of poles to be replaced will be based on the results of the condition assessment and design.

The quantity and extent of access roads to be upgraded will be dependent on the findings from the Condition Assessment.

## **B6. LIMITS OF CONTRACT**

The works under this contract applies to the Principals overhead powerlines network (both High and Low Voltage) in Tomago, Tomaree, Balickera and Belmont.

The work does not include work on the Ausgrid network.

## **B7. INTERPRETATION**

Unless the context requires otherwise, any expression in the Contract such as *give notice*, *submit*, *approval*, or *directed* means give notice to, submit to, approval by, or directed by the Principal.

Unless the context states otherwise, any expression in the Contract in the form of a direction means the Contractor shall perform the direction.

Unless the context states otherwise, any reference in the Contract to the Principal refers to the Principal's Authorised Person as nominated in the General Conditions of Contract or, where not nominated in the General Conditions of Contract, the person as nominated by the Principal to act on its behalf.

Unless specifically stated otherwise, this Contract includes all functions described in this General Specification and the provision of any minor materials or services which are not described but are reasonably necessary to design and construct, upgrade or repair a fully functional private overhead powerline network, owned and operated by the Principal.

## **B8. ACCREDITATION**

Design Work is to be performed by a Level 3 Accredited Service Provider (ASP3) designer experienced with designing 33kV sub-transmission systems using Ausgrid Network Standards.

Construction and demolition works is to be performed by a Level 1 Accredited Service Provider (ASP1) installer experienced in this type of work (e.g. working on sub transmission, HV or LV overhead powerlines, earthing installations, etc.). Undertake works in accordance with the The Principal High Voltage Installation Safety Management Plan (HV ISMP).

The electrical installation work must be supervised by a holder of an Electrical Supervisors Licence (this is a requirement of the Home Building Act; because Hunter Water's electrical network is on the customers side of the electricity meter, the Home Building act applies). Standing of poles (complete with cross arm assemblies) is not considered part of the electrical installation and therefore does not require the supervision of a holder of an Electrical Supervisor's licence.

The jointers and linesman must have the following qualifications:

---



- Joints: UET30409 - Certificate III in ESI - Cable Jointing (or equivalent) and CPR HLTCP201B (or equivalent),
- Linesman: UET30206 - Certificate III in ESI - Distribution (or equivalent) and CPR HLTCP201B (or equivalent).

Contractor personnel must have completed the Principals HV induction training, complying with all of the Principals OHSE and ISMP requirements.

Prior to commencing any construction work, submit evidence of accreditations for all personnel nominated to undertake the works.

## **B9. STANDARD THE PRINCIPAL DOCUMENTS**

HWC Standard Technical Specifications referenced in the Contract can be found at web site:-

[hunterwater.com.au/Building-and-Development/Drawings-Plans-Specifications/Drawings,-Plans--Specifications.aspx](http://hunterwater.com.au/Building-and-Development/Drawings-Plans-Specifications/Drawings,-Plans--Specifications.aspx)

## **B10. SELECTED SUBCONTRACT WORK**

The Contract includes work on The Principal's SCADA system. This work shall be carried out by a Selected Sub-Contractor, from The Principal's list of Approved Contractors for Telemetry and Automation, which is available on The Principal's internet site at:

<http://www.hunterwater.com.au/Resources/Documents/Approved-Designers-Suppliers-Contractors/Approved-Contractors/approved-contractors-telemetry-automation.PDF>

## **B11. OPERATION OF EXISTING ASSETS**

### **B11.1 General**

The Principal is responsible for the operation of all existing Assets for the duration of the contract for either work under the Contract or for maintenance and operational purposes. Access is to be maintained for all the Principals staff and authorised contractors to facilitate the operation of these assets. Access ways to and from operational equipment shall be kept clear to allow access at all times.

Operation or isolation of all operational electrical equipment will be undertaken by the Principal. All isolations will be carried out using either the Principal's lockout system or the Contractor's lockout system (following approval by the Principal).

Provide a minimum of 14 calendar days notice of any work requiring isolation of the HV equipment or access to the station's HV switchyards. Work on HV equipment shall be undertaken according to the Principals HV Safety Management Plan and High Voltage Safety Procedures Handbook (see Appendix). HV equipment shall only be operated by Authorised Principal personnel. These persons have completed an approved HV operator's course and have been trained in the isolation, testing and issue of Access Permits. An Access Permit must be issued for all HV work. The contractor shall have an authorised Access Permit Receiver who has completed a *nationally recognised* Permit Receivers Course.

Submit to the Principal details of any work that may impact on the operation of the Principal's assets, such as planned cut-ins, shutdowns, electrical alterations or pump changes, 14 calendar days before

---



commencing such work. Provide details such as time and duration within the submission. Update and provide any cut-in or shutdown plans developed during the design phase.

Availability for any planned shutdown, isolation or change to occur will depend on the Principals water network's operational conditions including but not limited to weather, other planned works or breakdowns.

No hot work or cut-ins will be permitted on total fire ban days.

### **B11.2 Scheduled Maintenance Activities**

Allow the Principal's personnel access to the sites to undertake scheduled maintenance activities. Scheduled maintenance activities may include, but would not be limited to, maintenance on Air Break Switch, insulators etc.

Induct the Principal's personnel onto the site and make them aware of all relevant operational issues that may impact on the maintenance activity.

### **B11.3 Operational Response Plan**

Submit (prior to commencing work onsite), for the Principal's approval, an 'Operational Response Plan' that identifies operational responsibility during the course of the contract and procedures / actions to be taken in the event of an operational alarm being raised at the Principals assets associated with the works under the Contract.

Prior to commencing work on each batch of work under this Contract attend a workshop of up to 1 day duration (for each site) with The Principal personnel at The Principal's nominated location. The purpose of the workshop is to prepare the framework of the Operational Response Plan and confirm the operational responsibilities during the contract period.

The Operational Response Plan shall be in a simple tabular format. The plan shall include as a minimum:

- (t) Major work stages,
- (u) Operational responsibilities during each stage of works,
- (v) Potential operational incidents / alarm faults,
- (w) Response hierarchy including minimum response times,
- (x) Emergency contact hierarchy,
- (y) Corrective actions / Decision tree
- (z) Incident Response Report Template.

The Operational Response Plan is to be consistent with site specific WHS Plans, Traffic Management Plans, the Construction Environmental Management Plan and any other documentation prepared under this contract.

### **B11.4 Responding to Operational Alarms**

Operational alarms are characterised as Priority 1, 2 or 3. If during the course of the contract, an operational alarm is raised at any of the sites associated with the works under the Contract, the Contractor will be contacted. Be available to respond to alarms 24 hours per day, 7 days per week. Attend the site within the response times as provided below. Nominate a contact person(s), who is

---



conversant with contract progress to respond to operational alarms and allow access onsite for The Principal personnel.

Priority 1 alarm - attend site within 2 hours, issue to be rectified within 4 hours

Priority 2 alarm - attend site within 24 hours, issue to be rectified within 3 days

Priority 3 alarm - attend site within 3 days, issue to be rectified within 5 days

Assess the cause of the alarm and advise the Principal of the proposed course of action.

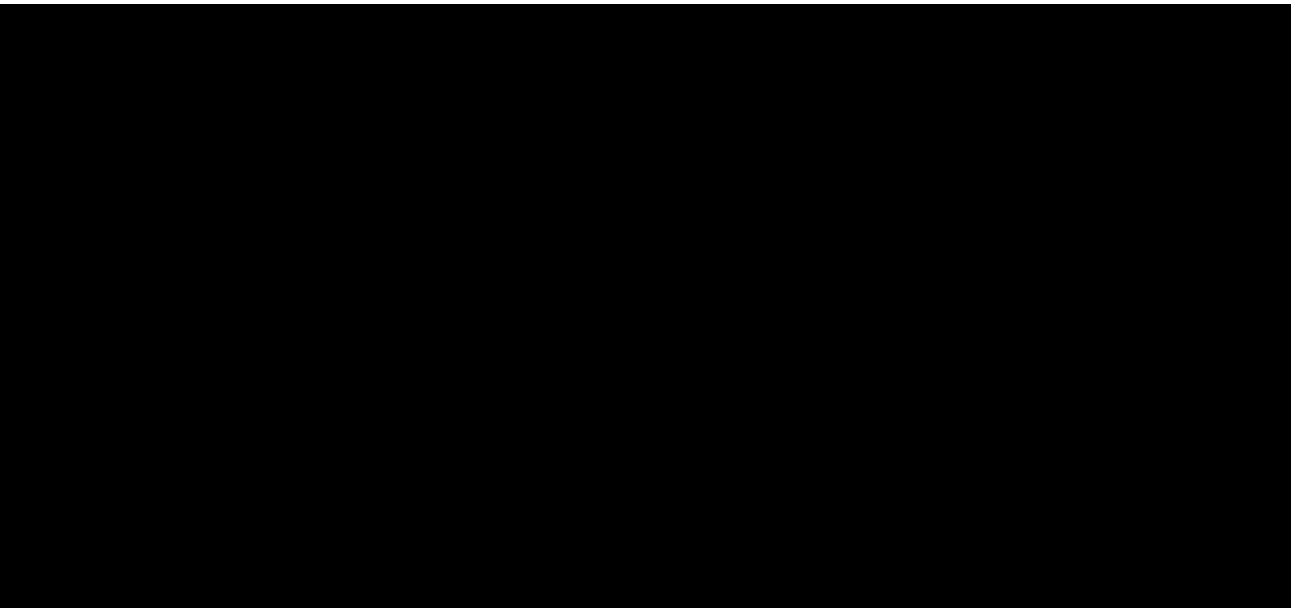
Maintain an up-to-date legible set of operational plans and electrical schematic on site at all times to facilitate operation and maintenance at the site. Ensure that the main power switches are clearly labelled and easily identifiable at all times during the contract period.

Complete and submit for the Principals approval a copy of an 'Incident Response' report on the successful rectification of the issue within 5 days of the incident being resolved.

Where the cause of an operational alarm is not due to the Contractor's work, the Contractor costs will be valued as 'Daywork' under clause C41 of the General Conditions of Contract.

## **B11.5 Operational Constraints**

### **B11.5.1 General**



## **B12. PLANNED INTERRUPTIONS OF SERVICE TO CUSTOMERS**

As stated above in operational constraints, isolation of overhead powerline at Balickera will also isolate private customers. These interruptions must be planned in advanced in consultation with the affected customers.

Ausgrid shutdowns may result in disruption of services to critical customers. In such cases, alternative arrangements shall be arranged by the Contractor as required by Ausgrid and the Principal.

Notify the Principal of any impact or disruption of service due to isolation and shutdown of any of the Principals overhead network cable. Suitable arrangements shall be made by the Contractor if required in case of an extended shutdown.

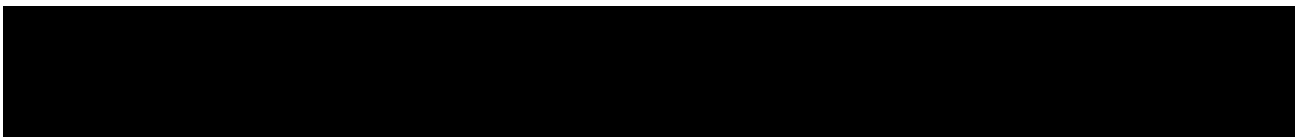
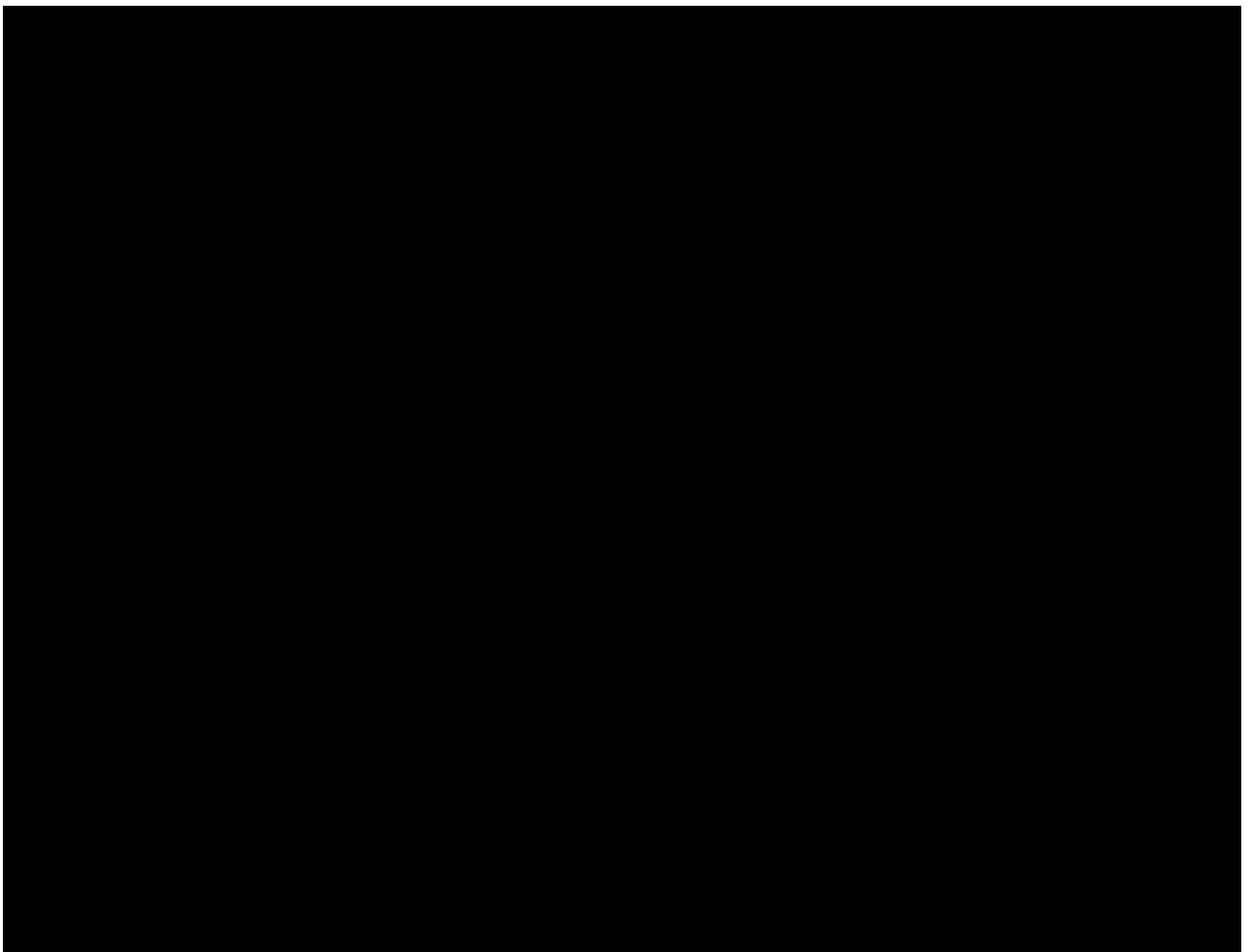
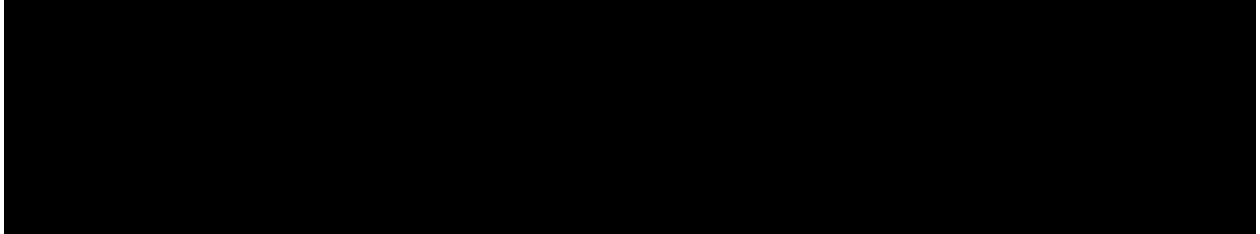


**B13. RESTRICTIONS ON WORKING HOURS AND/OR WORKING DAYS**

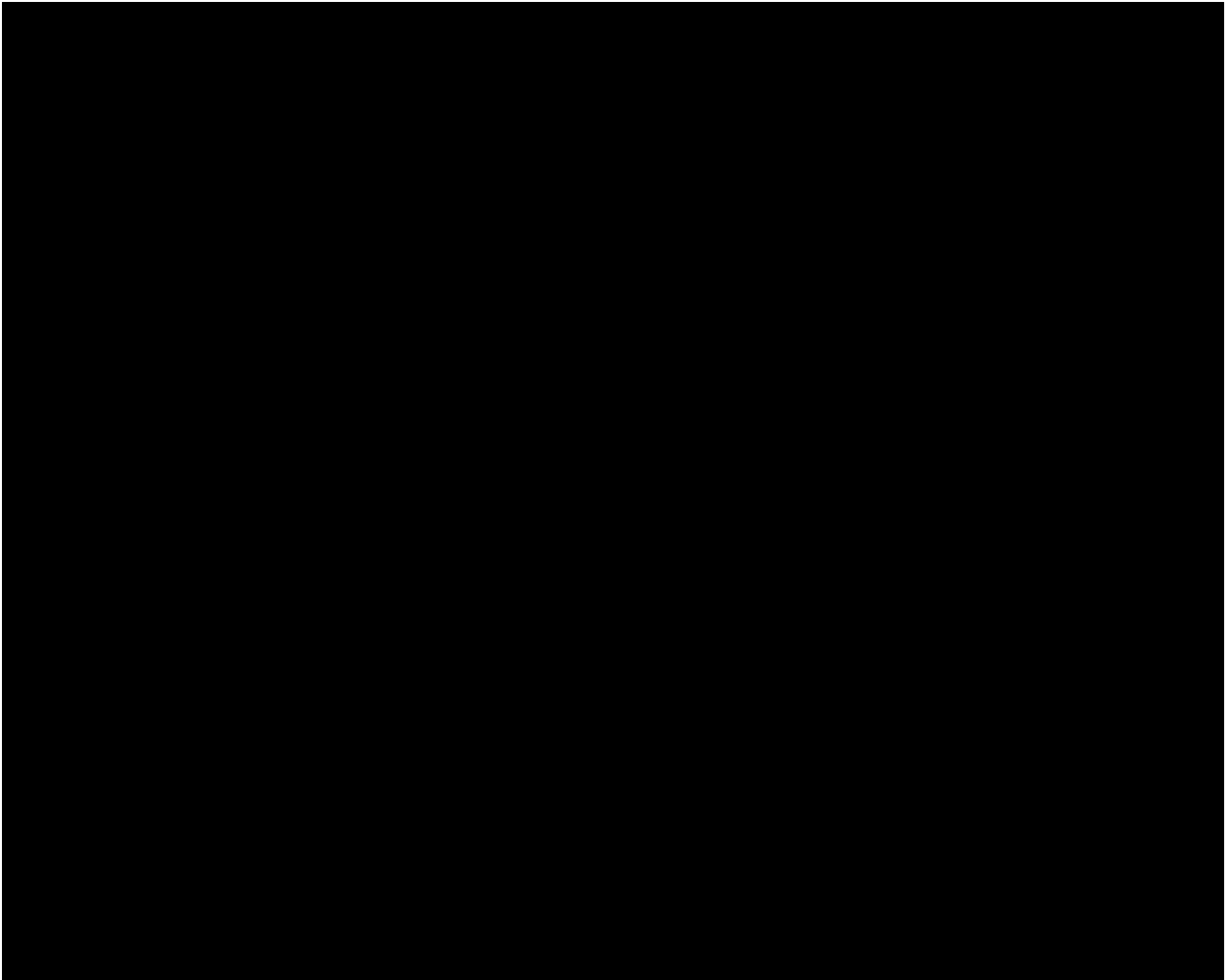


**B14. ACCESS TO THE SITE**

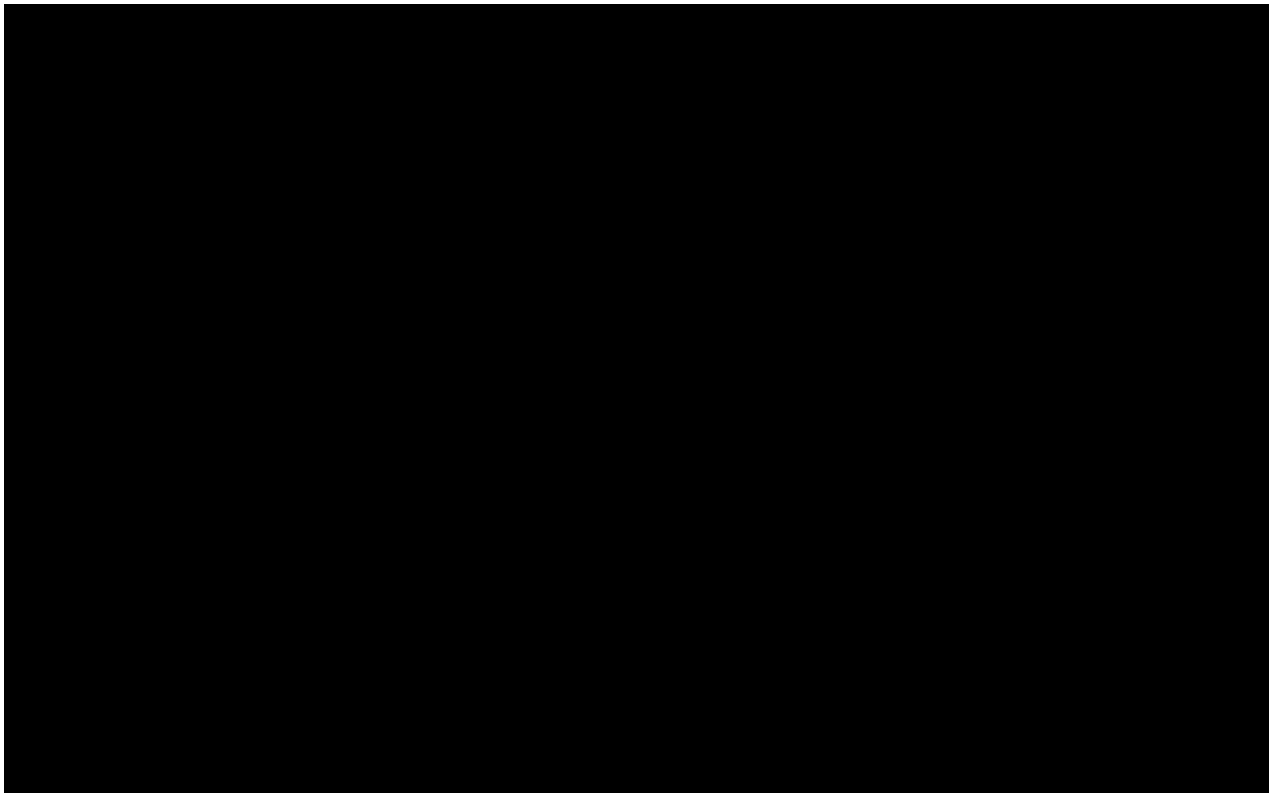
**B14.1 Balickera WPS and Balickera Feeder**



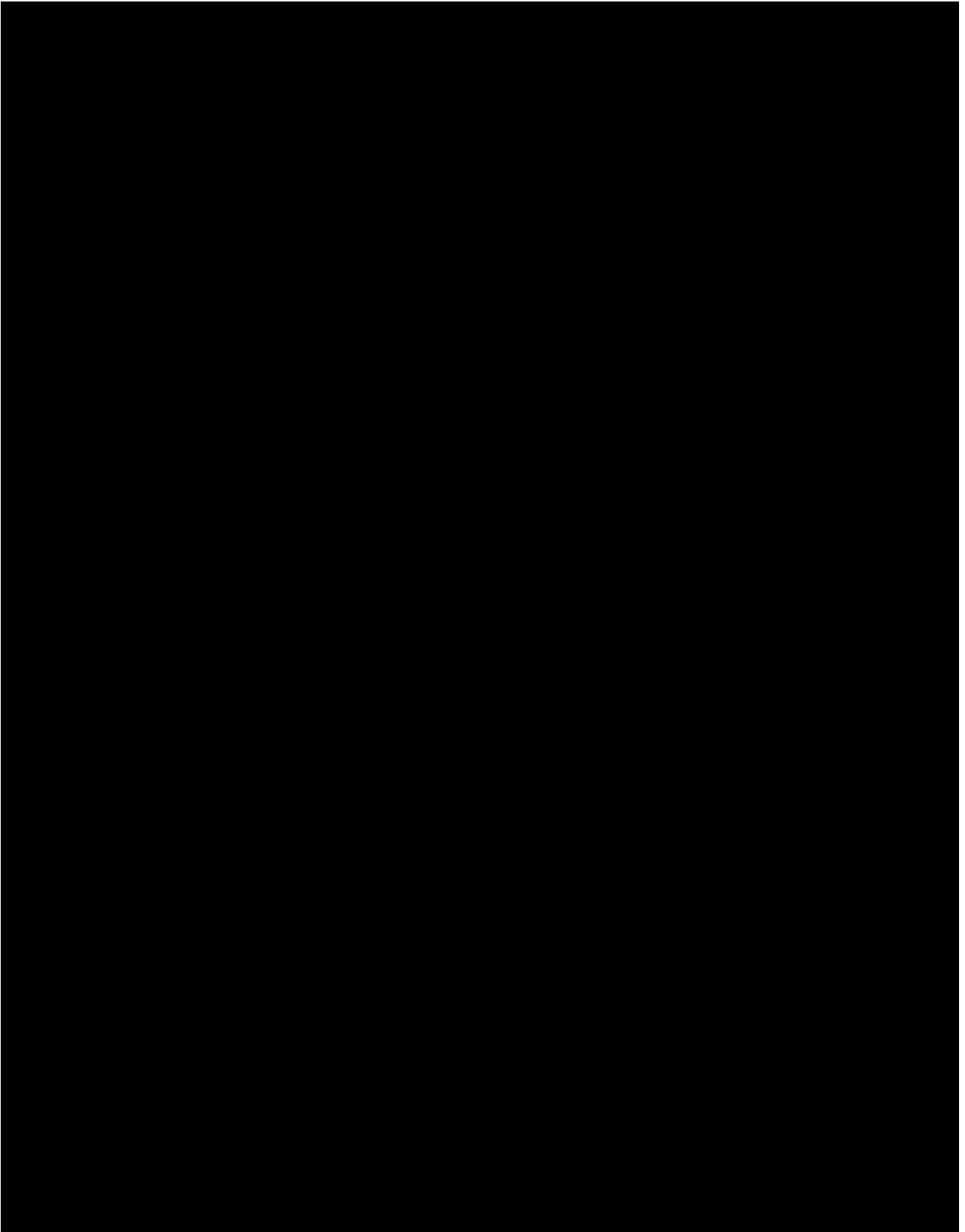




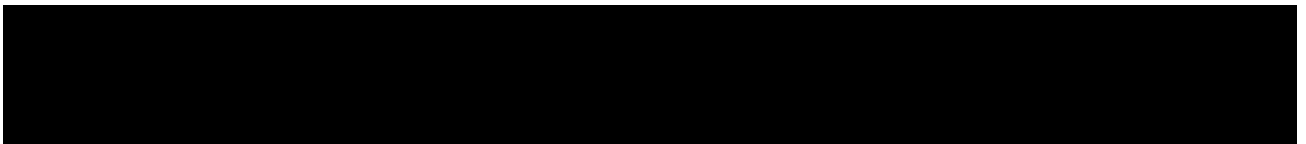
**B14.2 Bore Stations and Overhead Network (Tomago Peninsula)**



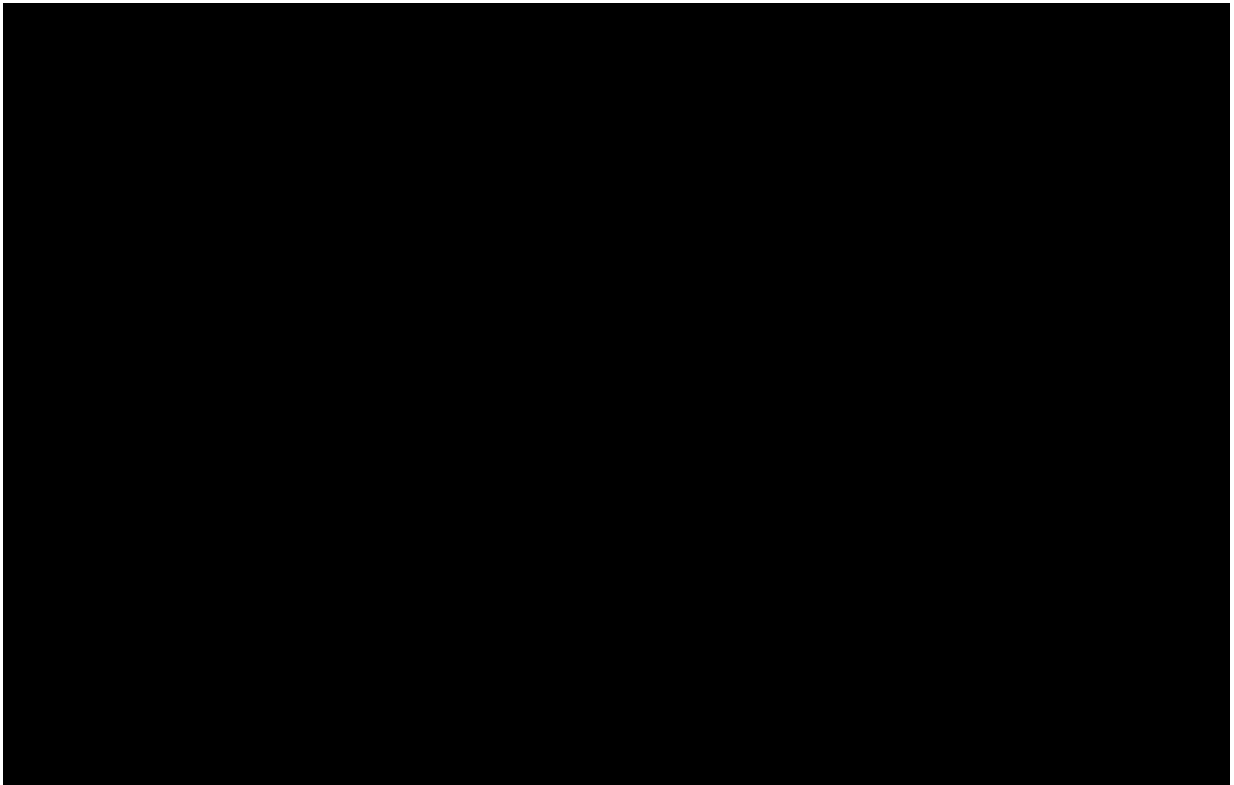




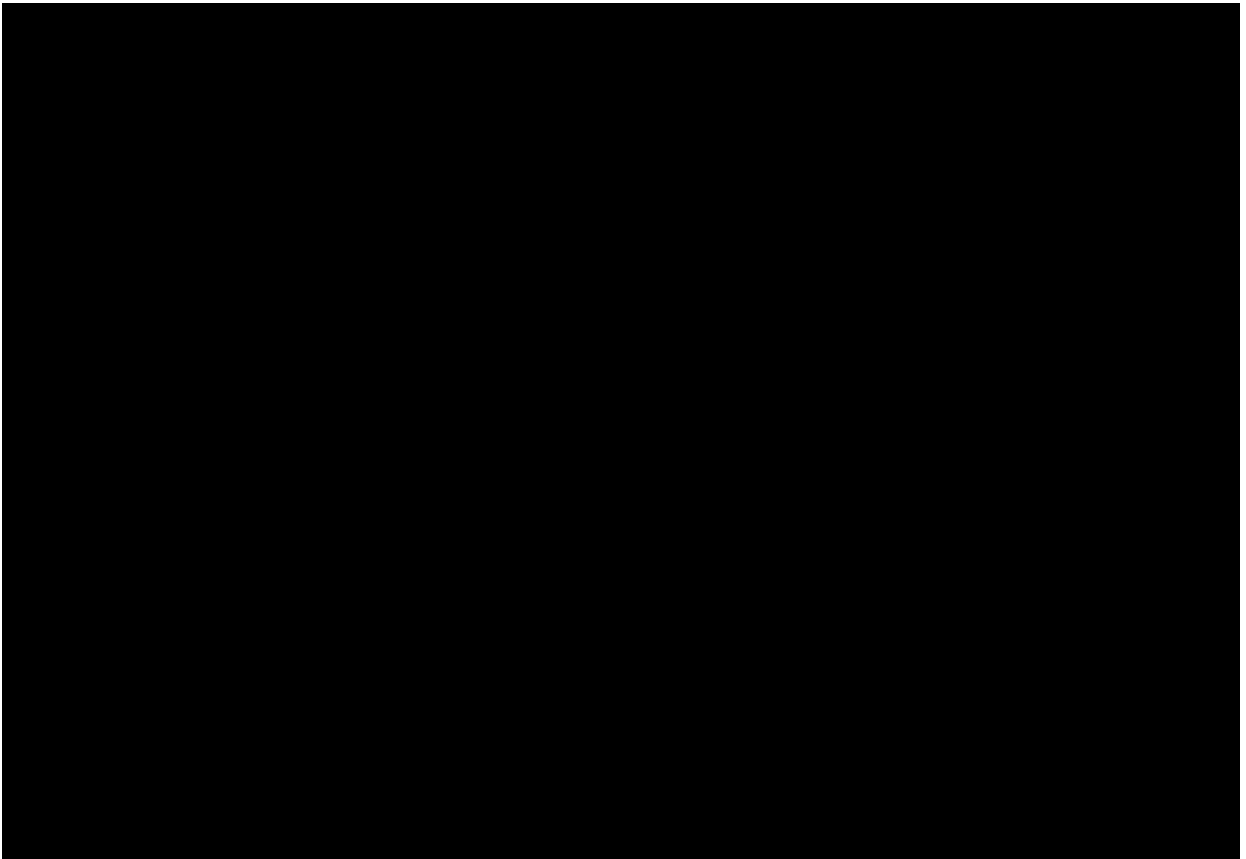
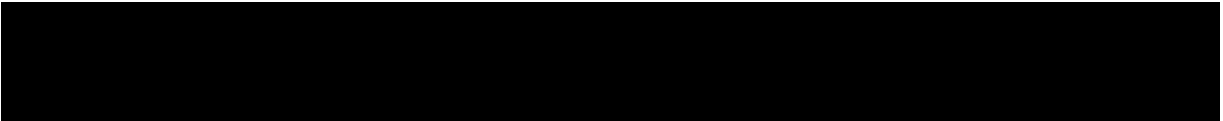
**B14.3 Tomaree Peninsula (Feeders)**







**B14.4 Masonite Rd Sub Station**





#### **B14.5 10's Corner**



#### **B14.6 Restrictions to Site Access**



#### **B14.7 High Ground Water Table**

Access to some areas may hindered by the high ground water table. In these circumstances the Contractor is responsible for providing construction access.

### **B15. SITES OWNED BY THE PRINCIPAL**

A security deposit of \$500 for each key or security system activation tag provided by the Principal for the Contractor's use will be retained from the next progress payment made by the Principal after issue of any key or security system activation tag.

Contractor shall advise number of keys required prior to commencement of works.

Electrical works access keys (81/3) will only be issued to personnel who:

- hold a current Electrical Supervisor Certificate; and
- have received the Principals electrical induction.

Within 2 weeks from the Execution of the Contract and receipt of the appropriate security deposit retained from payment, the Principal will provide the Contractor with one set of keys and/or tags to any existing Corporation sites which the Contractor will need to access to perform work under the Contract. Where possible, the Principal may alternatively allow or insist on the interlinking of the Contractor's padlock with the Principal's.

Where work involves access to an asset with an existing security alarm system requiring deactivation by insertion of a code, the Principal will provide the code as soon as practicable after receipt of the request. Do not divulge the code to any people other than those who must know the code for the efficient performance of the work under the Contract. Note that codes are subject to change without notice. The Principal shall advise the Contractor of the new code as soon as practicable after any change for as long as the Contractor needs access to perform work under the Contract.

Compliance with any request for additional keys and/or activation tags during the course of the Contract shall be at the sole discretion of the Principal and shall be subject to lodgement of the appropriate security deposit.

The security deposit for each key or tag shall be released within 10 business days after return of the key or tag to the Principal.

Any new locks to be permanently installed under the Contract will be provided by the Principal after commissioning of the asset is complete. The Contractor shall give 1 weeks notice to the Principal of the need for these locks.



If an alarm system is to be installed under the Contract, the alarm system shall have an access code nominated by the Principal. The Contractor shall give 1 weeks notice to the Principal of the need for any codes.

Sites owned and / or controlled by the Principal are subject to vandalism. Do not rely upon the Principal's security systems to prevent vandalism to or theft of, the Contractor's plant and / or materials.

## **B16. CONTRACTOR'S SITE ESTABLISHMENT**

### **B16.1 General**

The Contractor's plant, labour and materials shall be allowed on the site only to the extent necessary for the construction of the Works.

Where relevant, obtain written authorisation from the relevant land owners or controlling authorities before establishing any site compound. Submit details of the site(s) and copies of the authorisations before establishing the compound(s).

Obtain and submit written confirmation from the Principal 10 working days before establishing any site compound on the Principal's land to determine any constraints which may apply to site establishment.

### **B16.2 Contractor's Site Facilities**

Provide offices and sheds for the use of the Contractor's workforce.

Provide temporary toilet and washroom facilities for the Contractor's employees and sub-contractors.

### **B16.3 Site Disestablishment**

Remove all temporary works, excess materials, debris and rubbish from the site unless otherwise directed. Complete all restoration works.

Obtain and submit, as pre-requisite for Completion, written confirmation from the relevant land owners or controlling authorities stating that the reinstatement of their land conforms to the conditions of use as arranged prior to the site compound establishment.

## **B17. CONSULTATION WITH AUTHORITIES**

### **B17.1 General**

The Principal will be responsible for consulting with and obtaining approvals from relevant authorities as required for the work under the Contract, with the exception of the following matters:

- (a) Ausgrid consultation / approvals.
  - (b) Council and RTA consultation / approvals regarding:
    - ix. Contractor's site establishment;
    - x. Road closures and traffic controls;
    - xi. Restoration requirements, including restoration of roads, footpaths, bushland and grassed areas regularly used by the public (e.g.: sporting fields or foreshore areas);
    - xii. Removal of trees (if necessary).
-



If necessary, arrange and attend a site meeting with Council (including Council's Tree Preservation Officer if tree removal is likely to be required), RMS and the Principal to reach agreement on Council's / RMS's requirements regarding the above matters. The Principal shall be advised of all meetings with Council's / RMS etc at least 5 working days in advance of the scheduled date.

Allowance shall be made for all consultation (verbal and written) with relevant authorities and any necessary follow up action to ensure an appropriate response.

For all other matters, immediately inform the Principal in writing of issues that may require consultation with any third party, including but not necessarily limited to:

- (a) Safety
- (b) Changes to the Principal's Concept Design
- (c) Pole locations and High Voltage distribution line routes;
- (d) Location, length, height, width of new buildings or building modifications;
- (e) Proposed civil Works;
- (f) Access roads; and
- (g) Changes to power demands associated with the Works.

#### **B17.2 Ausgrid Consultation**

During preliminary discussions with Ausgrid they have advised that they reserve the right to inspect any new works.

If necessary, arrange and attend a meeting on-site with Ausgrid and the Principal to reach agreement on Ausgrid's requirements regarding the below matters. The Principal shall be advised of all meetings with Ausgrid at least 5 working days in advance of the scheduled date.

Liaise with Ausgrid to arrange inspections as required and submit the following documentation to Ausgrid prior to inspection:

- (a) Updated site safety management plan
- (b) Upgrade plans
- (c) Protection grading information
- (d) Details of site processes, plant and equipment
- (e) Operation & maintenance manuals
- (f) Inspection and Test Plans (ITP)

New installations may be considered non-conforming by Ausgrid if they do not comply with the above documentation, Service and Installation rules of NSW or relevant Australian Standards. Conformance with Ausgrid requirements is a prerequisite of Completion.

---



## **B18. COMMUNITY AND STAKEHOLDER CONSULTATION MANAGEMENT**

### **B18.1 Contractor Contact Persons**

Provide the names and contact details, including mobile telephone numbers, of at least 2 persons who will be available to respond at all times to issues which require action by the Contractor.

### **B18.2 Community Consultation Induction**

The Contractor's key personnel must attend a community consultation induction which will be provided by the Principal prior to commencement of work under the Contract. Key personnel will be those who hold management and consultation responsibilities for the Contractor.

The induction will be provided in a single session of approximately 1 hour duration at an agreed location, time and date.

The induction will include appropriate training in community consultation relating to undertaking the work under the Contract and outline the protocols, responsibilities, standards and behaviours expected when dealing with the community and stakeholders. At the induction the Contractor will be provided with community consultation already undertaken and the requirements for the Contractor relating to this Contract.

Provide an induction relating to community consultation for all employees and subcontractors.

Maintain a community relations induction register on site. Submit the register as part of the Contractor's monthly report.

### **B18.3 Community and Media Relations Standards and Procedures**

#### **B18.3.1 Standards of Behaviour**

Ensure that all employees and subcontractors:

- present a professional image at all times;
- are polite, professional and courteous;
- understand that, as far as the customers and the community are concerned, they are the 'face' of The Principal whilst working on this contract;
- avoid complex technical data or jargon when responding to questions from customers and the community;
- have a genuine interest in working with customers, the community and other stakeholders to minimise the impacts of construction activities; and
- comply with approved working hours.

#### **B18.3.1 Notification Procedure**

Comply with the following procedure:

- 2 weeks prior to commencement of work under the Contract formally notify directly impacted stakeholders and identified community stakeholders by printing and distributing a letter and The Principal Overhead Powerlines Upgrade Fact Sheet advising the proposed date for
-



commencement to a list of identified community stakeholders provided by the Principal.

- When additional notification is required due to project delays or an extension of working hours is granted, draft and submit a letter for approval one week prior to printing and distribution.
- Between 48 and 72 hours prior to commencement of work under the Contract, notify directly impacted stakeholders by carrying out a door knock and providing the Principal supplied 'Working in your area' calling cards, advising of the anticipated start date of construction.
- During construction, display signage supplied by the Principal to communicate with the community about the project. Signage must be installed in locations visible to the general public. For example: on a temporary site fencing or display of an A-frame sign at key roadside locations. This signage does not change or impact on any signage requirements in clause 0.
- During construction, continue to notify directly impacted stakeholders, utilising the Principal supplied 'Your vehicle' and 'We'll be back' calling cards as required.
- Ensure that the timing of restoration works, or any delays, are communicated to affected stakeholders, utilising the The Principals 'we'll be back' calling cards provided.
- At the end of construction and restoration works, distribute to impacted stakeholders the Principal supplied 'thank you' calling cards
- Maintain a register of all notifications issued. Submit the register as part of the Contractor's monthly report.

#### **B18.3.1 Media Enquiries**

Do not issue any information, publication, document or article for publication concerning the contract in any media or verbally without the prior written approval of the Principal, which approval shall not be unreasonably withheld.

Refer all enquiries concerning the contract from any media to the Principal.

Immediately advise the Principal of all issues which could create positive or negative media coverage for the Principal.

#### **B18.3.1 Third Party Complaints**

Notify the Principal upon receipt of all third party complaints.

Provide the notification as soon as practicable, and no later than 5:00pm on the day of receipt of the complaint.

Third party complaints which are received by the Principal will be referred to the Contractor for investigation and / or resolution with the Complainant.

Make direct contact with a complainant within 24 hours of receipt or notification of the complaint. Where responsibility is accepted, complete the agreed actions within the agreed timeframe. Confirm satisfactory completion of the actions with the complainant and notify the Principal.

---



If the Contractor considers that it is not liable to respond to the complaint, refer the complaint to the Principal. Provide a copy of relevant discussions to the Principal at the same time.

Maintain a third party complaints register which details complainant's name, address, contact phone numbers, date of receipt and details of the complaint, action / status, and completion date.

Submit the register as part of the Contractor's monthly report.

#### **B18.4 Audits**

On request, make available all relevant Community and Stakeholder Relations Management records. Provide all reasonable assistance during such audits, including attendance.

#### **B19. NOTIFICATION OF ENTRY**

At least 14 days before commencement of work under the Contract on land which is not Public land or owned by the Principal, provide the Principal with the names of any persons who are to enter such land to carry out work under the Contract. Prior to commencement of the work the Principal shall issue the Contractor with a certificate of authority in accordance with s21 of the The Principal Board Act 1991 ("the Act") for each person required to enter such land.

At least 7 days prior to entry, notify the Principal which properties are to be entered and the day or days on which entry is to be effected. The Principal shall issue a notice to the owners or occupiers of the relevant properties in accordance with s21 of the Act at least 2 days prior to the date of entry by the Contractor.

Ensure all persons entering property carry identification and present the identification and the certificate of authority from the Principal, whenever requested by the property owner or occupier. Cause as little disruption and inconvenience as possible.

#### **B20. VISUAL RECORD**

Prior to commencing work on site, prepare and submit detailed digital photograph and video records of all areas that will be subject to construction activity including stockpile areas, storage areas and access tracks.

These records shall be used as benchmarks for restoration work and may be used in the resolution of disputes with third parties. They must provide comprehensive coverage of structures, roads, pavements, reserves, kerbs, gutters, fences, drains, pits and other improvements which may be affected by work under the Contract. Ensure notable details and existing damage or faults are recorded.

Add to the record as work proceeds if additional areas will be affected by construction activity and the condition has not been previously recorded or if site conditions change.

Present the records in digital format on disk. Arrange files in groups representing each section of the work and include an index file on the disk such that photographs relating to particular properties and chainages can be readily identified. Label each disk to indicate the section(s) of work covered. Display the date of photographing on each photograph.

#### **B21. WHS MANAGEMENT**

##### **B21.1 General**

Requirements in this clause are in addition to requirements in the General Conditions of Contract.

---



## **B21.2 Codes of Practice**

NSW WorkCover Authority codes of practice which may be relevant to the work under the Contract include:

- How to Manage Work Health and Safety Risks;
- Hazardous Manual Tasks;
- Managing the Risk of Falls at Workplaces;
- Labelling of Workplace Hazardous Chemicals;
- Preparation of Safety Data Sheets for Hazardous Chemicals;
- Confined Spaces;
- Managing Noise and Preventing Hearing Loss at Work;
- Managing the Work Environment and Facilities;
- Work Health and Safety Consultation Coordination and Cooperation;
- How to Safely Remove Asbestos;
- How to Manage and Control Asbestos in the Workplace;
- First aid in the workplace;
- Construction work;
- Preventing falls in housing construction;
- Managing electrical risks at the workplace;
- Managing risks of hazardous chemicals in the workplace;
- Managing risks of plant in the workplace;
- Safe design of structures;
- Excavation work;
- Demolition work;
- Spray painting and powder coating;
- Abrasive blasting; and
- Welding processes

All actions recommended by NSW WorkCover Authority codes of practice (ie wherever the word 'should' is used in a code) must be adopted as mandatory.

The Work Health and Safety (WHS) requirements contained or referred to in this Specification, are in addition to, but are not in substitution for, any requirements under the WHS Act, the WHS Regulation and the codes of practice and do not limit the responsibilities of the Contractor.

---



The WHS Act and the WHS Regulation can be accessed at [legislation.nsw.gov.au](http://legislation.nsw.gov.au) and the codes of practice at NSW WorkCover Authority's website [workcover.nsw.gov.au](http://workcover.nsw.gov.au).

### **B21.3 Managing Risks to Health and Safety**

#### **B21.3.1 Identifying Hazards**

Identify all reasonably foreseeable hazards that could give rise to risks to health and safety during the term of the Contract. Examples of hazards include:

- (aa) the construction workplace itself, including its location, layout, condition and accessibility;
- (a) the use of ladders, incorrectly erected equipment, unguarded holes, penetrations and voids, unguarded excavations, trenches, shafts and lift wells, unstable structures such as incomplete scaffolding or mobile platforms, fragile and brittle surfaces such as cement sheet roofs, fibreglass roofs, skylights and unprotected formwork decks;
- (b) falling objects, for example tools, debris and equipment;
- (c) collapse of trenches;
- (d) structural collapse;
- (e) hazardous chemicals, including the handling, use, storage, and transport or disposal of hazardous chemicals;
- (f) the presence of asbestos and asbestos-containing materials;
- (g) welding fumes, gases and arcs;
- (h) the traffic management system that controls traffic access both within the construction workplace and where there are public roads, road verges, road medians, footpaths and bicycle paths;
- (i) systems of work;
- (j) hazardous atmospheres including ignition sources;
- (k) storage of flammable and combustible substances such as paints, solvents, grease, oils, fuels, glues and sealants;
- (l) plant, including the transport, installation, erection, commissioning, use, repair, maintenance, dismantling, storage or disposal of plant;
- (m) hazardous manual tasks causing injuries such as back injuries, sprains, strains and occupational overuse injuries;
- (n) the interface with other works or trade activities;
- (o) the physical working environment, for example the potential for electric shock, immersion or engulfment, fire or explosion, slips, trips and falls, people being struck by moving plant, exposure to noise, heat, cold, vibration, radiation, static electricity or a contaminated atmosphere, and the presence of a confined space.

Known hazards on the site include:

- Asbestos;
-



- Confined Space;
- Overhead Lines;
- Buried Services;
- Underground power;
- Restricted criteria for plant shut-down;
- Slippery surfaces;
- Unstable ground conditions;
- Flammable Liquids;
- Fire risks eg. parking in long grass;
- Fauna & Flora.

A number of typical hazard profiles are available for guidance from the Principals website at:

[hunterwater.com.au/Building-and-Development/Approved-Designers-Suppliers-and-Contractors/Hazard-Profiles.aspx](http://hunterwater.com.au/Building-and-Development/Approved-Designers-Suppliers-and-Contractors/Hazard-Profiles.aspx)

and from the NSW WorkCover Authority's website at:

[workcover.nsw.gov.au/formspublications/pages/default.aspx](http://workcover.nsw.gov.au/formspublications/pages/default.aspx)

Presentation of the above lists and hazard profiles do not relieve any person of their obligations under the WHS Act and WHS Regulation to identify hazards.

### **B21.3.2 Risk Assessment**

A risk assessment is not required when:

- (bb) legislation requires the hazard to be controlled in a specific way;
- (cc) controls are adopted from a code of practice that is applicable to the particular situation; or
- (dd) there are well known and effective controls for the particular situation.

Undertake risk assessments in accordance with chapter 3 of NSW WorkCover Authority's code of practice *How to Manage Work Health and Safety Risks, December 2011* available from NSW WorkCover Authority's website [workcover.nsw.gov.au](http://workcover.nsw.gov.au).

### **B21.3.3 Risk Control**

If it is not reasonably practicable to eliminate a health and safety risk, minimise the risk by doing one or more of the following:

- (a) substituting (wholly or partly) the hazard giving rise to the risk with something that gives rise to a lesser risk (eg: provide equipment to reduce manual handling);
  - (b) isolating the hazard from any person exposed to it (eg: provide physical barriers to keep pedestrians away from mobile plant);
  - (c) implementing engineering controls (eg: shoring of excavations to prevent collapse).
-



If a risk then remains, minimise the remaining risk, so far as is reasonably practicable, by implementing administrative controls (eg signage, training). Further minimise any remaining risk, so far as is reasonably practicable, by ensuring the provision and use of suitable personal protective equipment (eg hard hats, high visibility clothing, ear muffs).

Monitor the controls to ensure that they remain effective for as long as the hazard exists for the duration of the Contract.

#### **B21.3.4 Review Risk Controls**

Regularly review risk controls to make sure they work as planned. A review must be undertaken:

- (ee) when a control measure is not effective in controlling risk;
- (p) before a change at the workplace that is likely to give rise to a new or different health and safety risk that the control measure may not effectively control:
- (q) if a new hazard or risk is identified;
- (r) if the results of consultation indicate that a review is necessary; or
- (s) if an health and safety representative requests a review.

#### **B21.3.5 Risk Controls for Excavation**

Irrespective of whether or not there is a reasonable likelihood that earth, rock or other material will fall or dislodge from the face of an excavation, provide a shoring system, benching or battering to all excavation faces greater than 1.5 metres deep before any person enters the excavation. Any battering steeper than 45 degrees must be certified in writing by a geotechnical engineer as being stable.

Irrespective of measures taken to secure the site against unauthorised access, as far as reasonably practicable cover any excavations greater than 1.5 metres deep to prevent any person entering the excavation when the site is not attended.

#### **B21.3.6 Risk Controls for Electrical Equipment**

Comply with AS/NZS 3012:2010 Electrical installations – Construction and demolition sites.

Unless excluded under regulation 164 of the WHS Regulations, minimise electrical risks associated with the supply of electricity to 'plug in' electrical equipment by providing appropriate residual current devices with a tripping current that does not exceed 30 milliamps.

If there are reasonable grounds for believing that electrical equipment is unsafe, disconnect or isolate it from its electricity supply and do not reconnect it until it is repaired, tested and found to be safe, or replaced.

Arrange regular inspection and testing of all electrical equipment, including residual current devices, which is supplied with electricity through an electrical socket outlet or is used in an environment which is likely to result in damage to the equipment or a reduction in its expected life span, including conditions that involve exposure to moisture, heat, vibration, mechanical damage, corrosive chemicals or dust. Keep a record of any testing until the electrical equipment is next tested. Record the name of the person who carried out the testing, the date of the testing, the outcome of the testing and the date on which the next testing must be carried out. The record may be in the form of a tag attached to the electrical equipment tested. Ensure that electrical equipment is not used if the equipment is due for testing and has not been tested.

---



**B21.3.7 Risk Controls for Work on Energised Electrical Equipment**

Ensure that electrical work is not carried out on energised electrical equipment unless:

- (ff) it is necessary in the interests of health and safety that the electrical work is carried out while the equipment is energized;
- (t) it is necessary that the electrical equipment is energised in order for the work to be carried out properly;
- (u) it is necessary for the purposes of testing; or
- (v) there is no reasonable alternative means of carrying out the work.

Before electrical work commences on energised electrical equipment undertake a risk assessment, prepare a safe work method statement, ensure the area is easy to access and exit and the point at which the electrical equipment can be disconnected or isolated from its electricity supply is identified, easily accessed and capable of being operated quickly. Have a suitably qualified observer present during the work.

**B21.3.8 Traffic Control Plans**

Manage impacts on traffic by providing and implementing traffic control plans in accordance with *AS1742.3 Manual of uniform traffic control devices - Traffic control for works on roads* and *NSW Roads and Maritime Services: Traffic Control at Worksites Version 4*. Traffic control plans must be prepared by a person accredited for their preparation by NSW Roads and Maritime Service. Prepare separate traffic control plans for night and day work.

Liaise with the relevant local council or NSW Roads and Maritime Services traffic engineer to ensure all local requirements are taken into account in the traffic control plan, including any planned roadworks or special events likely to affect traffic volumes or flows.

Notify local councils, police, fire brigade, ambulance service and public transport companies if traffic is to be disrupted.

Engage traffic controllers accredited by NSW Roads and Maritime Services. Submit evidence of their accreditation before they begin work.

**B21.3.9 Safety Plan Documentation and Record Keeping**

Demonstrate that appropriate decisions have been made about controlling risks by documenting the decisions in a WHS Management Plan. Submit a draft safety plan 10 working days prior to the commencement of activities for which the safety plan applies, documenting:

- (gg) the identified hazards, assessed risks and chosen control measures (including any hazard checklists, worksheets and assessment tools used in working through the risk management process);
  - (hh) how and when the control measures are to be implemented, monitored and reviewed;
  - (ii) who was or will be consulted when risk management decisions are made;
  - (jj) all training requirements;
  - (kk) any plans for improvements or changes;
-



- (ll) any other specific records, plans, permits or approvals required by the WHS Regulation (such as those required for hazardous work under chapter 4 and for construction work under chapter 6 of the WHS Regulation); and
- (mm) details of the person(s) responsible for ensuring implementation, monitoring and compliance with the safety plan.

Submission of the documentation does not relieve the Contractor of any responsibility for ensuring compliance with the WHS legislation and the contract.

Adopt a system of routine and random workplace inspections to see if the control measures outlined in the safety plan are being implemented. Regularly review the safety plan to ensure that it remains effective.

Keep records that demonstrate compliance with all aspects of the safety plan, including the results of workplace inspections and any actions arising from those inspections.

#### **B21.4 WHS Management Meeting**

Arrange a meeting with the Principal for at least 14 days before commencing work on site under the Contract. At the meeting present:

- (a) the safety plan documentation required under clause 0;
- (b) the WHS Management Plan required under clause 0;
- (c) evidence of general construction induction training for all persons who have been engaged to work on the site, including persons engaged by a subcontractor;
- (d) list of hazards identified and proposed control measures relevant to the work; and
- (e) safe work method statements or a schedule of proposed safe work method statements and timetable for their submission; and
- (f) copies of any licences or permits required under the WHS Regulation.

#### **B21.5 The Principal Site Safety Rules**

In addition to any site safety rules adopted by the Consultant, all persons at workplaces on The Principal property must, as a minimum, comply with the following.

- **Workplace Specific Training.** Persons are only allowed to enter the workplace if they have been suitably informed, trained and instructed in the nature of any risks associated with their work or presence at the workplace and the controls measures to be adopted.
  - **Procedures, Signs and Instructions.** All persons must comply with safety procedures, posted signs and any instructions given by those persons having control of the workplace.
  - **Personal Protective Equipment.** All persons must wear footwear which provides protection to the entire foot. Thongs, sandals, high-heel or open-toe shoes are not permitted. All persons must wear long sleeve shirts, trousers and hat. Persons working on or near roads and other trafficable areas must wear high-visibility clothing. Persons using chemicals must wear the personal protective equipment as specified in the relevant material safety data sheet.
-



All persons in any part of the workplace designated as a construction site must wear safety helmets and safety footwear at all times. Safety helmets must comply with AS 1801 *Occupational protective helmets* and safety footwear must comply with AS 2210 *Occupational protective footwear*

- **Tags.** Equipment fitted with a Danger tag or an Out of Service tag must not be operated. The only person permitted to remove a Danger tag is the person named on the tag. Out of Service tags may only be removed by the person who fitted the tag, their supervisor or the maintenance worker who repaired the equipment.
- **Alcohol and Drugs.** No person is allowed to use or be in possession of any alcohol or illicit drugs while at a workplace on The Principal property. No person under the influence of any intoxicating substance is allowed at a workplace on The Principal property.
- **Smoking.** Smoking is not allowed on The Principal property.
- **Firearms, Weapons and Explosives.** Firearms, weapons and explosives are not permitted on The Principal property without explicit permission from The Principal's Representative.
- **Bullying, Harassment and Discrimination.** All forms of bullying, harassment and discrimination are not permitted at a workplace on The Principal property.
- **Emergencies.** All persons must be aware of, and comply with, their employer's emergency procedures.
- **Incident notification.** Workplace incidents, near misses and previously unidentified hazards must be reported immediately to supervisors.
- **Confined spaces.** No person is permitted to enter a confined space, including all sewerage structures and water reservoirs, unless they hold evidence of appropriate training.
- **Working at heights.** Fall prevention equipment must be adopted when working at heights of two metres or greater if appropriate fencing, handrails or barriers are not already provided.
- **Asbestos.** No person is allowed to bring asbestos in any form onto The Principal property.
- **Fire Prevention.** Provide suitable extinguishing equipment if work includes the use of flame or spark generating equipment. Avoid driving or parking motor vehicles on long dry grass as heat generated by the exhaust system can start a fire.
- **Housekeeping.** Keep work areas in a clean and orderly state and walkways free from obstructions. Store any materials, plant and equipment so that it doesn't present a hazard.
- **Electrical safety.** Worker's electrical appliances must be inspected and tagged prior to being used at a workplace on The Principal property.
- **Site Security.** Any unauthorized access must be reported immediately to supervisors.
- **Pets/animals.** Dogs, cats and other domestic animals are not permitted at workplaces on The Principal property.



**B21.6 Site Management****B21.6.1 Corporate WHS Management System**

For the duration of the Contract, maintain accreditation of a Corporate WHS Management System in accordance with the NSW Government *workplace Health and Safety Management System Guidelines, 4th edition*, available from the NSW Procurement website <http://www.procurepoint.nsw.gov.au/>. Comply with the accredited Corporate WHS Management System for the duration of the Contract.

**B21.6.2 WHS Management Plan**

At least 10 working days before commencing work on site under the Contract, submit a written WHS management plan which, as a minimum, includes all of the following information:

- (a) identification of The Principal as having commissioned the work and recognition that the Contractor is principal contractor for the purposes of the WHS Regulation;
- (b) for each workplace, the address of the workplace, anticipated start and end date of work at the workplace and type of construction work;
- (c) names, positions and health and safety responsibilities of all persons at the workplace having such responsibilities;
- (d) how persons conducting a business or undertaking at the workplace will consult, cooperate and coordinate activities between each other;
- (e) how safe work method statements will be collected, assessed, monitored and reviewed;
- (f) how subcontractors will be managed and monitored, how their compliance with the WHS management plan will be ensured and how non-compliances will be handled;
- (g) how work health and safety incidents will be managed, investigated and reported;
- (h) site-specific health and safety rules and how they are to be communicated to all persons at the workplace;
- (i) how the principal contractor's responsibilities are to be met;
- (j) if hazardous chemicals are to be used at the workplace, a hazardous chemicals register, safety data sheets and hazardous chemicals storage arrangements;
- (k) measures to be taken to ensure workplace security and public safety; and
- (l) arrangements for ensuring workers have appropriate licences and training to undertake the work.

**B21.6.3 Safe Work Method Statements**

Ensure that all high risk construction work is undertaken in accordance with safe work method statements prepared in accordance with section 4.2 of NSW WorkCover Authority's code of practice *Construction Work*. The code of practice is available from NSW WorkCover Authority's website [workcover.nsw.gov.au](http://workcover.nsw.gov.au).

High risk construction work is defined in regulation 291 of the WHS Regulation as construction work that:

- (a) involves a risk of a person falling more than 2 metres;
-



- (b) is carried out on a telecommunication tower;
- (c) involves demolition of an element of a structure that is load-bearing or otherwise related to the physical integrity of the structure;
- (d) involves, or is likely to involve, the disturbance of asbestos;
- (e) involves structural alterations or repairs that require temporary support to prevent collapse;
- (f) is carried out in or near a confined space;
- (g) is carried out in or near a tunnel or a shaft or trench with an excavated depth greater than 1.5 metres;
- (h) involves the use of explosives;
- (i) is carried out on or near pressurised gas distribution mains or piping;
- (j) is carried out on or near chemical, fuel or refrigerant lines;
- (k) is carried out on or near energised electrical installations or services;
- (l) is carried out in an area that may have a contaminated or flammable atmosphere;
- (m) involves tilt-up or precast concrete;
- (n) is carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor that is in use by traffic other than pedestrians;
- (o) is carried out in an area at a workplace in which there is any movement of powered mobile plant;
- (p) is carried out in an area in which there are artificial extremes of temperature;
- (q) is carried out in or near water or other liquid that involves a risk of drowning; or
- (r) involves diving work.

The primary purpose of the safe work method statement is to enable those at the workplace to understand the requirements that have been established to carry out the high risk construction work in a safe and healthy manner.

Submit draft safe work method statements 5 working days prior to the commencement of the activities for which the safe work method statements apply. Submission of the safe work method statements does not relieve the Contractor of any responsibility for ensuring compliance with the WHS legislation and the Contract.

Adopt a system of routine and random workplace inspections to see if the control measures outlined in the safe work method statements are being implemented. If the work subject to a safe work method statement is not being carried out in accordance with the safe work method statement, suspend the work immediately or as soon as it is safe to do so. Work must not resume until the work can be carried out in accordance with the safe work method statement.

Regularly review each safe work method statement to ensure that they remain effective. Specifically, review and revise any safe work method statement if a relevant risk control is revised. Undertake the review process in consultation with workers who may be affected by the operation of the safe work method statement and their health and safety representatives. Ensure that all relevant supervisors

---



and workers are advised of the revision in a manner that will assist them to understand and implement the revised safe work method statement.

#### **B21.6.4 Site Attendance Register**

Maintain a register on site of all persons attending the site including employees, subcontractors and visitors. Ensure that all persons attending the site sign in upon arrival and sign out when leaving the site. Check the register at the end of each day to ensure that all persons have left the site and are accounted for.

#### **B21.6.5 Site Security**

As a minimum, provide fencing at least 1800mm high to prevent unauthorised access to the construction site where practicable or, to the extent that unauthorized access cannot be prevented, to isolate hazards within the workplace, including stockpiles of materials and waste.

Materials stored by the Contractor shall be fenced entirely at all times. Contractor shall not rely on the Principal's security system at any time.

Provide an access gate in the perimeter fence to allow after hours access to the Principal to perform planned or emergency maintenance of the Principals Overhead Powerline network. The gate shall accommodate the Principal's lock. Keep access from the gate clear and safe at all times noting potential for limited visibility after hours.

#### **B21.6.6 Signage**

At each site on which work is being undertaken in view of the public, provide a sign displaying the current The Principal Corporation logo and stating the following in black vinyl lettering at least 50mm high:

CONSTRUCTION SITE

<Contractor's name>

Visitors report to <the location of the site office or supervisor>

PH : <Principal Contractor's phone number>

AH : <Principal Contractor's after hours phone number>

Contracting to The Principal Corporation

Signs shall be at least 450mm x 600mm x 0.8 mm thick colorbond steel sheeting coloured gloss white on the front face and green on the reverse face. Locate the signs so they are clearly visible from outside the workplace.

Signs should be fixed in place unless the workplace will only be a construction site while workers are in attendance (eg: work in the area is completed and full public access resumed in one shift), in which case relocatable signs (such as a sandwich-board style) may be used.

#### **B21.7 Consultation**

Consult with workers in accordance with NSW WorkCover Authority's code of practice *Work Health and Safety Consultation, Co-operation and Co-ordination* (available from NSW WorkCover Authority's website [workcover.nsw.gov.au](http://workcover.nsw.gov.au)) and consistent with an aim to ensure that sufficient information is collected to make well-informed decisions and that workers who may be affected by decisions are given a reasonable opportunity to express their views and understand the reasons for the decision.

---



## **B21.8 Information, Training, Instruction and Supervision**

### **B21.8.1 General**

Provide relevant information, training, instruction and supervision to protect all persons from risks to their health and safety arising from the work under the Contract. The information, training and instruction must be readily understandable by the person to whom it is provided and be suitable and adequate having regard to:

- (a) the nature of work carried out by the person;
- (b) the nature of risks associated with the work at the time of the information, training and instruction; and
- (c) the control measures implemented.

Supervisors must be aware of and provide the level of supervision necessary to ensure the health and safety of workers, including assessing worker's competency to undertake the work.

### **B21.8.2 General Construction Induction Training**

Do not direct or allow a worker to carry out construction work unless the worker has successfully completed general construction induction training and, if the worker completed the training more than two years previously, the worker has carried out construction work in the preceding two years.

Workers must hold and produce when requested:

- (a) a general construction induction training card issued under Reg 319 of the WHS Regulation; or
- (b) a general construction induction training certification that has been issued on completion of the course within the preceding 60 days.

General construction induction training must be provided by an organisation listed as a Registered Training Organisation for general construction induction training on [training.gov.au](https://training.gov.au).

### **B21.8.3 The Principal Inductions and Training**

Prior to commencement of work on site under the Contract, nominate key personnel who hold management and safety responsibilities to attend site-specific induction(s) provided by the Principal. Incorporate relevant information from the induction into training to be provided to all workers.

All workers undertaking work on site under the Contract must attend the Principal's General WHS Induction prior to commencing the work.

All workers undertaking electrical site work, and their supervisors, must attend the Principal's electrical induction training prior to commencing the work.

Where work is to be undertaken at a Water or Wastewater Treatment Plant the following requirements apply:

- If work is to be undertaken solely within a work area delineated and controlled by the Contractor as a Principal Contractor, then nominate key personnel only to attend Veolia's general and site specific inductions.
  - Otherwise, all workers must attend Veolia's general and site specific inductions prior to commencement of work. Furthermore, a permit to work must be obtained from Veolia for each work activity prior to commencement of work.
-



#### **B21.8.4 Workplace Specific Training**

Provide all workers with workplace specific training to make them aware of issues and arrangements relevant to the workplace including:

- (a) safety documents, policies and plans, including any WHS management plan and safe work method statements;
- (b) supervisory, consultation and reporting arrangements;
- (c) workplace safety rules, including first aid provisions and emergency procedures;
- (d) workplace facilities, including their location, use and maintenance;
- (e) emergency procedures, including after-hours emergency contacts;
- (f) health monitoring requirements and procedures;
- (g) access, egress and security;
- (h) workplace specific hazards and control measures;
- (i) how safety issues are resolved, including health and safety representative arrangements;
- (j) how to report hazards and unsafe work practices;
- (k) how to report accidents, incidents and dangerous occurrences;
- (l) what to do if a person is injured, including first aid provisions;
- (m) fire appliance selection and use appropriate for the various potential fire sources at the workplace (eg: electrical, liquids).

Provide suitably modified workplace specific training to any The Principal personnel who need to access the workplace to perform inspection, audit, management, maintenance or operations functions and to visitors.

Maintain a register on site identifying at least the persons provided with workplace specific training and the date trained.

#### **B21.8.5 Confined Space Training**

Comply with Regulation 76 of the WHS Regulation by ensuring that workers who are to enter a confined space, workers who are to carry out a function in relation to work in a confined space, and the supervisors of those workers, are provided with suitable and adequate information, training and instruction in relation to the following:

- (a) the nature of all hazards associated with a confined space;
- (b) the need for, and appropriate use of, risk control measures;
- (c) the selection, use, fit, testing and storage of any personal protective equipment;
- (d) the contents of any relevant confined space entry permit; and
- (e) emergency procedures;

Training must be by an organisation listed as a Registered Training Organisation for confined space training on [training.gov.au](http://training.gov.au). Assess competency every 2 years and provide re-training or refresher

---



training as necessary to maintain competency. Keep records of all training provided and competency assessments including at least the name of the person trained, an outline of the training, the date and duration of training and the name of the trainer and Registered Training Organisation.

Submit records of training and competency assessment prior to the commencement of confined space work on site.

Submit copies of all entry permits within 24 hours of the confined space being returned to service.

#### **B21.8.6 Licences for High Risk Work**

Do not allow any person to carry out any work listed in Schedule 3 of the WHS Regulation unless they hold an appropriate high risk work licence. Work which requires a high risk work licence includes, but is not limited to:

- (a) scaffolding;
- (b) dogging;
- (c) rigging;
- (d) operating a tower crane, derrick crane, portal boom crane, bridge and gantry crane, non-slewing mobile crane with a capacity exceeding three tonnes, or any slewing mobile crane;
- (e) operating a materials hoist or a personnel and materials hoist;
- (f) operating boom-type elevating work platform with a boom of 11 metres or more;
- (g) operating a concrete placing boom; and
- (h) operating a forklift.

#### **B21.8.7 Loadshifting Machine Operation Competency**

Do not allow any person to operate a wheeled or skid steer front end loader, backhoe or excavator unless the operator can demonstrate suitable competency or is under suitable supervision. Record details of how each operator's competency has been demonstrated including:

- (a) a signed written statement by a representative of the operator's employer or hirer that they have personally observed the operator working on the class of plant to be used under conditions similar to those likely to be experienced and the employer or hirer is satisfied that the operator is competent to do so without supervision;
  - (b) years of experienced operating the class of equipment as observed or verified by the operator's current employer or hirer;
  - (c) any certificates of competency previously issued by a regulator such as NSW WorkCover Authority;
  - (d) any statements of attainment or other nationally recognised qualification;
  - (e) any evidence of having completed training at an industry training school; and
  - (f) in the absence of any evidence under items (b), (c) or (d), the name(s) and extent of experience of those who have provided on-the-job training.
-



### **B21.9 Service Provider WHS Performance Report**

Each calendar month complete a Service Provider WHS Performance Report in the attached to this General Specification as ATTACHMENT A1 - SERVICE PROVIDER WHS PERFORMANCE REPORT. Submit the completed report no later than the 5th day of the next month. Payment for work under the Contract shall not be due until after submission of the completed Service Provider WHS Performance Report for the period for which payment is claimed.

### **B21.10WHS Incident Notification and Investigation**

In addition to the responsibilities under Part 3 of the WHS Act to immediately notify NSW WorkCover Authority of any Notifiable incidents and the General Conditions of Contract, also

Immediately notify the Principal and nominated The Principal Corporation personnel by a text message (SMS) of any Notifiable Incident or any other lost time injury, medical treatment injury or significant near miss. The notification must include:

- a) Name of contractor;
- b) Date and time of incident;
- c) Location of incident;
- d) Brief description of incident;
- e) Brief description of response / next steps.

The Principal shall provide details for the nominated The Principal Corporation personnel.

In the case of a Notifiable incident, ensure so far as is reasonably practicable, that the site where the incident occurred is not disturbed until directed or allowed by NSW WorkCover Authority unless necessary to assist an injured person, minimise the risk of a further Notifiable incident or at the direction of the police.

Submit, within 25 hours, copies to the Principal of any documents provided to NSW WorkCover Authority in relation to a Notifiable incident.

Record, investigate and analyse all incidents, work related illnesses and injuries and their causes in consultation with workers and their supervisors to bring about improvements in policies, standards, procedures, processes and work practices. Submit a written report detailing the investigation, analysis and proposed corrective actions within the period required in the General Conditions of Contract.

If any incident involves the failure of any plant or equipment, do not permit the continued use of the failed plant or equipment until it has been inspected, repaired and certified as fit for use by a qualified person (eg: structural engineer, electrician, mechanic) and the certification submitted.

### **B21.11 WorkCover Authority Inspections and Notices**

Immediately notify the Principal of any site inspection undertaken by a NSW WorkCover Authority inspector and of any Improvement, Prohibition, Investigation or Penalty Notices issued.

Submit, within 24 hours, a copy of such notices together with written details of the corrective action(s) taken to rectify the identified issue(s) and prevent recurrence.

---



**B21.12 Audits**

On request, make available all relevant WHS records, including those of subcontractors and suppliers, for the purposes of audit and surveillance. Provide all reasonable assistance during such audits, including attendance.

**B22. SAFE DESIGN****B22.1 Design for Full Life Cycle**

Undertake all design work ensuring, so far as is reasonably practicable, that the design is without risks to the health and safety of persons who are involved in, or maybe affected by, the construction, use, maintenance, repair or demolition of the structure (where *structure* has the meaning defined in the WHS Act and refers to anything that is to be constructed).

Integrate control measures early in the design process to eliminate or, if this is not reasonably practicable, minimise risks to health and safety throughout the entire life-cycle of the structure.

Comply with NSW WorkCover Authority's code of practice *Safe Design of Structures* (available from NSW WorkCover Authority's website [workcover.nsw.gov.au](http://workcover.nsw.gov.au)).

**B22.2 Preliminary Hazard Analysis and Consultation**

As early as practicable undertake a preliminary hazard identification in accordance with section 3.2 and table 2 of NSW WorkCover Authority's code of practice *Safe Design of Structures* (available from NSW WorkCover Authority's website [workcover.nsw.gov.au](http://workcover.nsw.gov.au)).

**B22.3 CHAIR Meetings**

CHAIR (Construction Hazard Assessment Implication Review) Safety in Design Tool is a systematic approach developed in conjunction with WorkCover. The primary aim of the CHAIR process is to identify and mitigate project specific safety risks associated with the construction and maintenance of new Works. CHAIR has been adopted by the Principal for use in the design process for all major capital works projects. A copy of the CHAIR Safety in Design Tool manual is available from WorkCover or from [workcover.nsw.gov.au](http://workcover.nsw.gov.au).

A copy of the CHAIR 1 meeting minutes is provided in an appendix. Address the identified safeguards as part of the design development.

Allow for attendance of relevant design personnel at a CHAIR meetings for each of the design submissions as follows:

CHAIR No. 2/3 – CHAIR 2 and CHAIR 3 aim to address construction and maintenance risks in the Detail Design phase. CHAIR 2 and 3 focus more on issues such as the method of construction and the maintenance and repair requirements of equipment. CHAIR 2 and 3 will be undertaken together following the receipt and review of the draft Detail Design and specification.

Allow 1 full day for attendance at each design submission (maximum of 7) CHAIR 2/3 meeting. Incorporate all outcomes from the CHAIR 2/3 into the Works, including identified methodologies.

The Principal will arrange a facilitator for the CHAIR meetings. The Principal will prepare and issue minutes of the CHAIR meetings.

Compile a risk register, highlighting those hazards which might be influenced by the design of the structure and possible ways that hazards could be eliminated or risks minimised. Update the register as the design progresses to record any new understanding of hazards and any actions taken or proposed to eliminate hazards or minimise risk.

---



Submit a copy of the updated register to the Principal's Representative when requested.

#### **B22.4 Control Measures**

As the design is developed, incorporate control measures into the design or specifications in accordance with section 3.3 and section 4 of NSW WorkCover Authority's code of practice *Safe Design of Structures* (available from NSW WorkCover Authority's website [workcover.nsw.gov.au](http://workcover.nsw.gov.au)).

Control measures for common hazards may be chosen from solutions known through common industry practice to suitably address the hazards. For uncommon or complex hazards, undertake a risk assessment to assist in determining the most appropriate control measures.

At an appropriate time near the end of design development, contact the Principal's Representative who will arrange a CHAIR-2 study workshop and a CHAIR-3 study workshop in accordance with NSW WorkCover Authority's *CHAIR Safety in Design Tool* (available from NSW WorkCover Authority's website [workcover.nsw.gov.au](http://workcover.nsw.gov.au)). Use these workshops to confirm that any residual hazards have been identified and that proposed control measures are appropriate.

#### **B22.5 Designer's Safety Report**

On completion of the design work, submit a written report in accordance with regulation 295 of the WHS Regulation, that specifies all hazards relating to the design of the structure that, so far as the Consultant is reasonably aware, create a risk to the health and safety persons who are to carry out construction work on the structure and are associated only with the particular design and not with other designs of the same type of structure.

Incorporate into the report:

- (a) information about any hazardous materials or structural features to be used or encountered during construction and the Contractor's assessment of the risks to construction workers arising from those hazards;
- (b) details of the actions the Contractor has taken to control those risks, for example, design features adopted;
- (c) all information required to be given by the designer under section 22 of the WHS Act including, but not limited to, any conditions necessary to ensure that the structure is without risks to health and safety during its construction or when used for a purpose for which it was designed.

### **B23. ENVIRONMENTAL MANAGEMENT**

#### **B23.1 Specification and Statutory Requirements**

The environmental management requirements contained in this Specification and any document referenced by this Specification, may be in addition to, but are not in substitution for, any statutory requirements and do not limit the liabilities and responsibilities of the Contractor.

#### **B23.2 Environmental Management Systems**

##### **B23.2.1 Project Environmental Management Plan**

Document and implement a Project Environmental Management Plan (EMP), which complies with the NSW Government "Environmental Management Systems Guidelines – Edition 2" (EMS Guidelines).

The Guidelines are available from the 'NSW Procurement' at:

Web site:

---



[http://www.nswprocurement.com.au/psc/nsw\\_government\\_guidelines/EMS-Ed2-Sept-2009.aspx](http://www.nswprocurement.com.au/psc/nsw_government_guidelines/EMS-Ed2-Sept-2009.aspx)

The EMP must include all elements described in Section 3 of the EMS Guidelines under "For all contracts" and all elements under "For major or environmentally significant contracts".

Submit the Project Environmental Management Plan no later than 10 days before construction work commences. Submit revisions to the Plan immediately after any revision and identify the revisions.

### **B23.3 Protection of Trees**

Keep disturbance of existing vegetation or natural features to a minimum. Any clearing must be in accordance with the relevant project Environmental Impact Assessment and approval. Clearly mark trees, which must be preserved and protected from damage during construction.

Prior to removal of any vegetation, notify the Principal to ensure all environmental approvals are received. The Principal may have additional requirements depending on extent of clearing.

### **B23.4 Erosion and Sediment Control**

The release of any sediment offsite must be prevented. Erosion and sedimentation controls must be installed wherever there is potential for the transportation of sediment. The controls must be appropriate for the site. Erosion and sediment controls must be installed in accordance with "*Managing Urban Stormwater: Soils and Construction – Volume 1, 4<sup>th</sup> Edition*" and "*Managing Urban Stormwater: Volume 2A Installation of Services*".

<http://www.environment.nsw.gov.au/stormwater/publications.htm>

Erosion and sediment controls are to be removed only once an area is stable.

### **B23.5 Environmental Mitigation Measures**

A Review of Environmental Factors has been prepared. The following is a list of the mitigation measures to be included in the CEMP/

#### **B23.5.1 General**

- Induct all onsite employees (including sub-contractors) on the environmental sensitivities of the work sites and relevant safeguards.

#### **B23.5.2 Topography, geology & soils**

- Prepare an Erosion and Sediment Control Plan (ESCP) as part of an Environmental Management Plan (EMP), in accordance with Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004). The ESCP shall detail measures to minimise pollution, soil erosion and sedimentation into adjacent waterways, with special attention given to drainage line crossings.
  - Train all onsite employees (including sub-contractors) in accordance with the Erosion and Sediment Control Plan.
  - Establish all erosion and sediment control measures before excavation begins and keep them in place until all surfaces have been fully restored and stabilised.
  - Install sediment control devices (eg silt fences, straw bales wrapped in geotextile etc) parallel with the contours of the site and immediately downslope of any areas where the natural ground surface has been disturbed.
-



- Install appropriate erosion control devices around any spoil storage areas or stockpiles to control runoff and prevent sedimentation.
- Regularly inspect and maintain sediment and erosion control devices to ensure effectiveness over the entire duration of the Contract and cleaned out before 30% capacity is reached.
- Redirect upslope surface runoff around work areas by using diversion drains or other methods.

### **B23.5.3 Water quality / Hydrology - Drainage**

The storage and handling of fuels and chemicals shall comply with Australian Standard AS1940.

- Do not store or collect for disposal, chemicals, fuels, and/or waste, within or adjacent to drainage lines or unsealed surfaces.
- Keep a 'spill kit' on site at all times for potential chemical or fuel spills.
- Do not store fuel within the water catchment areas of the Hunter Water Special Areas unless in designated areas agreed by Hunter Water (such as appropriately bunded areas).
- Prepare an Incident Management Plan (IMP) as part of the EMP and include a contingency plan and emergency procedures for dealing with the potential spillage of fuel or other environmental incidents that may occur on the work site. The IMP shall contain procedures dealing with the unexpected onset of rainfall during the work period. Include notification procedures to be followed under the POEO Act in the event that there is potential material risk of harm if a spill occurs.
- If de-watering is required when installing poles, water shall will be pumped and either collected in tanks for appropriate disposed or filtered through geotextile fabric onto grass filter areas. Do not discharge water directly to waterways or wetlands.
- Wherever possible, reuse drilling water and lubricating fluids prior to disposal at a licenced waste management facility.
- Implement appropriate containment measures to ensure that all drilling fluids are captured and contained.
- Maintain vehicles and machinery to minimise the risk of any fuel leakage.
- Do not enter waterlogged areas or undertake works in low-lying areas during or immediately following rain, so as to minimise soil disturbance and impacts on surface water quality.

### **B23.5.4 Flora, fauna & ecosystems**

- Locate materials/equipment lay-down areas in cleared or degraded areas to prevent any damage to the surrounding plants or habitat. Show the location of materials/equipment lay-down areas in the EMP.
  - Do not store materials, plant or equipment within the drip-lines of any trees at the site(s) or near the site(s).
  - Do not drive vehicles or machinery outside the boundaries of designated access tracks/roads, in order to damage to vegetation.
  - Where access tracks/roads run alongside areas of natural bushland, install protective fencing or paraweb fencing along the boundaries of the track/road to prevent vehicles from inadvertently entering/damaging bushland where the HV upgrade works are being undertaken.
-



- If removal of weeds is required, undertake the removal in accordance with contemporary bush regeneration principles and practices.
- All weeds removed from a site are to be transported in a sealed container or bag and disposed of at a licenced waste disposal facility.
- Where works are being undertaken in a weed-infested area(s), clean all construction vehicles before they leave the site to prevent the spread of weed species.
- Do not clear native vegetation without the prior approval of Hunter Water.
- Prior to commencement of on-ground works, contact with wildlife carers is to be made to ensure they are willing to assist in treating injured animals if required. Their contact details are to be given to the site manager and kept in a location easily accessible by all site staff (e.g. site office). The licenced wildlife rescue groups in the project area is the Native Animal Trust Fund (NATF). Contact details are:

NATIVE ANIMAL TRUST FUND  
24 Hr Emergency Wildlife Rescue  
Hotline - 0418 628 483

- To prevent the inadvertent transmission of Root-rot Fungus (*Phytophthora cinnamomi*) into native vegetation along the power line corridors, prior to bringing any vehicles and equipment on-site, soil is to be removed from all equipment e.g. by washing down or brushing with a wire brush and disinfection of tyres and workers' boots undertaken.

#### **B23.5.5      Restoration Activities**

- Stabilise disturbed areas as soon as possible and in a progressive manner as works are completed.
- Where excavated soil is to be used in site restoration, excavate and stockpile it in sequential layers corresponding to the existing soil profile. Topsoil and leaf litter is to be removed first and windrowed in separate stockpiles of less than 1m in height on the upslope side of excavations. Replace soil layers sequentially so that the soil profile is restored as closely as possible to its pre-work status.
- Restore the natural landform of the site(s) as possible to the pre-works condition.
- Remove from the site all temporary erosion and sediment control devices such as silt-stop fencing at the completion of the works or when the site(s) are fully revegetated/stabilised.

#### **B23.5.6      Air quality & energy**

- Do not leave machinery and vehicles running or idling when not in use.
  - Promptly deal with odour or air pollutant emission complaints and eliminate the source wherever practicable.
  - Keep covered at all times during transportation all loads of excavated material, soil, fill and other erodible matter that are transported to or from the work site. Keep them covered until they are unloaded either for use at the work site, reuse or disposal at a licensed waste disposal facility.
  - Closely monitor for dust generation all work sites, general work areas and stockpiles and in the event of dry and/or windy conditions, water down (with clean water) or cover (via seeding or tarpaulins) the areas.
-



- Maintain vehicle and machinery exhaust systems so that exhaust emissions comply with the Clean Air Regulation under the Protection of the Environment Operations Act 1997.
- Keep site disturbance to the minimum required to ensure dust generation is controlled.
- Identify and implement, methodologies to minimise dust impacts to residents and adjoining public roads.

#### **B23.5.7 Heritage**

- Prior to commencing work induct all onsite employees (including sub-contractors) on requirements in regards to Aboriginal heritage by Hunter Water's archaeologist.
- If Aboriginal objects are discovered during operations (that are outside of an area where an Aboriginal Heritage Impact Permit applies), cease all work in the area and notify the Principal as soon as possible. The Principal will determine the preferred management approach and contact OEH and relevant local Aboriginal stakeholders, if required.
- If Non-Aboriginal heritage items that have not been previously recorded are discovered during the course of the project, cease all work in the area and the notify the Principal as soon as possible. The Principal will determine the preferred management approach and contact the local council and/or NSW Heritage Office, if required.
- Undertake the works in accordance with the conditions of any Aboriginal Heritage Impact Permit that is issued.

#### **B23.5.8 Visual environment**

- Maintain the site in an orderly manner.
- On completion of the works, remove from the work site(s) and any adjacent affected areas all vehicles, construction equipment, materials and refuse relating to the works.
- Restored work sites as close to their original condition as possible, any areas disturbed whilst undertaking the works.

#### **B23.5.9 Noise & vibration**

- Turn off all vehicles and plant when not in use.
- Avoid the operation of noisy plant/equipment during early morning and preferably only operate the noisy plant/equipment between 9.00 am and 4.00 pm where audible to sensitive noise receivers.
- Fit all stationary and mobile equipment with residential type silencers.

#### **B23.5.10 Traffic & access**

- Prepare a Traffic Management Plan in consultation with the relevant traffic authority(s).
  - Use appropriate exclusion barriers, signage and site supervision at all times to ensure that the work site is controlled and that unauthorised vehicles and pedestrians are excluded from the works area.
-



- All traffic control devices are to be in accordance with AS 1742.3-1996 "Traffic control devices for works on roads".
- In the Traffic Management Plan define vehicle access routes to and within the site(s).
- Do not obstruct access roads or tracks outside of work hours.
- Prevent the tracking of soil and mud onto public roads with the use of wash facilities. If soil and mud are tracked onto roads clean it up immediately.

#### **B23.5.11 Land use, services & public amenity**

- Repair, in consultation with the owner, any damage to property which occurs as a result of the works.
- Maintain a complaints register. Responded as soon as possible to any complaints received.
- All services in the vicinity of the works are to be located in the field and 'pegged-out' and noted in the Environmental Management Plan and/or work plans prior to excavation works - "dial 1100 before you dig".
- Notify Port Stephens Council of any works that are to occur within road reserves managed by council i.e Masonite Road, Medowie Road, Grahamstown Road, Italia Road.
- Notify RMS of any works that are to occur within road reserves managed by RMS ie Richardson Road and Pacific Highway

#### **B23.5.12 Waste generation**

- Reuse or remove from the work areas, as soon as practicable, all waste generated during the course of the works. Dispose of waste in accordance with waste regulations.
- Submit documentation to demonstrate the lawful disposal or reuse of waste.
- All vessels used for contaminated or hazardous waste are to be sealed, labelled according to their contents and stored within bunded areas until they are removed from the work site.
- Collect using absorbent any fuel, lubricant or hydraulic fluid spillages and dispose of contaminated material at a licensed waste facility.
- At the completion of the works, leave the work site(s) clean and free of weeds, debris and other rubbish.
- Remove from site and dispose of all hazardous wastes in accordance with the state and national regulations and guidelines and best practice for the removal of these materials.
- Detail in the EMP, the recycling and reuse of materials.
- Remove from the site and dispose of at a licensed facility, any excess spoil material that cannot be reused or recycled.
- Dispose of waste of in accordance with the Waste Classification Guide (DECC 2008).

#### **B23.5.13 Bush fire**

- Include in the EMP a Bush Fire Plan. Detail in the Bush Fire Plan procedures:
  - to ensure the risk of fire ignition as a result of the works is minimised,



- to ensure personnel are trained in the implementation of appropriate safeguards and
- in the event of a bush fire for relocation machinery and evacuating people from the site.

### **B23.6 Contamination Management Plan**

Prepare, submit and implement a Contamination Management Plan (CMP) for the Works.

The CMP must address all contamination issues for the works under the contract, including but not limited to the following:

- (a) **Contaminated Soil Management:** Due to leaks or spills of transformer oils, the soils beneath and or surrounding the high voltage equipment has the potential to be contaminated. The CMP must include detail on:
- i. Contaminated soil delineation and validation, including what methods and techniques, the Contractors intends to use to delineate contamination either, prior to excavation or during excavation. Details shall also be provided on and what methods and techniques the Contractor will use to validate the suitability of the residual ground surface following excavation
  - ii. Soil handling and management processes which minimise the risk of cross contamination (including equipment decontamination procedures), and maximises the opportunities for the onsite re-use of suitable materials
  - iii. Odour mitigation, where required
  - iv. Management of unexpected contamination and/or finds, including details on how the Contractor will manage contaminated soil if encountered in an unexpected location.
- (B)**Waste Classification:** Wastes created in connection with the Contractor's activities must be managed in accordance with this Contract and all applicable Law. The CMP must include detail on:
- i. How waste will be classified in accordance with the NSW Environmental Protection Authority (EPA) Waste Classification Guidelines Part 1: Classifying Waste (DECCW 2009) and is to include details on how the Contractor intends on assessing treated timber poles in accordance with the general immobilisation approvals 2001/11 (for CCA treated timber), 2001/12 (for creosote treated timber) and 2000/8 (for Tanalith E treated timber)
  - ii. How the Contractor will recover resources from waste where this is a benefit and does not harm, or potentially harm, the environment or human health. This must be completed in accordance with the resource recovery exemptions under part 6 clause 51 and 51A of the Protection of the Environmental Operations (Waste) Regulation 2005. Particularly, but not limited to, The excavated natural material exemption, 2008, The recovered aggregate exemption 2010 and The "batch process" recovered fines exemption September 2010
  - iii. Identification and use of appropriately licensed waste transporters and facilities. The contractor must ensure the relevant parties hold all relevant approvals for the storage, treatment, transport and disposal of the contaminated soil or other waste. Evidence of such approvals must be provided to the Principal's Representative, prior to the use of the nominated facility or transporter
  - iv. Reporting to the Principal's Representative on the amount of waste generated, the waste classification, and evidence that the waste materials were transported, stored, treated, disposed or recycled by the appropriately licensed facility as nominated prior to the works.

(c)**Polychlorinated Biphenyls (PCBs):** Transformers and/or capacitors nominated within the works are known to have PCB's with concentrations greater than 2mg/kg. Transformer oil or capacitors containing PCBs at a concentration of greater than 2mg/kg are considered to be a scheduled PCB waste for the purposes of disposal, and must be

---



transported, treated or disposed of by an appropriately licensed contractor in accordance with the requirements of the NSW EPA. The CMP must include detail on:

- i. How PCB wastes will be managed and disposed in accordance with the Polychlorinated Biphenyl (PCB) Chemical Control Order 1997 (the PCB CCO) and the requirement of the NSW EPA
- ii. Identification and use of appropriately licensed waste transporters and waste facilities. The Contractor must ensure the relevant parties hold all relevant licences and approvals for the storage, treatment, transport and disposal of the PCB waste. Evidence of such approvals must be provided to the Principal's Representative, prior to the use of the nominated transporter or facility
- iii. Reporting to the Principal's representative on the amount of PCB waste generated, the waste classification, and evidence that the PCB waste materials were transported, treated, disposed or recycled by the appropriately licensed facility as nominated prior to the works.

**(D)Asbestos:** Asbestos and asbestos contaminated soils has been identified on selected Site(s) and the Contractor is to ensure the asbestos impacted sites are assessed by an occupational hygienist in accordance with Working with Asbestos (NSW WorkCover 2008) and a site specific Asbestos Management Plan developed, submitted and thereafter implemented, where required. The CMP must include detail on:

- i. The removal of materials known or suspected to contain asbestos by an appropriately licensed contractor in accordance with the NOHSC Code of Practice for the Safe Removal of Asbestos, 2nd Edition [NOHSC:2002(2005)] and relevant NSW WorkCover guidelines
- ii. Identification and use of appropriately licensed Asbestos waste transporters and waste facilities. The contractor must ensure the relevant parties hold all relevant licences and approvals for the storage, treatment, transport and disposal of the Asbestos waste. Evidence of such approvals must be provided to the Principal's Representative, prior to the use of the nominated transporter or facility
- iii. Reporting to the Principal's Representative on the amount of asbestos waste generated, the waste classification, and evidence that the asbestos waste materials were transported, and disposed at the appropriately licensed facility as nominated prior to the works.

**(E) Lead Paint:** There is the potential for the presence of lead paint on selected Site(s) and the Contractor is to ensure the lead paints are managed in accordance Australian Standard AS4361.1 Guide to Lead Paint Management - Industrial Applications, the requirements of the NSW EPA and all applicable law. The Contractor's CMP must include details on:

- i. The identification, removal and tracking of materials known or suspected to contain lead paint, including specific details on how the Contractor will manage lead paint waste in accordance with the requirements of the NSW EPA
- ii. Identification and use of appropriately licensed waste transporters and waste facilities for the disposal of lead paint waste. The contractor must ensure the relevant parties hold all relevant licences and approvals for the storage, treatment, transport and disposal of the lead paint waste. Evidence of such approvals must be provided to the Principal's Representative, prior to the use of the nominated transporter or facility
- iii. Reporting to the Principal's Representative and EPA on the amount of lead paint waste generated, the waste classification, and evidence that the lead paint waste materials were transported, and disposed at the appropriately licensed facility as nominated prior to the works.

**(F) Sampling and Analysis:** The management of contamination during the works will require the Contractor to collect and have analysed various samples. The CMP must include detail on:

- i. Sample collection and handling, including sample collection techniques compliant with the requirements of guidance documentation endorsed by the NSW EPA, and the National
-



Environmental Protection (Assessment of Site Contamination) Measure, 1999 (National Environmental Protection Council)

- ii. Sample analysis, including a list of contaminants of concern with the individual site(s), nomination of independent analytical laboratories (primary and secondary), the analytical techniques, the laboratory limit of detection for each chemical compound, procedures for the dispatching of samples to laboratories, and quality assurance and quality control procedures.

**(G) Personnel:** Indicate the names, responsibilities and authority of the site management personnel for implementing the CMP, monitoring its effectiveness, rectifying any deficiencies and keeping of records. The nominated personnel must have appropriate qualifications and experience in the management of contamination, and evidence of personnel experience and qualifications are to be provided to the Principal on request. The Contractor must nominate a member of the site management team who is authorised contact person for the Principal, the Principals Representative and the NSW EPA.

Submit a copy of the CMP with the EMP. Submit revisions to the Plan immediately after any revision and identify the revisions.

## **B23.7 Contract Environmental Management Report**

### **B23.7.1 Waste Management**

Waste must be managed in accordance with the *“NSW Waste Classification Guidelines, DECC 2008”*.

Recycle and divert from landfill surplus soil, rock, and other excavated or demolition 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.

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.

Monitor waste volumes and record their 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.

Complete the Waste Management Progress Report details section (on the implementation of waste management measures) in ATTACHMENT A3 - CONTRACT ENVIRONMENTAL MANAGEMENT REPORT and submit within 5 calendar days of the end of each month. Records of waste disposal must be provided to the Principal as an attachment to the Waste Management Progress Report.

Report immediately to the Principal the details of any waste from the site which has been conveyed to or deposited at any place that cannot lawfully be used as a waste facility for that waste.

### **B23.7.2 Greenhouse Gases**

The National Greenhouse & Energy Reporting Act requires that the Principal measure and report on greenhouse gas emissions. Monitor and record all fuel consumption (and other energy where practical) associated with the work under the Contract.

Complete the Fuel Consumption Progress Report details section in ATTACHMENT A3 - CONTRACT ENVIRONMENTAL MANAGEMENT REPORT and submit within 5 calendar days of the end of each month.

---



**B23.7.3 Use of Gases**

Limit the use of chlorofluorocarbons and halons, or products or equipment manufactured using these gases and as far as practicable do not use any such gases or products on the Contract work which have not been notified at the time of Tender.

**B23.7.4 Environmental Incident Reporting**

Immediately notify by text message (SMS) the following The Principal personnel of any incident that causes or may cause degradation of the environment:

- a) Project Manager
- b) Project Controller
- c) Manager Infrastructure Delivery
- d) Chief Operating Office
- e) Manager Environment & Sustainability.

The text message must include the following information:

- a) Name of contractor;
- b) Date and time of incident;
- c) Location of incident;
- d) Brief description of incident;
- e) Brief description of response / next steps.

Supply a detailed report on the environmental incident to the Project Manager within 24 hours of the incident.

**B23.8 Aboriginal and cultural heritage impacts**

The Principal has identified that there are some areas which have high impacts of construction on known and unknown aboriginal artefacts. These areas will require a permit to move, relocate any artefacts. The Principal is in the process of seeking a permit. The Contractor shall not disturb any such areas without prior approval from the Principal. All requirements of the aboriginal Heritage Impact Permit must be met at all times. These requirements will be provided in the REF mitigation measures. Contractor must incorporate all REF mitigation measures in the Construction Environmental Management Plan.

**B23.9 Impacts on the ground water**

The work areas are within the Principals drinking water extraction sources. Avoid any contamination of ground water due to construction activities. Do not store fuels, oils and grease onsite. All chemicals must be bunded accordingly while within the borefields. The requirements specified in the REF mitigation measures must be strictly followed. Contractor must incorporate all REF mitigation measures in the Construction Environmental Management Plan.

---



## **B24. QUALITY MANAGEMENT**

### **B24.1 Product Compliance**

For products manufactured to an Australian Standard, submit evidence from the manufacturer which demonstrates compliance with the Australian Standard prior to shipment to site.

Satisfactory evidence includes:

- Product Certification supported by a sampling and testing plan,
- Minimum Sampling and Testing Frequency Plan required by the Australian Standard.

Submit records of testing required by the plans upon request or as directed.

### **B24.2 Monitoring and Audits**

The Principal and/or its agents may undertake monitoring and audits (including testing) to confirm that the Contractor, its subcontractors or suppliers are complying with the Contract.

Ensure that the Principal and/or its agents (including visitors authorised by the Principal) has access to all facilities, documentation, records and personnel that are needed by those persons for the carrying out of the monitoring and audits.

Ensure that the appropriate employees and representatives of the Contractor are available, as necessary, to discuss details of quality matters with the Principal and/or its agents (including visitors authorised by the Principal) during the above monitoring and audits.

### **B24.3 Quality Records**

- (b) ITPs and checklists;
- (c) inspection and test records obtained from subcontractors, manufacturers and suppliers; and
- (d) test results obtained from testing laboratories etc.

Ensure that the Quality Records are secure against deterioration, damage and loss and are suitably filed and indexed to allow convenient retrieval of individual records.

Retain Quality Records until issue of the Final Payment Certificate or submit as required by the Contract including at the request of the Principal.

### **B24.4 Failure to Comply**

If the Contractor fails to comply with the requirements of clause "Quality Management", the Principal may carry out such inspections and tests that the Principal determines and the cost incurred by the Principal shall be a debt due from the Contractor.

## **B25. INDUSTRIAL RELATIONS MANAGEMENT**

Comply with the NSW Government "Industrial Relations Management Guidelines" (IR Guidelines) for Project Category 3.

The Guidelines are available from NSW Procurement website at:-

<http://www.procurepoint.nsw.gov.au/>

---



Select “Reference Material” then “Procurement Guideline Documents” & then choose the appropriate guideline from list.

## **B26. APPRENTICE REPORTING**

Provide details in the form below, of 1<sup>st</sup> year Apprentices engaged on the project each month. Submit within 5 calendar days of the end of each month.

### **1st Year Apprentices engaged by Contractors on NSW Government funded projects, by primary work location**

Contract No./ Name:	Month:                      Year:
Contractor:	Signed:

Primary work location	Trade Qualification	Total Apprentices	Number of Indigenous Apprentices	Number of Female Apprentices	Comments

## **B27. PROGRAMMING**

### **B27.1 Format**

In addition to the requirements in the General Conditions of Contract, set out the program on a time scale of calendar weeks with individual activity durations not exceeding two weeks. The program shall show but not be limited to:

- a project calendar clearly denoting which days are work days (allow for restrictions on working time and contingencies for which the Contractor is responsible under the terms of the Contract. This would include but not be limited to week-ends, holidays, Christmas close-down, union designated and other days off and manufacture and trade delays);
- the plant and manpower resources for each activity;
- mobilisation to Site;
- appointment of subcontractors and their respective programs;
- order dates, supply lead time and Site delivery dates for all major items, including those to be supplied by the Principal, as well as details of off-site manufacturing and fabrication activities;
- any action for which the Principal is responsible;
- Pre-commissioning;
- Commissioning;
- the preparation and submission of O&M Information;
- the preparation and submission of WAC Information



- the estimated value of work completed for each calendar month for the contract duration;
- the differences or divergences from the tender program;
- proposed dates for connection to, or modification to The Principal Corporation assets.

### **B27.2 Daily Records**

Each day submit a certified Daily Record in the form at ATTACHMENT A2 - DAILY RECORD SHEET or equivalent.

### **B27.3 Failure to Comply**

If at any time the Contractor has not supplied a program, or Daily Record as specified, then notwithstanding other requirements of the Contract, payment will not become due to the Contractor before 7 days after the submission of the documents.

## **B28. REPORTING**

### **B28.1 Report Contents**

Within 5 calendar days of the end of each month, supply a written report for that month addressing the following issues:

- WHS Management: Refer clause 0 Service Provider WHS Performance Report
  - Updated Schedule of Safe Work Method Statements and status of the submissions. Refer Clause 0.
  - Quality Management: Results of audits completed by the Contractor (including those on subcontractors), status of development of Procedures, Method Statements and Inspection and Test Plans, identify any non-conformances and associated corrective and preventive actions.
  - Environmental Management: As required by the Environmental Management Plan including Waste Management Report (refer Clause 0) and Greenhouse Gas Report (refer Clause 0).
  - Industrial Relations Management: Industrial action (on site or off site) which may impact upon the work under the Contract, inspections of the site by union officials.
  - Community Consultation: Updated community consultation induction register (refer to clause 0), updated register of notifications issued (refer to clause 0).
  - Status of Third Party Complaints: Provide a register of all complaints received including source, date, time, issue, action/status. (refer to clause 0).
  - 1<sup>st</sup> Year Apprentices: Refer clause B26 Apprentice Reporting.
  - Works Progress: Provide an Extension of Time register which shows the status of actual and anticipated claims for Extensions of Time. Notwithstanding that an updated program is to be provided, report the Contractor's assessment of progress making reference to any activities which may be well behind or ahead of schedule, ability to achieve Completion by the date for Completion, action to be taken to improve progress if necessary.
-



- Variations/Claims for Extra Cost: Provide a variation/claim register that shows the status of actual and anticipated Variations/Claims for Extra Cost.
- Contract Payments: Provide a table of payment claims, payments received and predicted payment claims.
- Subcontract Matters: Provide a register of the work which has been or will be subcontracted and the name of the subcontractors.
- Requests for Information (Register): Details of correspondence for which a response from the Principal is outstanding.
- Status of WAC Information: Contractor's assessment of the status of preparation of the WAC Information and confirmation that the section/s of WAC Information will be submitted prior to Pre-commissioning.

### **B28.2 Failure to Comply**

If at any time the Contractor has not supplied the written report, Service Provider WHS Performance Report, or Contract Environmental Management Report as specified, then notwithstanding other requirements of the Contract, payment will not become due to the Contractor before 7 days after the submission of the documents.



## ATTACHMENT A1 - SERVICE PROVIDER WHS PERFORMANCE REPORT

Contract/Brief Name:		Month:	
Contract/Brief Number:		Prepared by:	
Service Provider:		Date:	
PERFORMANCE INDICATOR	Occurrences including subcontractors, subconsultants & employees		
	Current Month	Total to Date on Contract/Brief	Reported to HWC during month? Y/N
<b>Lost Time Injuries</b> <i>(incident that resulted in time lost of one day/shift or more)</i>			
<b>Total No. of Days Lost to above LTI's</b>			
<b>Medical Treatment Injuries</b> <i>(treatment administered by a doctor or hospital)</i>			
<b>First Aid Injuries</b> <i>(first aid treatment in the workplace)</i>			
<b>Near Misses</b> <i>(incident with no injury but potential for injury)</i>			
<b>Notifiable Occurrences reported to WorkCover</b>			
<b>Property Damage</b>			
<b>WHS Training (first day on site)</b>			
<b>WHS Training (later than first day on site)</b>			
<b>Workplace Inspections Carried Out</b>			
<b>Total hours worked by service provider</b>			
<b>Total hours worked by subcontractors/consultants</b>			

Details of the following information are attached as applicable:-

### Safe Work Method Statements

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 WHS Regulation.

### Inspections and Reviews

Summary of all WHS inspections and reviews carried out to identify hazards and ensure that risk management controls are being implemented and adhered to.

### WHS training

An up to date copy of the training register and details of all WHS training carried out.

### Incident management

Details of any WHS incidents (including near misses), WHS issues (including non-compliance with procedures) and proposed or completed corrective actions.



**Service Provider Comments**

---

---

---

---

I certify that all actions required by the Safety Plan / WHS Management Plan have been completed.

Name of Service Provider's Representative:

---

Signature:

---

Date:

---

**The Principal's Comments**

---

---

---

---

1	Number of audit / inspections carried out by HWC during the month	
2	Number of audit / inspections carried out by a third party during the month	
3	Meeting/s held with the Service Provider during the month?	Yes / No
4	Number of issues logged in Issue Management System during the month	

Name of The Principal Representative:

---

Signature:

---

Date:

---



**DATE :** \_\_\_\_\_ **WEATHER :** \_\_\_\_\_

Plant. No	Details	Hours Worked	Plant. No	Details	Hours Worked	Plant. No	Details	Hours Worked
1.	.....		5.	.....		9.	.....	
2.	.....		6.	.....		10.	.....	
3.	.....		7.	.....		11.	.....	
4.	.....		8.	.....		12.	.....	

Lab. No	Name	Hours Worked	Lab. No	Name	Hours Worked	Lab. No	Name	Hours Worked
1.	.....		5.	.....		9.	.....	
2.	.....		6.	.....		10.	.....	
3.	.....		7.	.....		11.	.....	
4.	.....		8.	.....		12.	.....	

[illegible]



Task No in Const Prog	Details of Work/Activity Performed, Location and milestone reached	Plant. No	Hrs	Lab. No	Hrs

**MATERIALS DELIVERED TO SITE**


**COMMENTS** (Including any delays, WorkCover inspection etc).




I ..... certify that the above information is correct.

(Name of Contractor's Representative)

This record does not satisfy the requirements for a "Notice" if required under the Contract.

Signature of Contractor's Representative: .....

Date : .....



## ATTACHMENT A3 - CONTRACT ENVIRONMENTAL MANAGEMENT REPORT

## CONTRACTOR - MONTHLY ENVIRONMENT REPORT

Please enter data into blue and yellow cells where relevant. Comments may be added at the base of the page. When calculating data include data relevant to Subcontractors working on the site as part of the project team. Do not include data that relates to Subcontractors who only make deliveries to the site.



REPORT FOR THE MONTH/YEAR OF

CONTRACT NUMBER

CONTRACT NAME

MY NAME

MY HWC PROJECT MANAGERS NAME

ENVIRONMENTUNITS

This Month

Reportable environmental incidents*	number	
Third party complaints	number	
Any prosecutions and penalty notices	number	

\* Provide detail on the nature of the incident at the base of the page

PEOPLE

Staff given environmental training #	number	
--------------------------------------	--------	--

# This may include specific environmental training or be part of site induction.

ENERGY USE

This Month

Biodiesel	litres	
Diesel	litres	
Ethanol	litres	
E10	litres	
Petrol (Unleaded)	litres	
LPG	GJ	



Natural Gas	GJ		
Electricity (If not supplied to site by HWC)	KiloWatts		From Bill

<u>TOTAL WASTE GENERATED THIS MONTH</u>		Waste Volume	Volume Recycled	% Recycled
Vegetation	Tonnes			0%
Concrete	Tonnes			0%
Soil or fill	Tonnes			0%
Asphalt	Tonnes			0%
Timber	Tonnes			0%
Bricks and roof tiles	Tonnes			0%
Metals - iron and steel	Tonnes			0%
Metals - non ferrous	Tonnes			0%
Plasterboard	Tonnes			0%
Plastics	Tonnes			0%
Glass	Tonnes			0%
Paper & Packaging	Tonnes			0%
Mixed general waste sent to landfill	Tonnes			
Co-mingled recycling waste(cans,bottles,etc)	Tonnes			
Contaminated/hazardous waste(ie.Asbestos)	Tonnes			

COMMENTS

For further information, please contact [roland.bow@hunterwater.com.au](mailto:roland.bow@hunterwater.com.au)



## Annexure 4 – Appendix A

---

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following

No.	Description	Number of Pages
1.		



## Annexure 5 – Appendix B

---

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 6 – Appendix C

---

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 7 – Appendix D

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 8 – Appendix E

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 9 – Appendix F

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 10 – Appendix G

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 11 – Appendix H

---

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 12 – Appendix I

---

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 13 – Appendix J

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 14 – Appendix K

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

No.	Description	Number of Pages
1.		



## Annexure 15 – Appendix L

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:

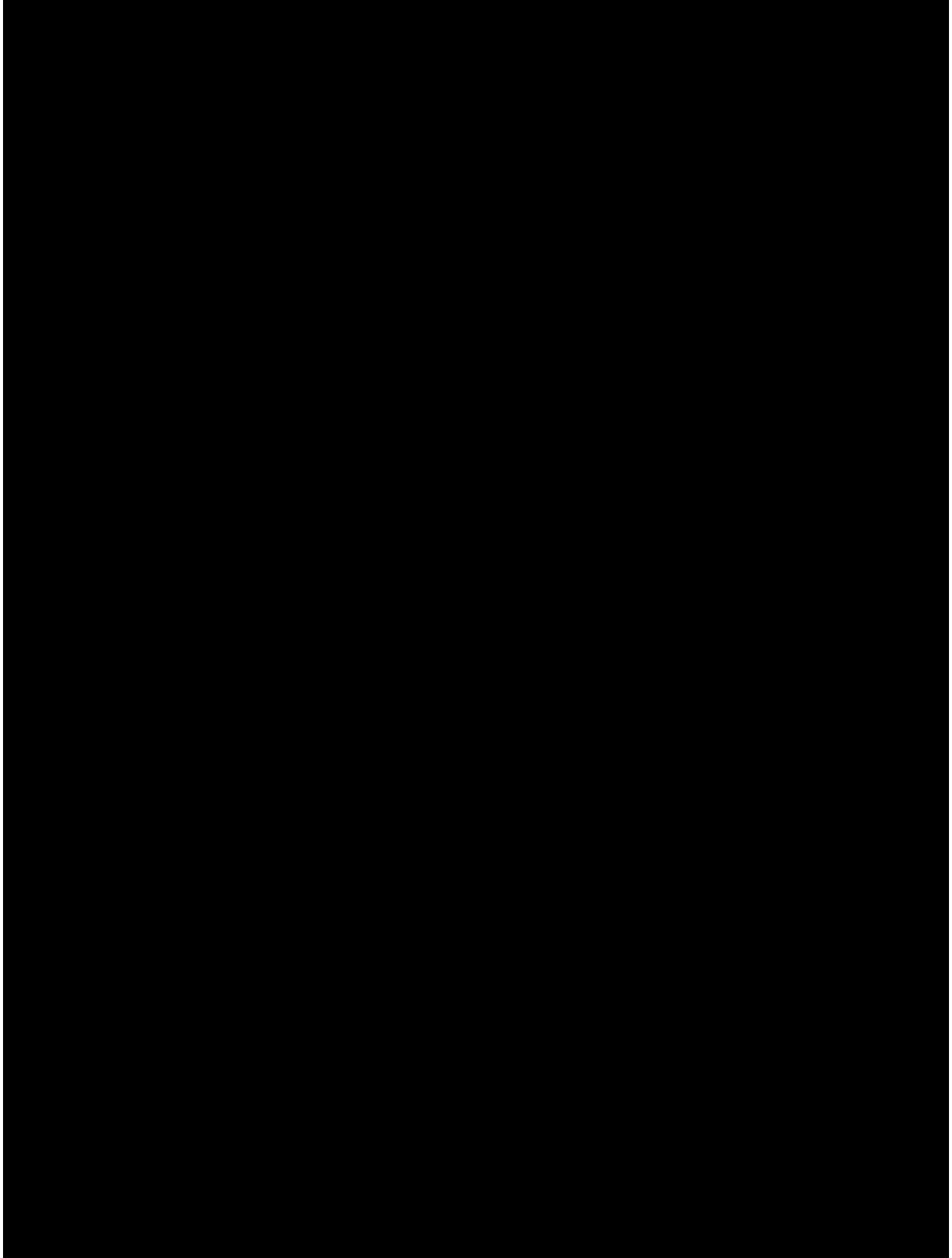
No.	Description	Number of Pages
1.		



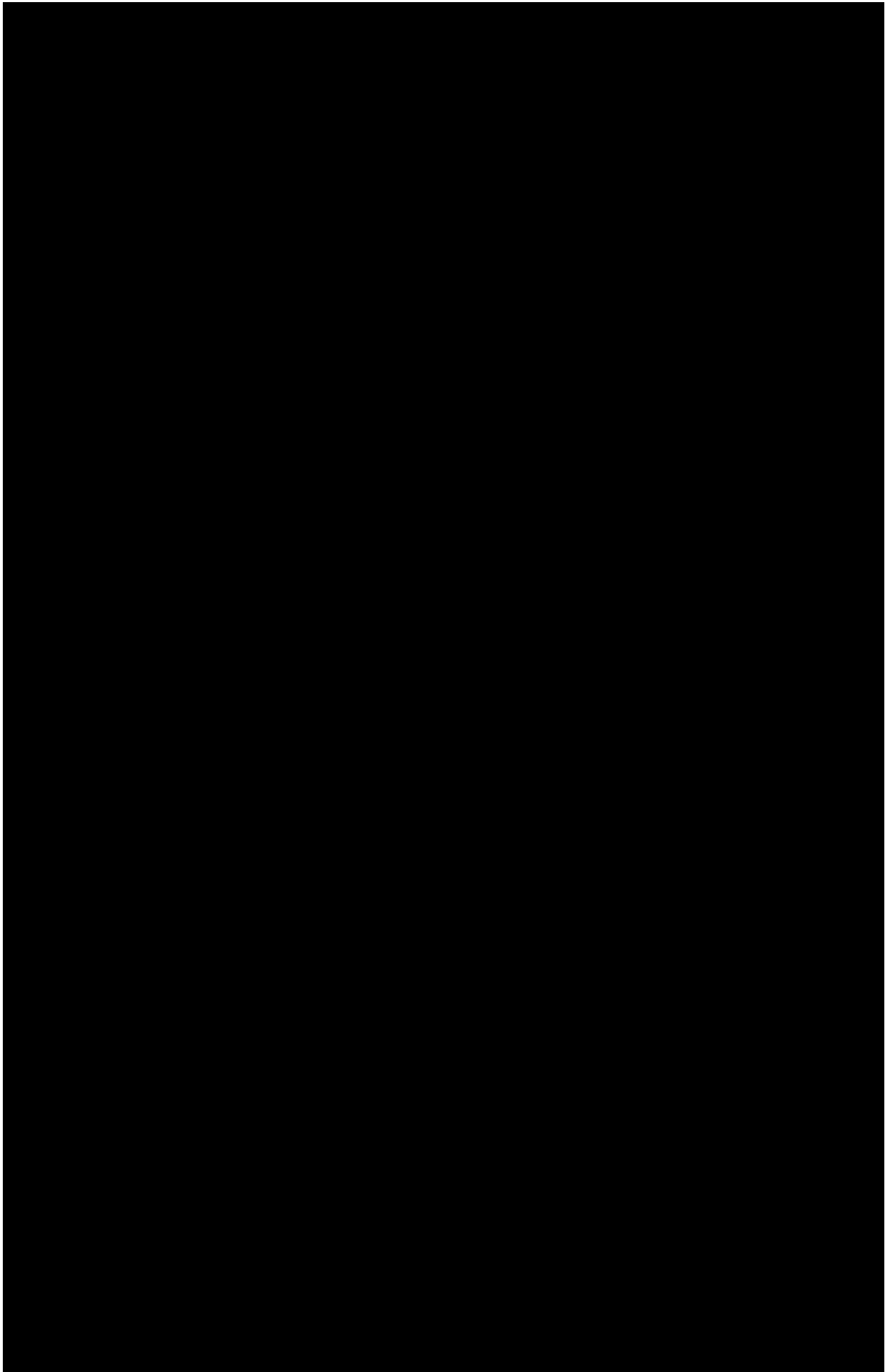
## Annexure 16 – Drawings

---

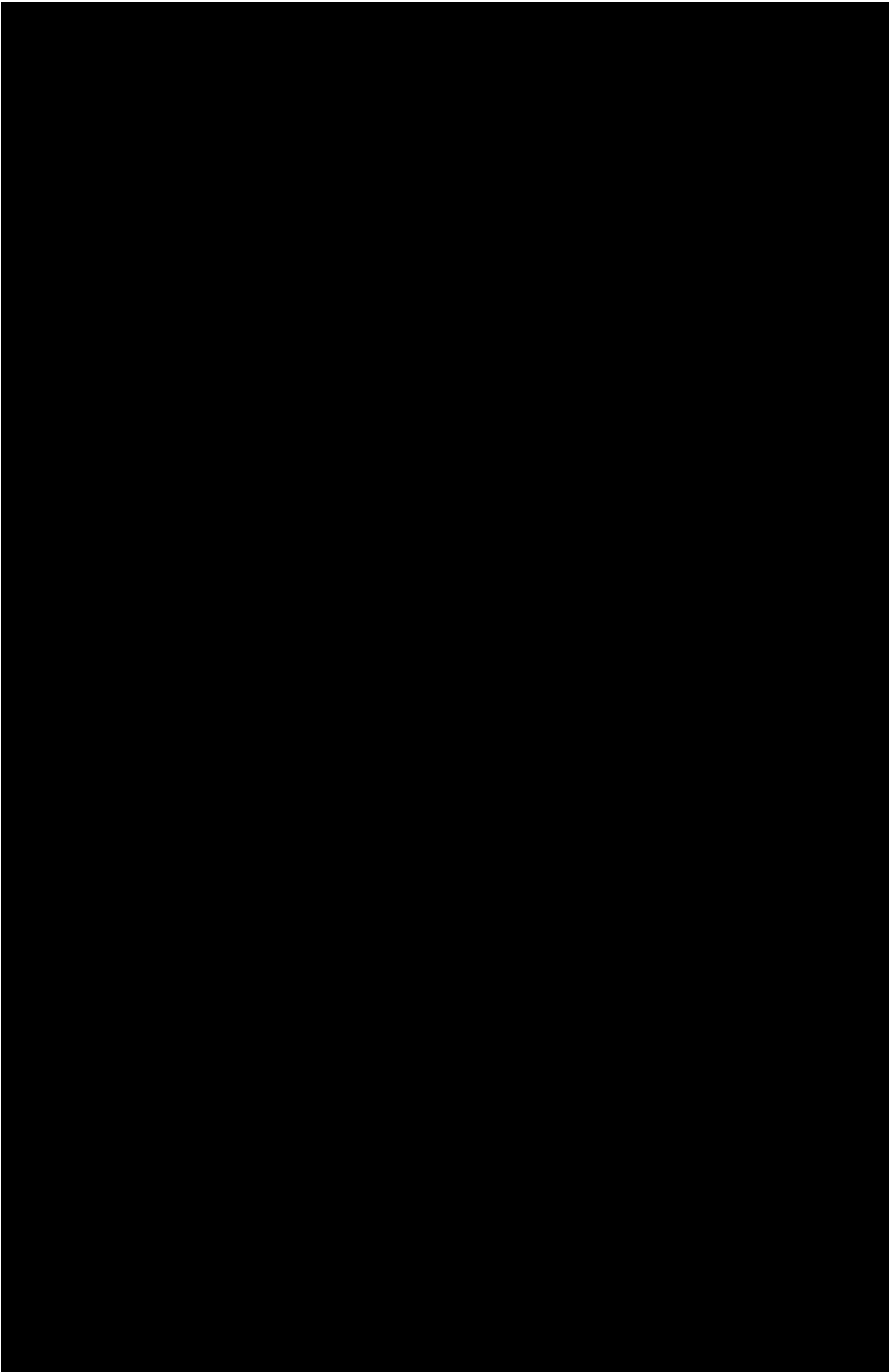
Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following:



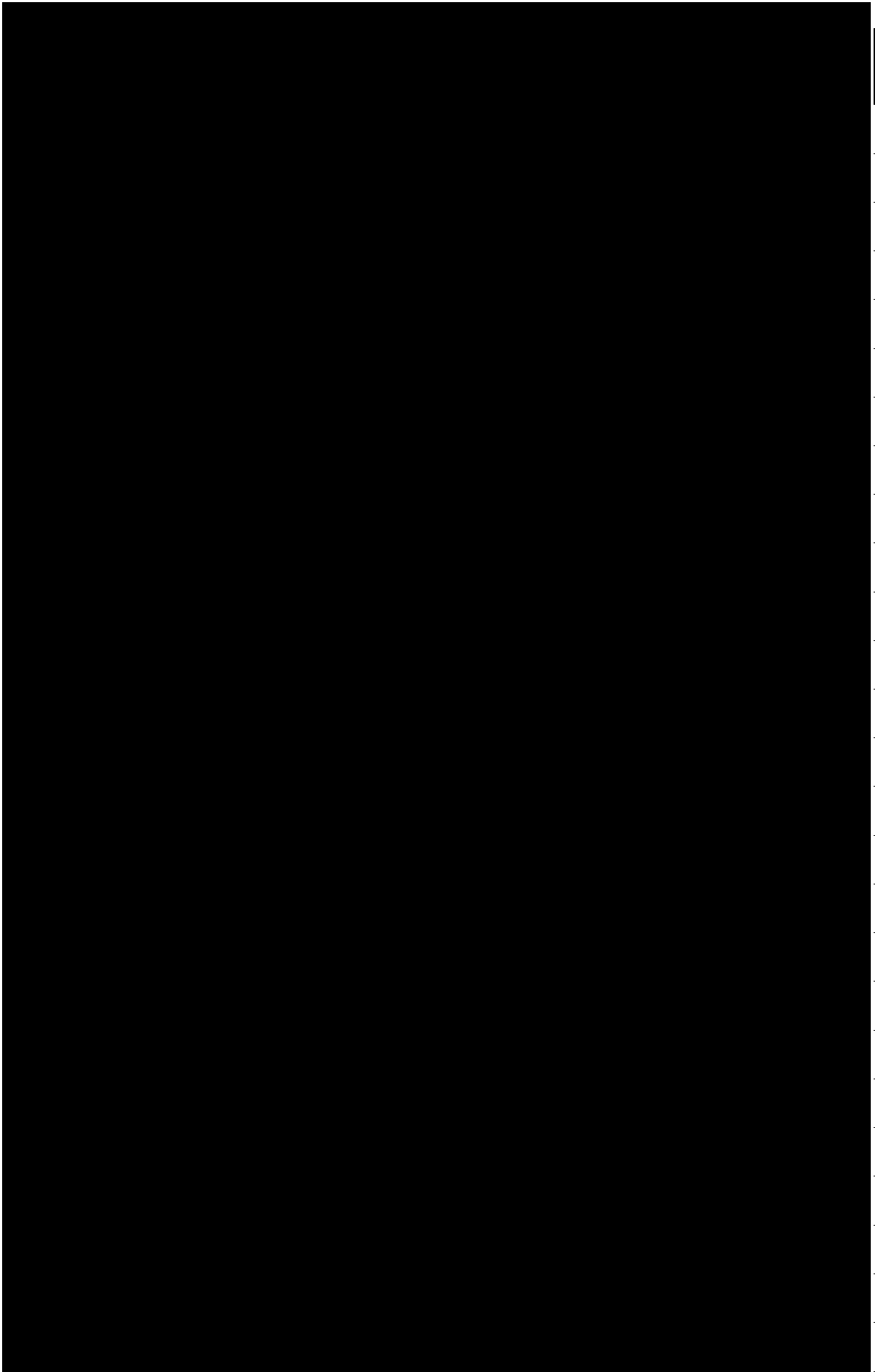




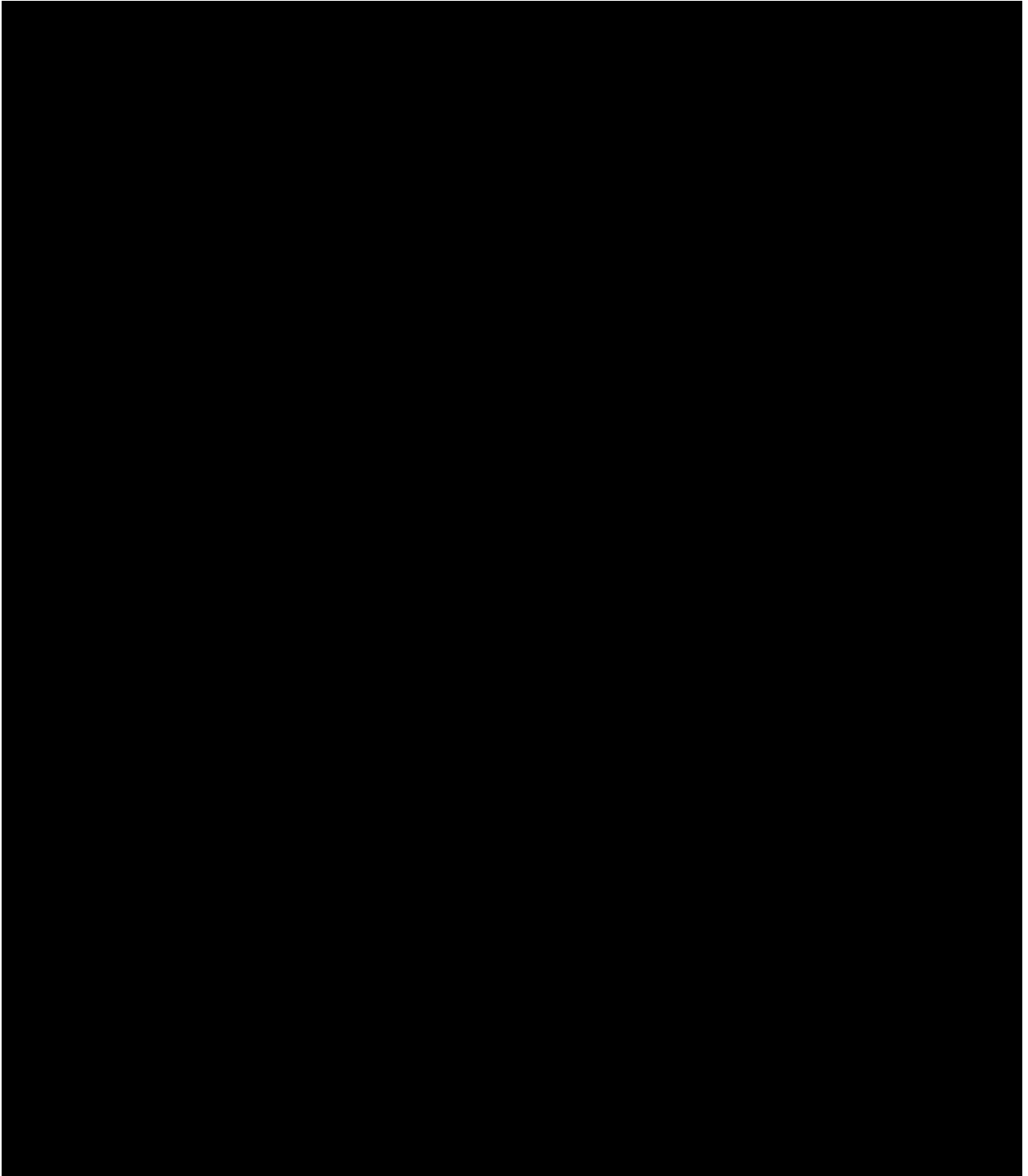














## Annexure 17 - Payment Milestones & Schedule of Rates



2. Lump Sum Price Breakdown

\$7 345 071.00

3. Schedule of Rates, Dayworks, Standby Rates

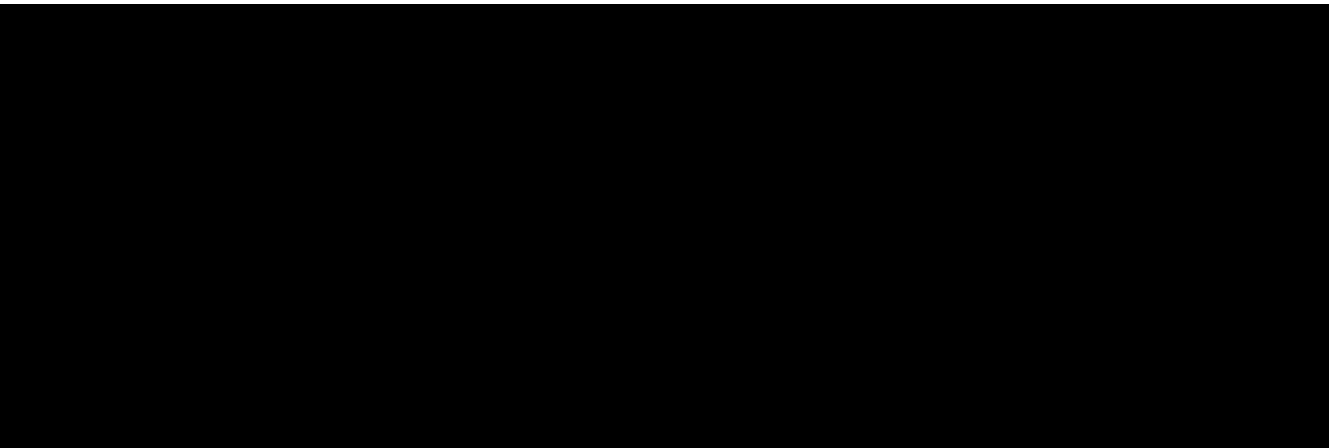
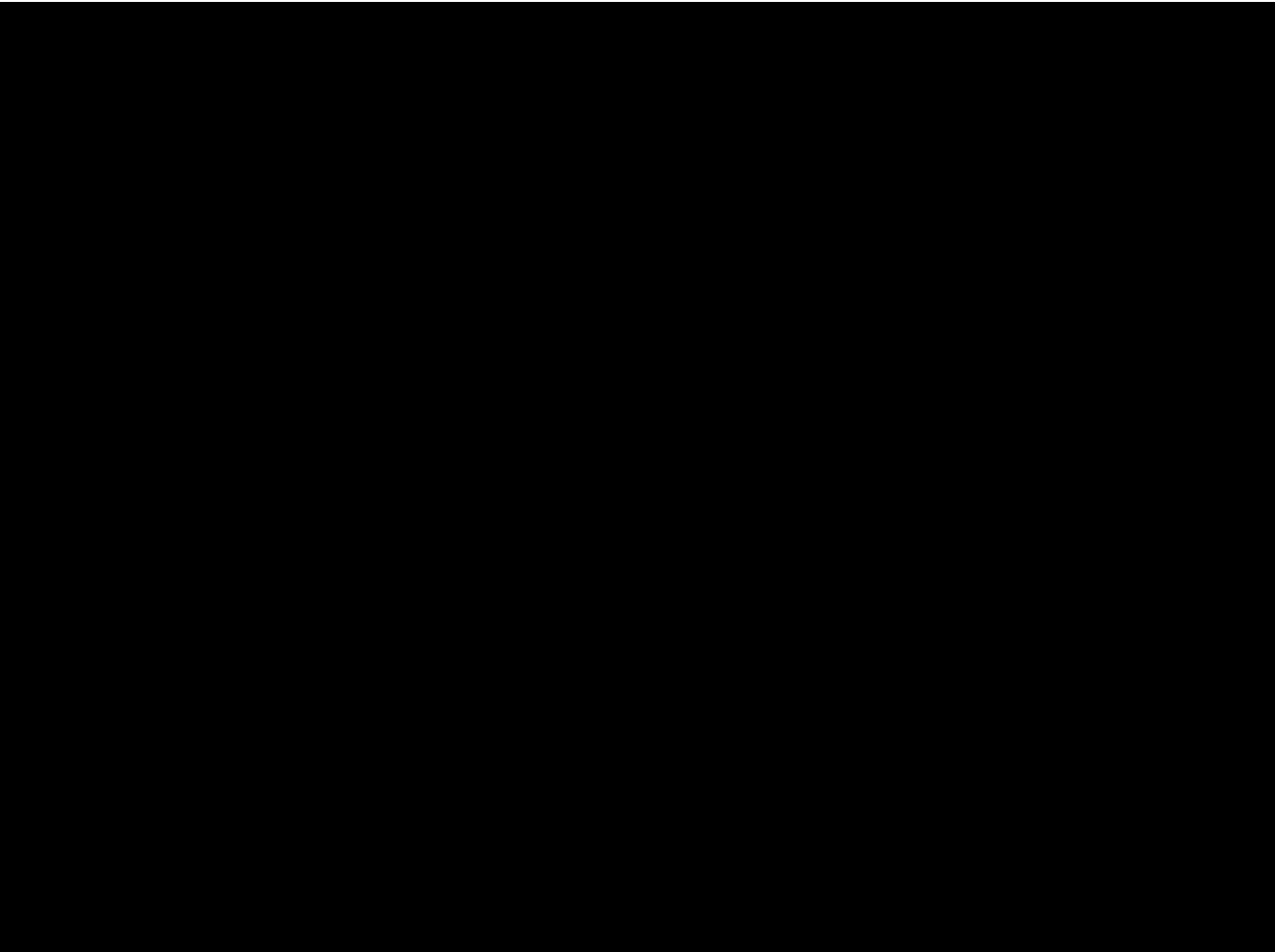
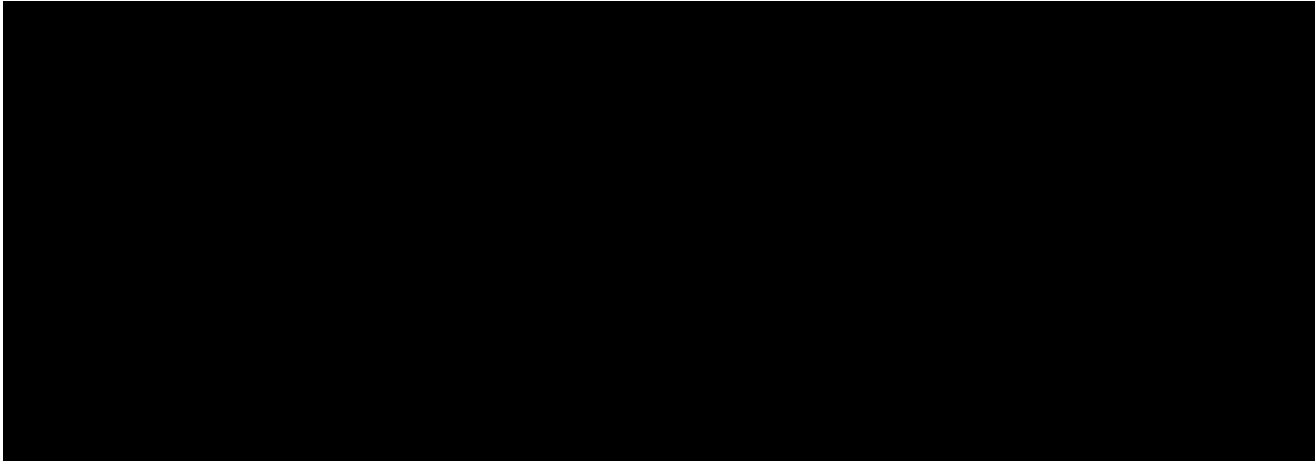
The LABOUR rates shall be deemed to be inclusive of wages, profit, overheads, supervision, tools and incidental charges.

The PLANT AND EQUIPMENT rates shall be inclusive of the operator's charges, profit, overheads, supervision, tools, fuel and incidental charges.

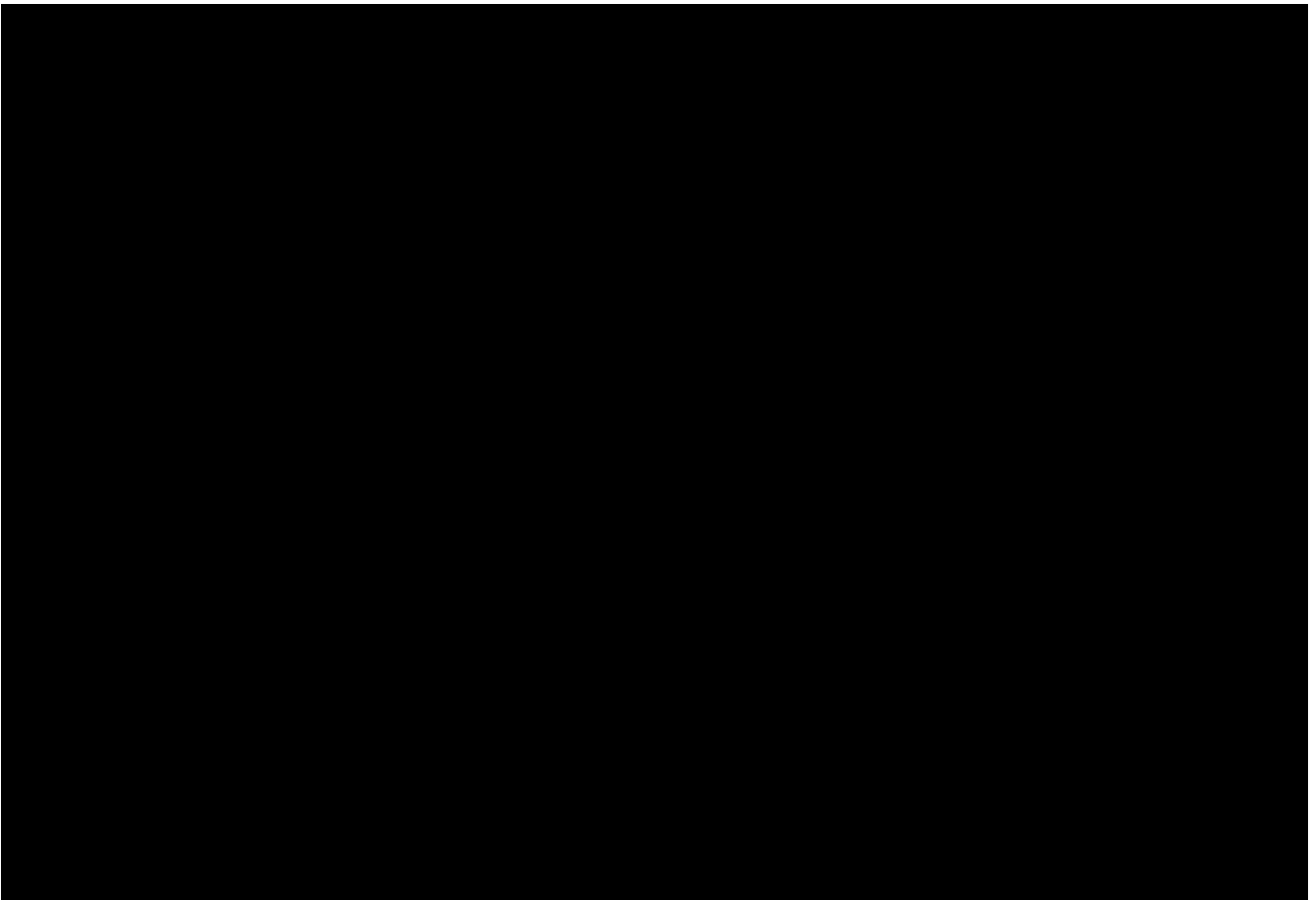
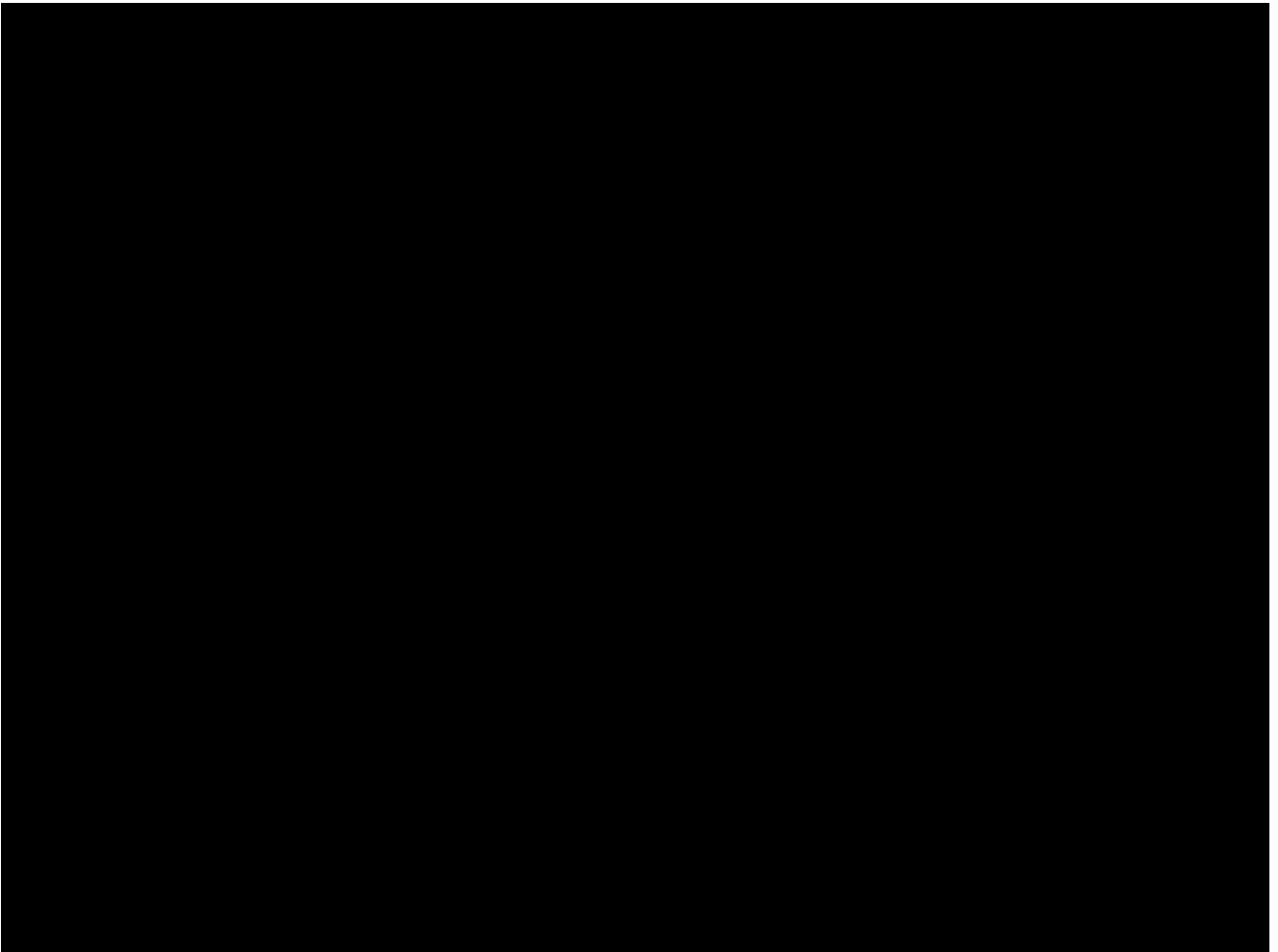
The MATERIALS shall be paid for based on the actual quantities of materials used.

The overtime rate only applies if the day work is carried out in excess of 10 hours per day

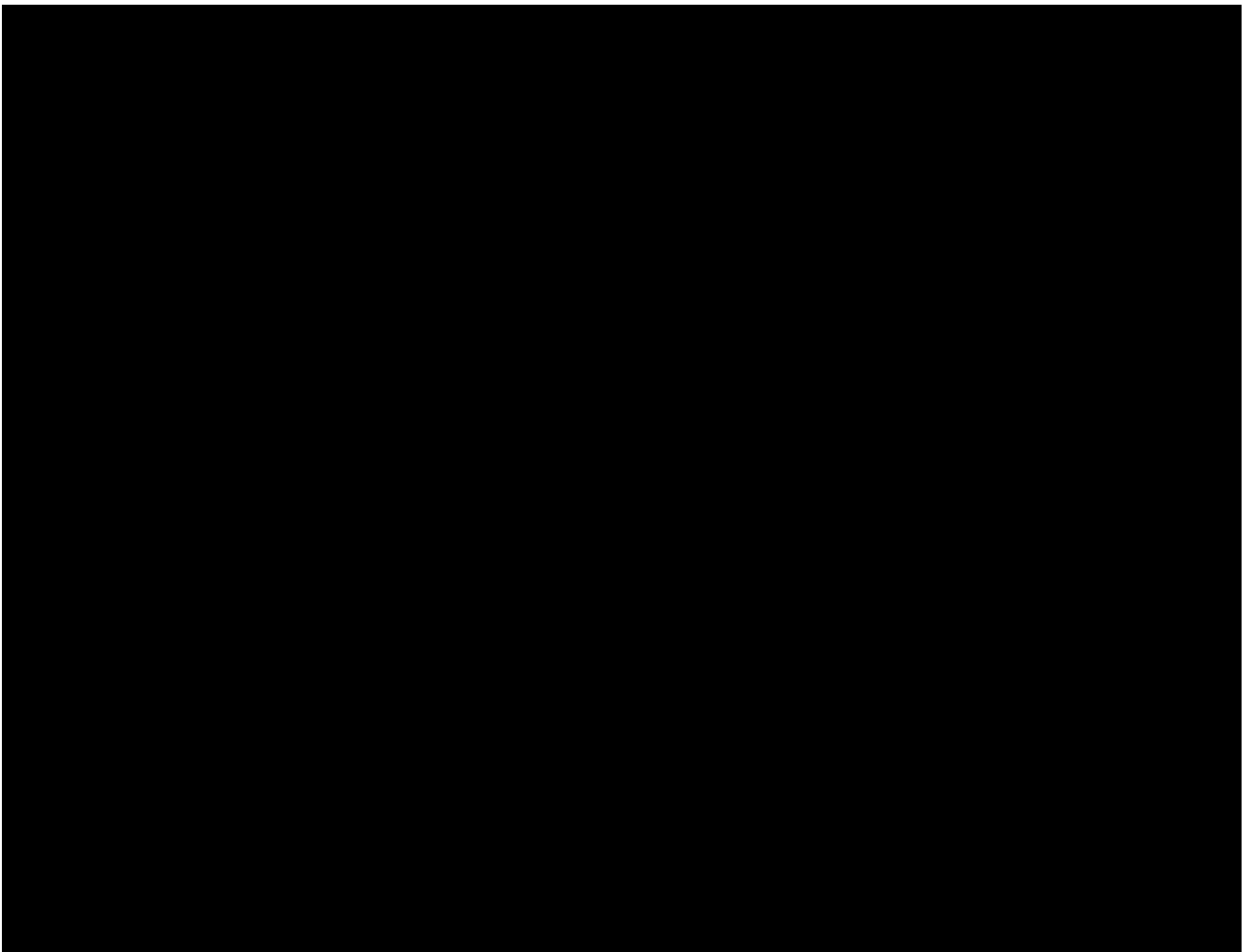
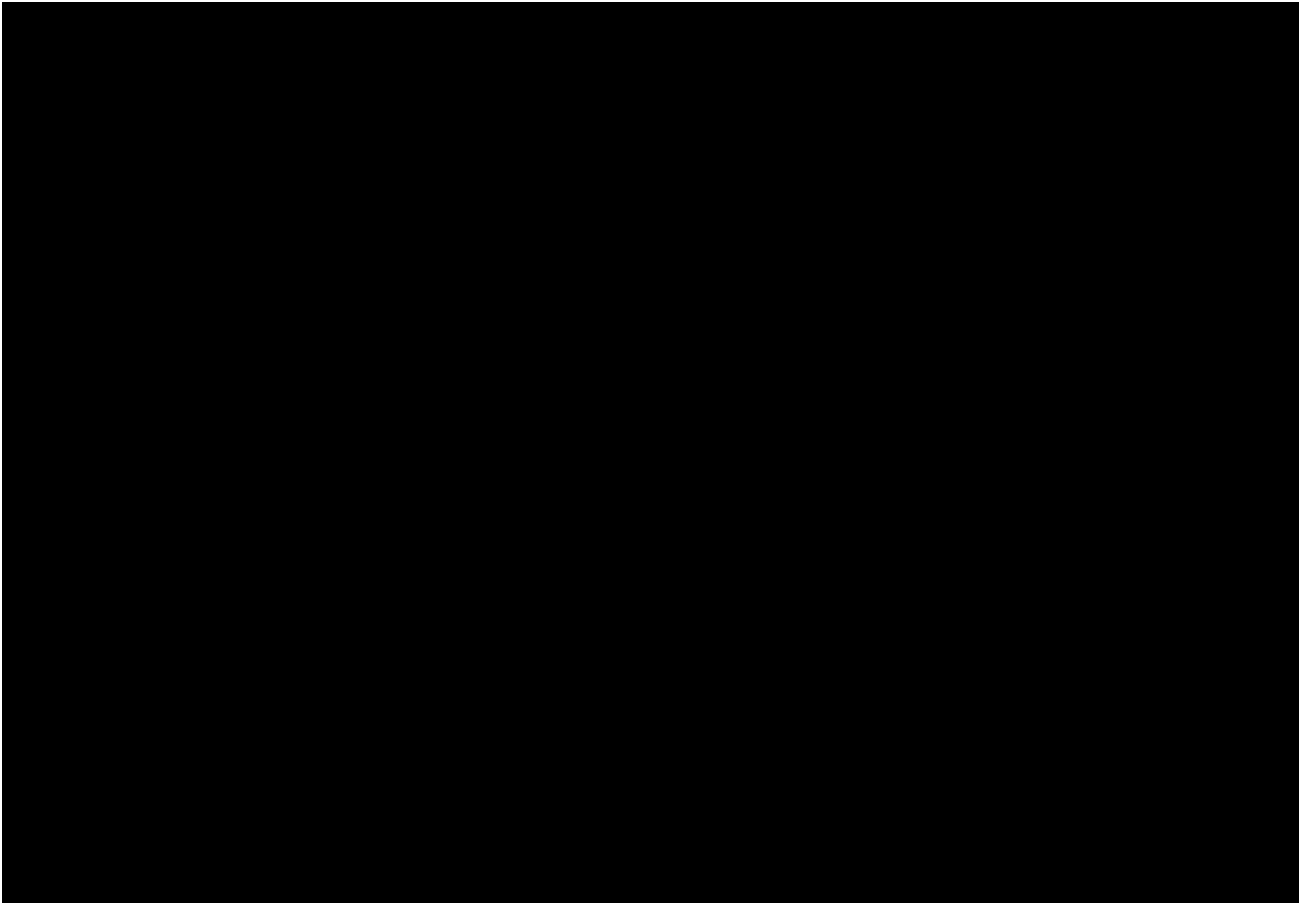




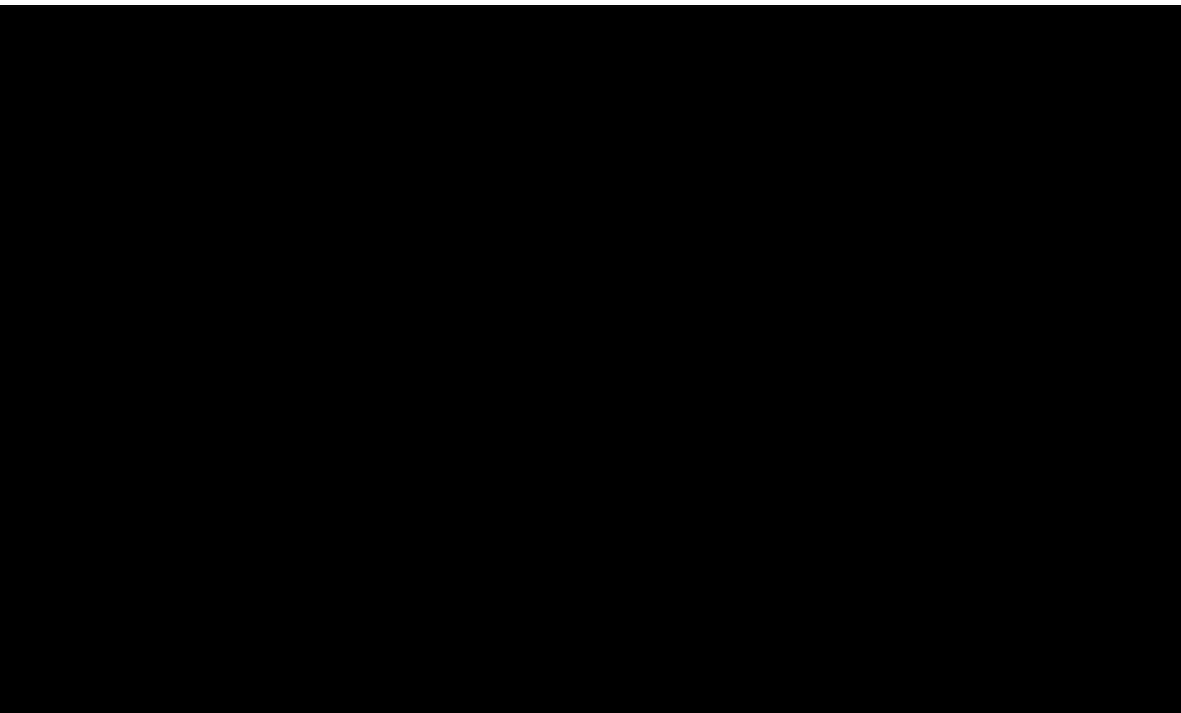
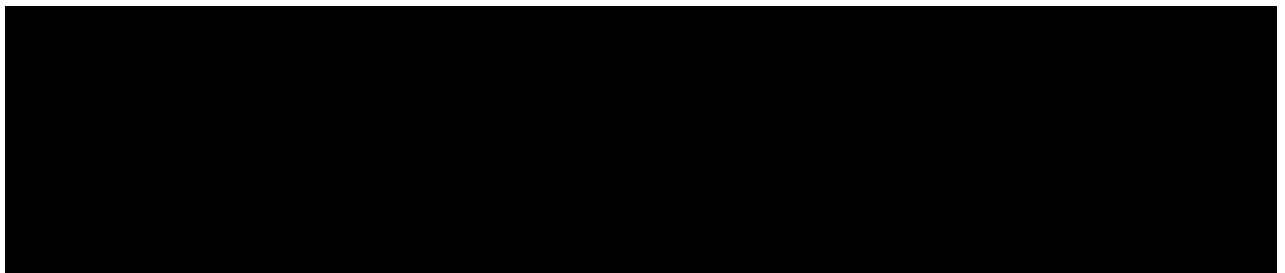
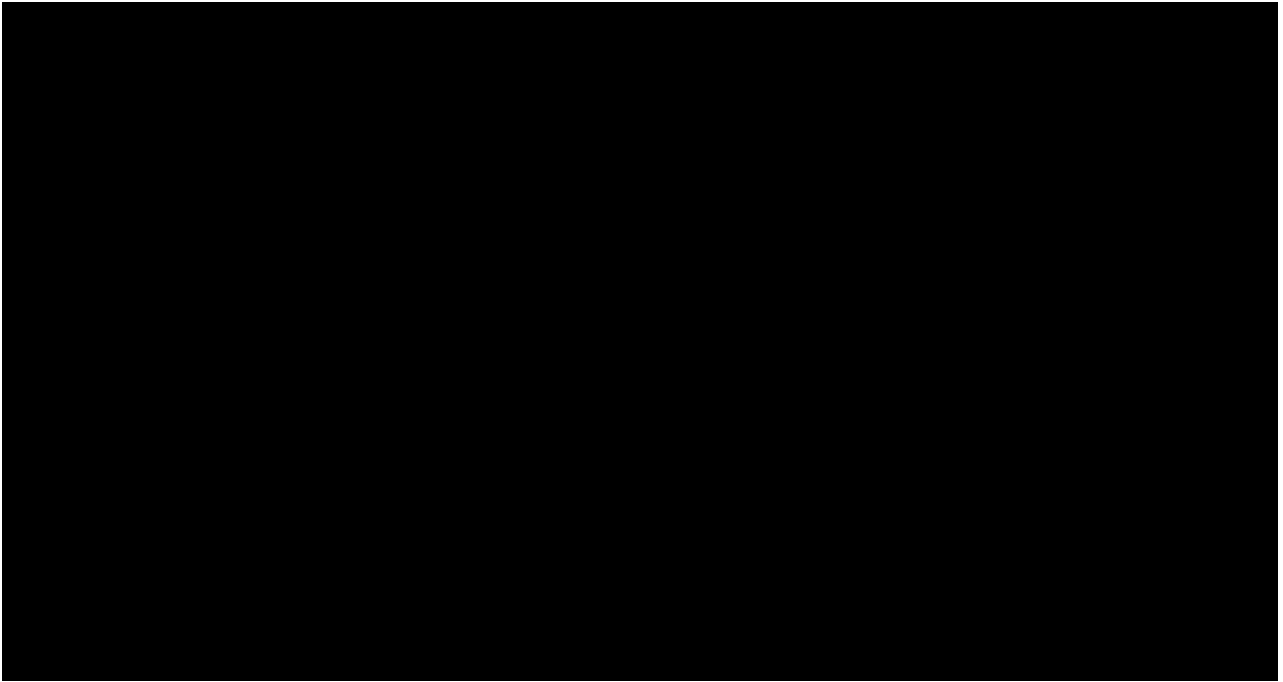




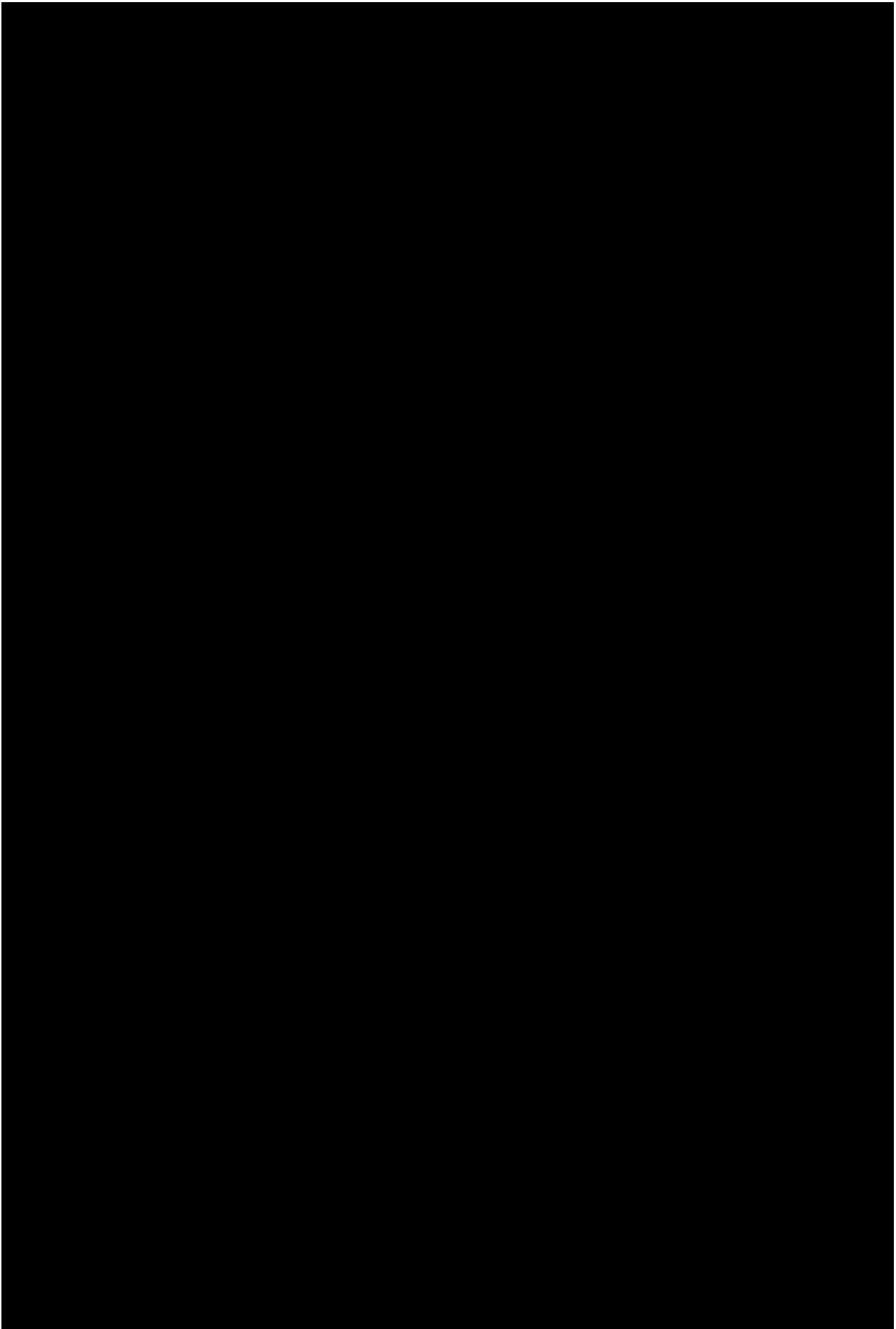








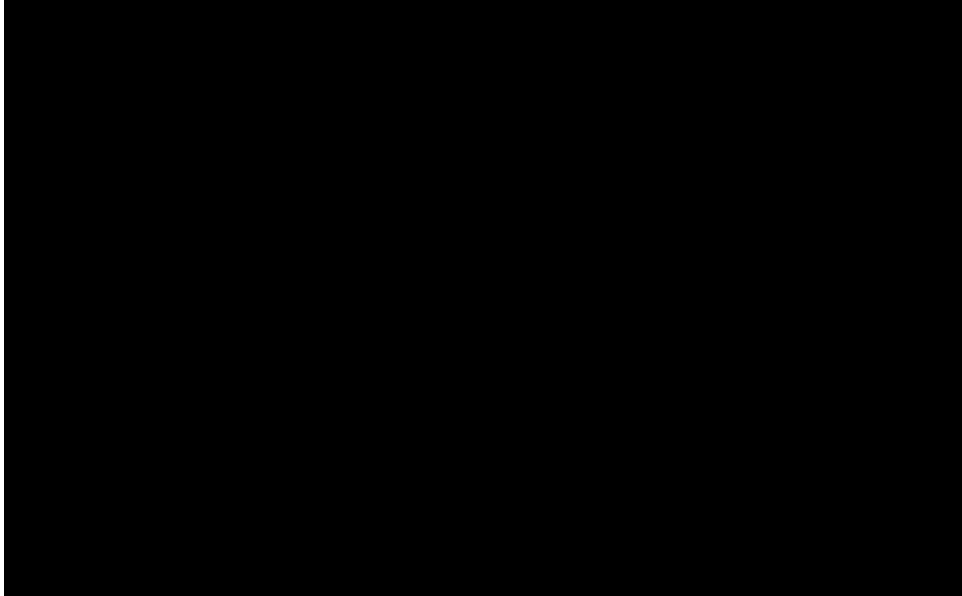






## Annexure 18 - Project Team

---

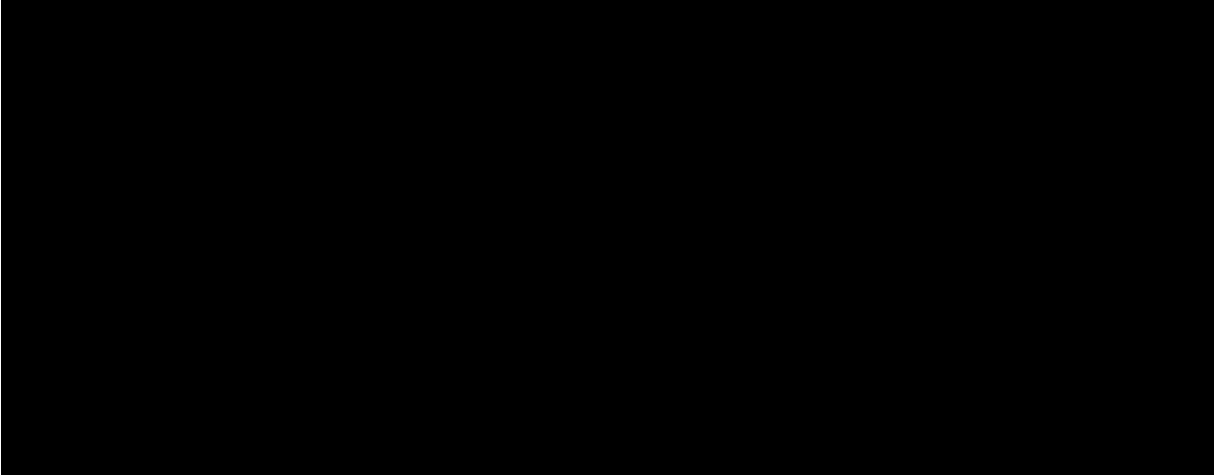




## Annexure 19 - Subcontractors

---

Without limiting any other provision of the Contract, the subcontractors proposed to be engaged by the Contractor in the performance of the Works are as follows:



All other subcontractors must be approved by Hunter Water in accordance with the Conditions of Contract.



## Annexure 20 - Program

---

The Contractor must supply the Works in accordance with the following Program and ensure the Works are completed by the date for completion stated in the Agreement.

No.	Description	Number of Pages
1.		



## Annexure 21 - Site Information

---

Without limiting any other provision of the Contract, the Contractor must comply with the following site specific conditions in supply of the Works under the Contract:

1. **Utilities:**

The Supplier will have access to the available utilities and amenities in the current facilities for the execution of the Work under the Contract and performance of its other obligations under this Contract

2. **Communications**

The Supplier's vehicles (including the Supplier's Representative's, supervisors' and subcontractors' vehicles must have two-way radios (hand held units are acceptable) or mobile phones with hands free kit for emergency communication with the Principal. No use of the existing Hunter Water landline is permitted by the Supplier



## Annexure 22 – Principal's Standards and Policies

Without limiting any other provision of the Contract, the Contractor must supply the Works and any other obligation under the Contract in accordance with the following Hunter Water Standards and Policies:

No.	Description	Number of Pages
1.	Alcohol and Other Drugs Manual	20
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9	Damstra Process and Registration Checklist	3
10	Quality Policy	2