

MEDIUM WORKS CONTRACT - DESIGN AND CONSTRUCTION

CONTRACT NUMBER: ISD-18-7801

POWER SUPPLY UPGRADE PROGRAM DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION

Between

Transport for NSW

[PRINCIPAL]

ABN 18 804 239 602

and

Abergeldie Contractors Pty Ltd ABN 47 004 533 519
[CONTRACTOR]

Level 5, Tower A 821 Pacific Highway CHATSWOOD NSW 2067

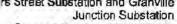


Contents

1.	Defini	tions and Interpretation		
	1.1	Definitions		
	1.2	Interpretation		
	1.3	Ambiguous terms		
	1.4	Order of Precedence		
	1.5	Deed Poll by Contractor		
	1.6	Authorities		
2	4.00			
2.	Contra	actor's obligations		
	2.1	General		
	2.2	Subcontracts		
	2.3	Compliance with Law	26	
	2.4	Legal Challenge to Approval	30	
	2.5	Services	31	
	2.6	Crown Building Work		
	2.7	Unconditional Undertakings and Parent Company Guarantee	32	
	2.8	Long Service Leave Levy		
	2.9	Co-operation with Interface Contractors	32	
	2.10	Incident Management Reporting		
	2.11	Principal Contractor		
	2.12	Third Party Agreements		
	2.13	Commissioning and Operational Readiness		
	2.14	Contemporaneous Work		
	6110.3		4	
3.	The Si	The Site and location of the Works		
	3.1	Access		
	3.2	Temporary Works		
	3.3	Management and Control of the Site	48	
	3.4	Land in Addition to the Site	50	
	3.5	Latent Conditions	51	
	3.6	Information Documents and Materials	52	
	3.7	Hazardous Material		
	3.8	Things of Value Found		
	3.9	Contamination		
	3.10	Principal's Right to Access and Inspect		
	3.11	Works to be constructed within Site		
	3.12	Condition Surveys		
	3.13	Waste Disposal		
	3.14	Principal not in Control		
2	2 40			
4.		iance		
	4.1	Quality of Work		
	4.2	TfNSW Standard Requirements		
	4.3	Environmental Management		
	4.4	WHS Management		
	4.5	No Relief from Obligations	60	
	4.6	Engineering Authorisation	61	
	4.7	ASA Compliance	61	

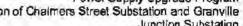


5.	Design and Design Documentation		62	
	5.1 5.2 5.3 5.4 5.5	Contractor's Design Prior Design Work Design Documentation Review of Design Documentation Copies of Design Documentation	63 64 65	
	5.6 5.7 5.8 5.9	Availability of Design Documentation Ownership of Contract Documentation and Methods of Working Delivery Up of Contract Documentation	66 67	
6.	Variati	ions	68	
	6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8	Proposed Variations Variation Orders Omissions Contractor's Entitlements	68 .69 .69 69	
7.	Const	ruction	70	
	7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8 7.9 7.10 7.11	Construction All Work Included Co-operation with Other Contractors Setting Out Survey Cleaning Up Safety Construction Plant and Materials Removal. Principal Supplied Items Rail Safety	70 71 71 71 72 72 74 74	
8.	8.1 8.2 8.3 8.4 8.5 8.6 8.7 8.8	Defects Liability Defect Notification Rectification of Defect No Claim for Correction of Civil and Building Defects Acceptance of Work Extension of Defects Rectification Period Defect Rectification by Other Contractor Rights Not Affected	76 77 78 78 78 79	
9.	Admin	Administration		
	9.1 9.2 9.3 9.4 9.5	Principal's Representative	80 80 81	





	9.6	Environmental Representative			
	9.7	Industrial Relations			
	9.8 9.9	Submission for Review by the Principal's Representative			
	9.10	Work Method Exchange of Information between Government Agencies			
	9.10	Financial Assessment			
	9.12	Employment of Aboriginal and Torres Strait Islander People			
	W. D.				
	9.13	Waste Reduction and Purchasing Policy			
	9.14 9.15	Training Management			
10.	50.00	nd Progress			
-					
	10.1	Rate of Progress	90		
	10.2	The Contractor's Programming Obligations			
	10.3	Contractor not Relieved			
	10.4		91		
	10.5	Importance of Completion on Time			
	10.6	Risk and Notice of Delay			
	10.7		92		
	10.8		92		
	10.9		.92		
	10.10		92		
	10.11		92		
	10.12	Unitateral Extensions			
	10.13	CANADA PARA	92		
	10.14	Suspension			
11.	Payme	Payment			
	11.1	Contractor's Payment Entitlements			
	11.2	Payment Claims			
	11.3	Payment Statements	96		
	11.4	Payment	97		
	11.5	Payment on Account	97		
	11.6	Conditions Precedent	97		
	11.7	Unfixed Plant and Materials	98		
	11.8	Payment of Employees and Subcontractors	99		
	11.9	Completion Payment Claim	99		
	11.10	Release after Completion Payment Claim	100		
	11.11	Final Payment Claim	100		
	11.12	Release after Final Payment Claim			
	11.13	Interest	101		
	11.14	Correction of Payment Statements	101		
	11.15	Costs Allowed by Contractor			
	11.16	Security of Payment Act	102		
	11.17	Title	103		
12.	Comple	etion	103		
	12.1	Progressive Inspection and Testing	103		
	12.2	Contractor to Notify			
	12.3	Inspection before Completion			
	12.4	Unilateral Issue of Notice of Completion	106		

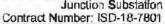




	12.5 12.6	Hand Over upon Completion		
	12.7	107		
	12.8	Final Completion107		
	12.9	Effect of Notice of Completion or Final Completion108		
13.	Care o	Care of the Works, Risks and Insurance		
	13.1	Care of the Works109		
	13.2	Indemnity		
	13.3	Reinstatement110		
	13.4	Works Insurance - Alternative 1		
	13.4	Works Insurance - Alternative 2111		
	13.5	Public Liability Insurance – Alternative 1112		
	13.5	Public Liability Insurance – Alternative 2		
	13.6	Contractor's Other Insurance Obligations113		
	13.7	General Insurance Requirements115		
	13.8	Period of Insurance 117		
	13.9	Notice of Potential Claim117		
	13.10	Cross Liability		
	13.11	Risk of Deductibles		
14.	10000	or Insolvency118		
14.		는 사람들이 보고 있다면 가는 사람들이 되었다. 그렇게 되었습니다. 그 사람들이 되었습니다. 그렇게 되었습니다. 그리고 있는 사람들이 되었습니다. 그리고 있다면 그렇게 되었습니다. 그렇게 되었습니다.		
	14.1	Contractor's Default		
	14.2	Contents of Notice		
	14.3	Rights of the Principal Following Notice119		
	14.4	Immediate Termination on Take-Out119		
	14.5	Principal's Common Rights After Take-Out or Termination		
	14.6	Principal's Entitlements after Take-Out121		
	14.7	Principal's Rights after Termination122		
	14.8	Contractor's Rights after Repudiation or Wrongful Termination		
	14.9	Termination for Convenience		
	14.10	Payment for Termination for Convenience		
	14.11	Preservation of Rights 124		
	14.12	Termination by Frustration		
	14.13	Codification of Contractor's Entitlements124		
15.	Dispute	95 ,125		
	15.1	Notice of Dispute		
	15.2	Time for Submitting Notice Concerning Principal's Representative's		
	1,414	Direction		
	15.3	Determination of Schedule 1 Disputes by the Principal's		
		Representative		
	15.4	Response to Notice of Dispute126		
	15.5	Executive Negotiation126		
	15.6	Expert Determination		
	15.7	The Expert		
	15.8	Rules of Expert Determination		
	15.9	Agreement with Expert		
	15.10	Determination of Expert		
	15.11	Litigation		
	15.12	Survive Termination 128		
	13.12	Outvive Tellimination		



	15.13 15.14	Continuation of Work	
16.		ıl129	
7.52			
	16.1	Notices129	
	16.2	Governing Law129	
	16.3	No Waiver129	
	16.4	Assignment 130	
	16.5	Entire Agreement 130	
	16.6	Joint and Several Liability130	
	16.7	Severability130	
	16.8	Indemnities to Survive130	
	16.9	Stamp Duty and Other Fees	
	16.10	Taxes131	
	16.11	Confidentiality131	
	16.12	Right of Set-Off	
	16.13	Entire Contract 132	
	16.14	Principal May Act	
	16.15	Process Agent	
	16.16	Indemnity	
	16.17	Variations 133	
	16.18	Provisions Limiting or Excluding Liability	
	16.19	Limit of Contractor's Liability	
	16.20	Economic or Consequential Loss	
	16.21	Qualification on Limitation of Liability	
	16.22	Proportionate Liability 134	
	16.23	Prior Work	
	16.24	Design Life	
	16.25	Counterparts	
	16.26	Personal Property Securities Act	
	16.27	Vienna Convention	
	16.28	Australian Government Requirements137	
17.		ation of Claims139	
	17.1	Notice of Variation139	
	17.2	Notice of Other Claims139	
	17.3	Prescribed Notices140	
	17.4	Submission of Claims140	
	17.5	Continuing Events141	
	17.6	Bar,141	
	17.7	Other Provisions Unaffected141	
18.	Genera	Provisions Relating to GST141	
19.	TfNSW	TfNSW's Statement of Business Ethics142	
20.	NSW C	ode of Practice143	
	20.1	NSW Code and NSW Guidelines143	
	20.2	Primary Obligation143	
	20.3	Access and information143	
	20.4	Sanctions144	
	20.5	Compliance 144	
	-0.7		





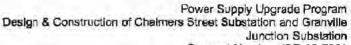
Schedule 1 - Contract Particulars146
Schedule 2 - 154
Schedule 3 - Form of Confidentiality Undertaking159
Schedule 4 - Action in Complying with Planning Approval and Third Party Agreements
Schedule 5 - Subcontractors - Security of Payment163
Schedule 6 - Consultant Deed of Covenant165
Schedule 7 - Approvals to be obtained by the Principal170
Schedule 8 - Form of Unconditional Undertaking171
Schedule 9 - Information Documents and Materials173
Schedule 10 Employed Worker Costs
Schedule 11 - Form of Warranty213
Schedule 12 - Form of Statutory Declaration
Schedule 13 - Property Owner's Certificate225
Schedule 14 - Form of Subcontractor Deed
Schedule 15 Not used
Schedule 16 - Form of Contractor Deed Poll231
Schedule 17 - Deed of Guarantee and Indemnity233
Schedule 18 - Deed of Novation (Principal, Contractor and Subcontractor)249
Schedule 19 - Contractor's Certificate of Design Compliance251
Schedule 20 - Contractor's Certificate of Construction Compliance
Schedule 21 - Contractor's Certificate of Completion253
Schedule 22 - Contractor's Certificate of Final Completion
Schedule 23 - Form of Other Contractor Deed Poll255
Schedule 24 - Form of Interface Agreement Deed Poll in favour of Rail Transport Agency and Transport for NSW258
Schedule 25 - Deed of Novation (Principal, Contractor and Consultant)260
Schedule 26 - Expert Determination Agreement271
Schedule 27 - Principal Supplied Items
Contract Execution Page

List of Exhibits

EXHIBIT A TINSW STANDARD REQUIREMENTS

EXHIBIT B WORKS BRIEF

EXHIBIT C PRINCIPAL'S INSURANCE POLICIES



Contract Number: ISD-18-7801



EXHIBIT D PLANNING APPROVAL

EXHIBIT E CONTRACT SPECIFIC REQUIREMENTS

EXHIBIT F REPORTS

EXHIBIT G LIST OF WARRANTIES REQUIRED FROM SUBCONTRACTORS

EXHIBIT H PRELIMINARY DESIGN

EXHIBIT | THIRD PARTY AGREEMENTS

EXHIBIT J DOCUMENTS RELATING TO PRIOR WORK

Attached CD titled "MEDIUM WORKS CONTRACT – DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES"

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023w9



Parties	
1.	Transport for NSW (ABN 18 804 239 602), a corporation constituted by section 3C of the <i>Transport Administration Act 1988</i> (NSW), of Level 5, Tower A, Zenith Centre, 821 Pacific Highway, Chatswood NSW 2067 (" Principal ").
2.	Abergeldie Contractors Pty Ltd (ABN 47 004 533 519) of 5 George Young Street, Regents Park NSW 2143 ("Contractor")
Recitals	
A	Transport for NSW is a corporation constituted by section 3C of the <i>Transport Administration Act 1988</i> (NSW), and is responsible for developing certain major railway systems and other major projects.
В	Trensport for NSW is responsible for developing the Chalmers Street Substation and the Granville Junction Substation.
С	The Works comprise the design, construction, commissioning, integration and handover of the Chaimers Street Substation and the Granville Junction Substation.
D	A significant proportion of the design and construction of the Works has been performed by the Contractor (in conjunction with a former joint venture partner under the JV Contracts) prior to entering into this Contract, and clause 16.23 applies in that context.
É	The Contractor has agreed to undertake the Contractor's Activities for the Principal in accordance with this Contract.

It is agreed as follows

Definitions and Interpretation

1.1 Definitions

In this Contract, unless the context otherwise indicates:

"Accreditation" means accreditation (including provisional accreditation, conditions or restrictions in respect of accreditation or any variation to the accreditation) under Part 3 of the Rail Safety National Law (or an exemption from same).

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/v9



- "Additional Hazardous Material" means any Hazardous Material the Contractor discovers on the Site which was not described in, or could not have reasonably been inferred from, the Hazardous Material Report.
- "Additional Contamination" means any Contamination which the Contractor discovers on the Site which was not described in, or could not have reasonably been inferred from, the Contamination Report.
- "ASA Authorisation" means an authorisation issued by the ASA to a legal entity which verifies that it has the relevant systems in place to carry out the class of Asset Lifecycle work specified in the authorisation, subject to any conditions of the authorisation.
- "ASA Charter" means the document which identifies the ASA's objectives, functions, powers and governance and the duties of Rail Transport Agencies and AEOs in relation to the ASA (as amended from time to time), a copy of which can be found on www.asa.transport.nsw.gov.au.
- "ASA Requirements" has the meaning assigned to it in the ASA Charter.
- "Asset Lifecycle" has the meaning assigned to it in the ASA Charter.
- "Asset Services" means the aspects of the Contractor's Activities which relate to the Asset Lifecycle of NSW Rail Assets.
- "Asset Standards Authority" or "ASA" means the unit within Transport for NSW which sets, controls, maintains, owns and publishes the network and asset standards for NSW Rail Assets as defined in the ASA Charter. Information about the ASA and the network and asset standards can be found on www.asa.transport.nsw.gov.au
- "Authorised Engineering Organisation" or "AEO" means a legal entity to whom the ASA has issued an ASA Authorisation.
- "Authority" includes any governmental or semi-governmental or local government authority, administrative or judicial body or tribunal, department, commission, public authority, agency, Minister, statutory corporation or instrumentality (and includes ASA) and any private electricity, telecommunications, gas or other utility company having statutory rights in relation to the Works or the Contractor's Activities.
- "Authority Approval" means any licence, permit, consent, approval, determination, exemption, certificate, memorandum of understanding, notification or permission from any Authority or under any Law, or any requirement made under any Law, which must be obtained or satisfied (as the case may be) to:



Contract Number: ISD-18-7801

- (a) carry out the Contractor's Activities including for the avoidance of doubt all
 things required for conducting work within the Rail Corridor or affecting rail
 operations and all things required for dealing with, transporting and disposing of
 Contamination, Hazardous Material or waste; or
- (b) occupy and use for its intended purpose the completed Works or a completed Portion,

and for the avoidance of doubt includes:

- (c) the Planning Approval; and
- (d) the EPL.

"Building Code" means the Building Code 2013 issued under subsection 27(1) of the Fair Work (Building Industry) Act 2012 (Cth).

"Business Day" means any day other than a Saturday, Sunday, public holiday in New South Wales or 27, 28, 29, 30 or 31 December.

"CCU" means Construction Compliance Unit, the unit established within NSW Industrial Relations to monitor compliance with and receive reports of alleged breaches of the NSW Guidelines.

"Change in Authority Approval" means a change:

- in an Authority Approval which is in existence as at the date of this Contract;
 and
- (b) which occurs after the date of this Contract.

"Change in Codes and Standards" means a change in the Codes and Standards taking effect after the date of this Contract, excluding a change in the Codes and Standards which, as at the date of this Contract:

- (a) was published or of which public notice had been given (even as a possible change in the Codes and Standards); or
- a party experienced and competent in the delivery of works and services similar to the Works or the Contractor's Activities (as applicable) would have reasonably foreseen or anticipated,

in substantially the same form as the change in the Codes and Standards eventuating after the date of this Contract.

"Change in Law" means (if it takes effect after the date of this Contract):

- (a) a change in an existing Law (other than a change in an Authority Approval); or
- (b) a new Law (other than a new Authority Approval),

compliance with which:

(c) has a direct effect on the Contractor carrying out the Contractor's Activities; and



(d) directly results in an increase or decrease in the Contractor's costs of carrying out the Contractor's Activities, or a delay to the Contractor achieving Completion of the Works or a Portion by the relevant Date for Completion.,

but excludes:

- (e) a change in an existing Law in respect of Taxes or a new Law in respect of Taxes; and
- (f) a change in an existing Law or a new Law which, as at the date of this Contract was published or of which public notice had been given (even as a possible change in an existing Law or a possible new Law) in substantially the same form as the change in an existing Law or new Law eventuating after the date of this Contract.

"Civil and Building Works" means that part of the Contractor's Activities relating to

- (a) the civil and building works completed by the Contractor as set out in the following paragraphs of the documents titled "Works Brief, Design and Construction of Granville Junction Substation" and "Exhibit B Works Brief, Design and Construction of Chalmers Street Substation Program Delivery Power Supply Upgrade (PSU) Infrastructure and Services" forming part of the Works Brief:
 - (i) paragraph 2.3;
 - (ii) paragraph 2.4; and
 - (iii) paragraph 2.12;
- (b) the other civil and building works completed by the Contractor which are described in any other part of the Works Brief; and
- (c) such other parts of the Contrator's Activities as agreed in writing by the Executive Negotiations from time to time.

Despite paragraph (a) and (b), nothing in this definition of "Civil and Building Works" is intended to capture mechanical and electrical works whether completed by the Contractor or others.

"Civil and Building Defects" means those Defects which relate to the Civil and Building Works.

"Claim" includes any claim for an increase in the Contract Sum, for payment of money (including damages), for an extension of time to a Date for Completion or for any other form of relief:

- (a) under, arising out of, or in any way in connection with, this Contract, including any direction of the Principal's Representative;
- (b) arising out of, or in any way in connection with, the Contractor's Activities or the Works or either party's conduct prior to the date of this Contract; or
- (c) otherwise at Law or in equity including:



(i) under or for breach of statute;

- (ii) in tort for negligence or otherwise, including negligent misrepresentation; or
- (iii) for restitution, including restitution based on unjust enrichment.

"Codes and Standards" means:

- (a) the relevant building codes (including the Building Code of Australia), Standards Australia codes, standards, specifications, guidelines, rules, procedures or other publications current at the date of this Contract (including the Disability (Access to Premises – Buildings) Standards 2010), including any specified or required by this Contract;
- (b) the Code of Practice for Procurement (January 2005), NSW Government Policy on Aboriginal Participation in Construction (May 2015), NSW Code, NSW Guidelines, Environmental Management Systems Guidelines (3rd edition) (January 2014), Work Health and Safety Management Systems and Auditing Guidelines (5th edition) (March 2014), Training Management Guidelines (February 2009), Quality Management System Guidelines for Construction (August 2013), NSW Government Resource Efficiency Policy ("GREP") and any other NSW Government guidelines and requirements specified or required by this Contract; and
- (c) if (and to the extent) the codes and standards referred to in paragraphs (a) or (b) are irrelevant, then relevant international codes, standards, specifications, guidelines, rules, procedures or other publications current at the date of this Contract.

"Commissioning" has the meaning given to that term in the TfNSW Standard Requirements.

"Completion" means the stage in the execution of the Contractor's Activities when:

- (a) the Works are, or a Portion is, complete in accordance with this Contract except for minor Defects:
 - (i) that do not prevent the Works or the Portion from being reasonably capable of being used for the intended purpose of the Works or the Portion:
 - (ii) that can be rectified without prejudicing the convenient intended use of the Works or the Portion; and
 - (iii) in respect of which the Contractor has reasonable grounds for not promptly rectifying;
- (b) the Contractor has:
 - (i) carried out and passed all tests that:
 - A. are required under this Contract to be carried out and passed before the Works or a Portion reaches Completion; or

[&]quot;Commonwealth" means the Commonwealth of Australia.



- B. must necessarily be carried out and passed to verify that the Works or a Portion is in the condition this Contract requires the Works or Portion (as the case may be) to be in at Completion;
- (ii) without limiting clause 2.3(c)(iv), obtained all Authority Approvals that it is required under this Contract to obtain before Completion of the Works or a Portion and provided such Authority Approvals to the Principal's Representative;
- (iii) given to the Principal's Representative all other documents and information:
 - required (including in accordance with the TfNSW Standard Requirements and the Works Brief) for the use, operation, maintenance and repair of the Works or a Portion; and
 - that are to be handed over to the Principal's Representative before Completion of the Works or a Portion;
- (iv) complied with all performance requirements that this Contract requires to be verified before Completion of the Works or a Portion; and
- (v) provided the Principal's Representative with the Contractor's Certificate of Completion in the form of Schedule 21 for the Works or a Portion;
- (vi) completed all Commissioning and Operational Readiness in accordance with this Contract; and
- (c) the Contractor has done everything else that it is required to do under this Contract before Completion of the Works or a Portion including those things referred to in Schedule 1.

"Configuration Change Acceptance Notice" (or "CCAN") means a notice of that name issued by the Configuration Control Board in respect of Design Documentation.

"Configuration Control Board" means the board established by TfNSW to manage configuration changes for the Transport Projects Delivery Office of TfNSW's programs and projects in accordance with the Configuration Management Framework.

"Configuration Management Framework" means the framework established by the ASA from time to time for configuration management.

"Construction Environmental Management Plan" means the plan which forms part of the Contract Management Plan which is required to be provided and implemented by the Contractor pursuant to the TfNSW Standard Requirements.

"Construction Plant" means equipment, appliances, machinery and things used in the execution of the Contractor's Activities but not forming part of the Works.

"Contamination" means the presence in, on or under land or any other aspect of the Environment of a substance, gas, chemical, liquid or other matter (whether occurring naturally or otherwise) which is at a concentration above the concentration at which the substance, gas, chemical, liquid or other matter (whether occurring naturally or otherwise) is normally present in, on or under land or any other aspect of the Environment in the



same locality, being a presence that presents a risk of harm to human health or any other aspect of the Environment.

"Contamination Report" means:

- in respect of Portion 1 and Portion 2, the report titled "Report for Soil Contamination Assessment Site A – Prince Alfred Sidings, Central Station April 2010": and
- in respect of Portion 3, the report titled "Granville Junction Substation Geotech and Site Contamination Report" dated 14 August 2015,

which forms part of the Information Documents and Materials, a copy of which is located in Exhibit F – Reports.

"Contemporaneous Work" means work carried out:

- (a) by Other Contractors on or after the date of this Contract:
- (b) on or adjacent to the Site; and
- (c) upon or by which the proper execution of the Contractor's Activities is dependent or may be appreciably affected by it being unsuitable, unsatisfactory or detrimental in any way.

"Contract" means the contract between the Principal and the Contractor in respect of the Works constituted by the documents referred to in Schedule 1.

"Contract Documentation" means all documentation in computer readable or written forms brought into (or required to be brought into) existence as part of, or for the purpose of, performing the Contractor's Activities (whether before or after the date of this Contract) including:

- (a) the Works Brief (including any Preliminary Design) and all Design Documentation; and
- (b) all plans, manuals, programs and other documents.

"Contract Management Plan" means the documents required to be provided and implemented by the Contractor pursuant to the TfNSW Standard Requirements as developed, amended or updated from time to time in accordance with the Contract.

	CONTRACTOR OF SERVICE AND
(a)	
(a) (b)	
(c)	
(d)	

"Contract Sum" means the aggregate of the:

"Contractor" means the person named as the Contractor in Schedule 1.

"Contractor's Activities" means all things or tasks which the Contractor is, or may be, required to do to comply with its obligations under this Contract, including:



- (a) the design, construction, commissioning and hand-over of the Works;
- (b) the provision of Temporary Works and Construction Plant;
- (c) Commissioning and Operational Readiness; and
- anything incidental or ancillary to the obligations in paragraphs (a) to (c). (d)

"Contractor's Program" means the program prepared and provided by the Contractor in accordance with clause 10.2, as developed and updated in accordance with clause 10.2 from time to time.

"Contractor's Representative" means the person notified to the Principal's Representative in accordance with clause 9.4(a) as being the Contractor's Representative.

"Crown Bullding Work" has the meaning given to that term in section 109R of the Environmental Planning and Assessment Act 1979 (NSW).

"Date for Completion" means in respect of the Works or a Portion the date, or the last day of the period of time, specified in Schedule 1 for the Works or that Portion, as adjusted under this Contract by an extension of time determined by the Principal's Representative or pursuant to any determination by an expert or any litigation.

"Date of Completion" means:

- the date of Completion of the Works or a Portion, set out in a Notice of (a) Completion; or
- (b) where another date is determined in any determination by an expert or any court pursuant to clause 15 as the date upon which Completion was achieved, that date.

"Date of Final Completion" means:

- the date determined in accordance with clause 12.8(e)(i) as the date Final (a) Completion was achieved; or
- (b) where another date is determined in any determination by an expert or any court pursuant to clause 15 as the date upon which Final Completion was achieved. that date.

"Defect" means any:

- defect, deficiency, fault, error or omission in the Works or Temporary Works, (a) including subsidence, shrinkage and movement outside the required tolerances;
- (b) other aspect of the Works, Temporary Works or Contractor's Activities that is not in accordance with the requirements of this Contract, including noncompliances, non-conformances and non-conformities,

and includes Civil and Building Defects and the Electrical Defects.



"Defects Rectification Period" means the period stated in Schedule 1, as extended by clause 8.6.

"Design Documentation" means all design documentation (including design standards, design reports, durability reports, construction descriptions, specifications, models, samples, prototypes, calculations, drawings, digital records, computer software and all other relevant data) in computer readable and written forms, or stored by any other means required by this Contract or necessary to be produced by the Contractor to design and construct the Works and the Temporary Works and documentation (including certificates and check lists) to evidence that the design documentation complies with the requirements of this Contract.

"Dispute" has the meaning given to that term in clause 15.1.

"Document" means any document which is required to be submitted for the review of the Principal's Representative under this Contract.

"Electrical Defects" means Defects which are not Civil and Building Defects.

"Employed Workers" means workers directly employed by the Contractor.

"Employed Worker Costs" means an amount in respect of Employed Workers that perform on-Site works forming part of the Contractor's Activities on or after 1 December 2018 (paid on a daily rate per worker basis). The agreed daily rates for such workers are set out in Schedule 10.

"Environment" means components of the earth, including:

- (a) land, air and water;
- (b) any layer of the atmosphere:
- (c) any organic or inorganic matter and any living organism;
- (d) human-made or modified structures and areas; and
- (e) interacting natural ecosystems that include components referred to in paragraphs (a) to (c).

"Environmental Representative" means the person identified in Schedule 1 as the environmental manager appointed by the Principal, or any replacement notified to the Contractor by the Principal's Representative.

"EPL" means an environment protection licence issued under the *Protection of the Environment Operations Act 1997* (NSW).

"Excepted Risk" means any one of:

- (a) war, invasion, act of foreign enemies, hostilities (whether war is declared or not), civil war, rebellion, revolution, act of terrorism, insurrection or military or usurped powers, martial law or confiscation by order of any government or public authority;
- (b) 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 its Subcontractors or either's employees or agents; or



(c) any other event so described in Schedule 1.

"Excluded Claim" means any claim:

- (a) with respect to a Change in Law under clause 2.3(d);
- (b) for a Variation directed in accordance with clause 6.2 or a direction by the Principal's Representative to which clause 17.1 applies;
- (c) not used; or
- (d) for payment under clause 11, including claims under clauses 11.9 and 11.11.

"Extra Land" means the land referred to in clause 3.4(a).

"Force Majeure Event" means earthquake, flood, bushfire, act of terrorism, act of a public enemy, war (declared or undeclared) or revolution.

"Final Authorisation" means a final authorisation issued by the ASA to a legal entity which authorises that entity to carry out the class of Asset Lifecycle work specified in the final authorisation, subject to any conditions of the authorisation, for the purposes of entering into a contract with a Rail Transport Agency.

"Final Completion" means the stage in the execution of the Contractor's Activities when:

- (a) all Defects Rectification Periods (including any extension under clause 8.6) have expired and the Contractor has rectified all Defects in accordance with the Contract;
- (b) the Contractor has:
 - (i) carried out and passed all tests which:
 - A. are required under this Contract to be carried out and passed before the Works reach Final Completion; or
 - must necessarily be carried out and passed to verify that the Works are in the condition this Contract requires them to be in at Final Completion;
 - (ii) obtained all Authority Approvals that it is required under this Contract to obtain which:
 - A. were not obtained before Completion of the Works or the last Portion to reach Completion; or
 - B. are to be obtained prior to Final Completion,

and provided such Authority Approvals to the Principal's Representative;

- (iii) given to the Principal's Representative all other documents or information referred to in this Contract:
 - A. which are required for the use, operation, maintenance and repair of the Works but which were not obtained before Completion of the Works or the last Portion to reach Completion; or



- Which are required to be handed over to the Principal's Representative before Final Completion; and
- (iv) complied with all performance requirements under this Contract that must be verified before Final Completion; and
- (c) the Contractor has done everything else which it is required to do under this Contract before Final Completion.

"General Conditions" means clauses 1 to 20 of this Contract.

"Greenhouse Data" means all data, information, records and reports of the type that a registered corporation or any other person may be required or entitled to provide under the NGER Legislation, including as to:

- (a) greenhouse gas emissions, energy production or energy consumption; and
- (b) reduction of greenhouse gas emissions, removal of greenhouse gases or offsets of greenhouse gas emissions from any greenhouse gas project,

relating to any aspect of any of the Contractor's Activities or the activities of any of the Contractor's personnel in connection with the Contractor's Activities.

"Hazardous Material" means any natural or artificial substance whether solid, liquid or gas (alone or in combination with any other substance) which is toxic, flammable or otherwise capable of causing harm to humans or damage to the Environment including asbestos, toluene, polychlorine biphenyls, lead based paints, glues, solvents, cleaning agents, paints and water treatment chemicals.

"Hazardous Material Report" means:

- in respect of Portion 1 and Portion 2, the report titled "Hazardous Materials Survey Report Prince Alfred Substation June 2011",
- (b) in respect of Portion 3, the report titled "Granville Substation Pre-Demolition Hazardous Building Material Assessment" dated June 2011.

which forms part of the Information Documents and Materials, a copy of which is located in Exhibit F – Reports.

"Incident" means:

- (a) any work health and safety or environmental or security incident arising from the performance of (or failure to perform) the Contractor's Activities including:
 - a fatality or injury to any person including any incident which must be reported to New South Wales WorkCover Authority;
 - loss of containment, escape of or migration of Contamination off-site and into the Environment;

Contract Number: ISD-18-7801

- (iii) any fire or dangerous event on the Site or Extra Land;
- (iv) a security breach;
- (v) any unauthorised removal of trees;
- (vi) a non-compliance with an Authority Approval; or
- (vii) any public complaint; or
- (b) any unplanned and/or undesired event which results in or has the potential to result in injury, ill-health, damage to or loss of property, interruption to operations or environmental impairment.

and includes:

- (c) a near miss, breach of procedure, quality failure and/or injuries to contractors and members of the public; and
- (d) "occurrences" and "notifiable occurrences" under the WHS Legislation and Rail Safety National Law.

"Information Documents and Materials" means:

- (a) the items specified in Schedule 9;
- (b) the Reports; and
- (c) all other documents, core and other samples, exhibits and materials in any format or medium including any electronic form provided to the Contractor unless expressly identified as forming part of this Contract,

including anything which is expressly stated by this Contract to form part of the Information Documents and Materials.

"Insolvency Event" means when:

- one party informs the other party in writing, or its creditors generally, that the party is insolvent or is unable to proceed with its obligations under this Contract for financial reasons;
- (b) in relation to an individual, the individual (being a party) commits an act of bankruptcy, a bankruptcy petition is presented against the individual or the individual is made bankrupt;
- (c) execution is levied against a party by a creditor, debenture holders or trustees or under a floating charge; or
- (d) in relation to a corporation any one of the following:
 - notice is given of a meeting of creditors with a view to the corporation entering into a deed of company arrangement or scheme of arrangement (other than a solvent scheme of arrangement);
 - (ii) the corporation enters a deed company arrangement or composition with creditors;

- (iii) an application is made for, a resolution is passed by the directors for the appointment of, or an order is made for, a controller, administrator, receiver, receiver and manager, provisional liquidator or liquidator to be appointed to the corporation:
- (iv) a controller, administrator, receiver, receiver and manager, provisional liquidator or liquidator is appointed to the corporation;
- (v) an application is made to a court for the sequestration or winding up of the corporation and not stayed, dismissed or discontinued within 21 days:
- (vi) a sequestration order or winding up order is made in respect of the corporation;
- (vii) the corporation resolves by special resolution that it be wound up voluntarily (other than for a members' voluntary winding-up), or a meeting of creditors of a party under administration or a deed of company arrangement resolves that the corporation be wound up:
- a mortgagee of any property of the corporation takes possession of that property; or
- the corporation ceases, suspends or threatens to cease or suspend the conduct of all or a substantial part of its business, or disposes or threatens to dispose of all or a substantial part of its assets.

"Inspection" includes auditing, surveillance, monitoring, testing, review, examination and measuring.

"Institution" means any authorised deposit taking institution holding an authority to carry on banking business in Australia under the terms of the Banking Act 1959 (Cth).

"Intellectual Property" means all rights in copyright, inventions (including patents and innovation patents), registered and unregistered trademarks or name, registered and registrable designs, confidential information, trade secrets, technical data and know how, circuit layout rights, and all other protected rights of intellectual property defined in Article 2 of the Convention Establishing the World Intellectual Property Organisation of July 1967.

"Interface Agreement" means a Third Party Agreement of that name set out in Exhibit I.

"Interface Contractor" means an Other Contractor listed in Schedule 1 or otherwise identified by the Principal's Representative as an Interface Contractor that is carrying out, or that will carry out, Interface Work.

"Interface Work" means the work to be executed by Interface Contractors, which will interface with or affect or be affected by the Contractor's Activities and the Works, including that described in the Works Brief.

"JV Contracts" means the following contracts (terminated by agreement) which were entered into by the Principal, the Contractor and a third party:

 (a) Contract Number: TPD-14-4137, Design and Construction of Granville Substation dated 28 April 2016; and



(b) Contract Number: TPD-14-4150, Design and Construction of Chalmers Street Substation dated 18 April 2016.

"Latent Conditions" has the meaning given in clause 3.5.

"Law" means:

- (a) Commonwealth, New South Wales or local government legislation, including ordinances, instruments, codes of practice, policy and statutory guidance (but excluding the Building Code of Australia, any other building codes or Standards Australia codes), requirements, regulations, by-laws and other subordinate legislation;
- (b) principles of law or equity established by decisions of courts; and
- (c) Authority Approvals (including any condition or requirement under them).

"Major Civil and Building Defects" means a Civil and Building Defect which requires significant or major work to rectify (where the parties agree that any Civil and Building Defects requiring more than \$10,000 or 5 days to rectify are to be considered as requiring significant or major work to rectify), other than those caused by RCR O'Donnell Griffin Pty Ltd.

"Mitigation Measure" means a measure, action, standard or precaution to mitigate the impact of the Works.

"Monument" has the meaning given to that term in the Surveying and Spatial Information Regulation 2006 (NSW).

"NGER Legislation" means National Greenhouse and Energy Reporting Act 2007 (Cth), related regulations and legislative instruments.

"Notice of Completion" means a notice issued under clause 12.3(d)(i) by the Principal's Representative stating that Completion of the Works or a Portion has been achieved.

"NSW Code" has the meaning given in clause 20.2.

"NSW Guidelines" has the meaning given in clause 20.1.

"NSW Rail Assets" has the meaning assigned to it in the ASA Charter.

"NSW Trains" means the corporation by that name constituted by Part 2B of the Transport Administration (General) Regulation 2005 (NSW).

"Operational Readiness" has the meaning given to that term in the TfNSW Standard Requirements.

"Other Contractor" means any contractor, consultant, artist, tradesperson or other person engaged by the Principal or others to do work, other than the Contractor and its Subcontractors.

"Other Contractor Work" means the works to be undertaken by an Other Contractor on a part of the Site during any period in which the Contractor has been engaged as principal contractor in respect of that part of the Site.

"Parent Company Guarantee" means the Deed which appears in Schedule 17.



"Planning Approval" means:

- (a) the Authority Approval set out in Exhibit D as it may be modified from time to time, and any other Authority Approvals issued from time to time by either the Principal or the Minister for Planning and Infrastructure (acting in their capacity as determining authority) under the Environmental Planning and Assessment Act 1979 (NSW) in respect of the Works;
- any Mitigation Measures and statement of commitments that are required to be complied with or fulfilled in the documents referred to in paragraph (a); and
- (c) in respect of Portion 1 and Portion 2, S60 Approval under the Heritage Act 1977 (No. 2015/S60/69).

"Pollution" has the meaning given to "pollution" in the Dictionary to the *Protection of the Environment Operations Act 1997* (NSW).

"Portion" means a part of the Contractor's Activities or Works, as described in Schedule 1 or directed under clause 12.6A.

"PPS Act" means the Personal Property Securities Act 2009 (Cth).

"PPS Law" means:

- (a) the PPS Act and any regulations made at any time under the PPS Act, as amended from time to time; and
- (b) any relevant amendment made at any time to any other legislation as a consequence of paragraph (a).

"Preliminary Design" means the preliminary design of the Works (if any) which appears in Exhibit H.

"Principal" means TfNSW.

"Principal Supplied Items" means the items listed in Schedule 27.

"Principal's Representative" means:

- (a) the person nominated in Schedule 1; or
- (b) any other person appointed from time to time by the Principal under clause 9.2, and includes any appointee under clause 9.3.

"Prohibited Subcontractor" means:

- (a) any Subcontractor:
 - (i) who has made an admission to the Independent Commission Against Corruption that it has engaged in; or
 - (ii) in respect of whom the Independent Commission Against Corruption has made a finding that it has engaged in.

corrupt conduct as defined in the Independent Commission Against Corruption Act 1988 (NSW); or



(b) any Subcontractor employing an employee in respect of whom paragraph (a)(i) or (a)(ii) apply.

"Project Work Health and Safety Management Plan" means the plan which forms part of the Contract Management Plan which is required to be provided and implemented by the Contractor pursuant to the TfNSW Standard Requirements and which must:

- (a) set out in adequate detail the procedures the Contractor will implement to manage the Works and the performance of the Contractor's Activities from a work health and safety perspective; and
- (b) describe how the Contractor proposes to ensure the Works and Contractor's Activities are performed consistently with Law in relation to work health and safety.

"Provisional Authorisation" means a preliminary authorisation issued by the ASA to a legal entity which authorises that entity to carry out the class of Asset Lifecycle work specified in the preliminary authorisation, subject to any conditions of the authorisation, for the purposes of entering into a contract with a Rail Transport Agency.

"Provisional Sum Work" means the work detailed in Schedule 1.

"RailCorp" means Rail Corporation New South Wales, a corporation constituted by section 4(1) of the *Transport Administration Act 1988* (NSW).

"Rail Corridor" means the area containing the Rail Tracks, rail junctions, level crossings, station buildings, platforms, signal boxes, tunnels, bridges and other associated structures. This area is often defined by railway boundary fencing and in the absence of such fencing, is defined by a physical boundary (i.e. tunnel, building or retaining walls) or everywhere within 15 metres of the outermost rails.

"Rail Infrastructure Manager" has the meaning given to that term in the Rail Safety National Law.

"Rail Safety National Law" means the Rail Safety National Law (NSW), as defined in the Rail Safety (Adoption of National Law) Act 2012, and any associated regulations.

"Rail Transport Agency" means Transport for NSW (and each of its divisions), RailCorp, Sydney Trains and NSW Trains.

"Railway Track" or "Rail Track" or "Track" or "Line" means the rails fastened on sleepers or transoms and founded on ballast or bridge decking or concrete slab, associated signalling and overhead wiring components (in electrified areas).

"Relevant Subcontract" means executed Subcontracts which satisfy the following requirements:

- the Subcontract has been entered into by the Contractor for the performance of the Contractor's Activities with an appropriately qualified Subcontractor;
- (b) the Subcontract is on reasonable, arms-legth and competitive terms, including as to pricing and other entitlements to payment; and
- (c) a copy of the executed Subcontract has been provided to the Principal.

"Report" means each report referred to in Schedule 1,



"Required Rating" means a credit rating of at least A- by Standard and Poor's (Australia) Ptv Limited or A3 by Moody's Investors Service, Inc.

"Rolling Stock Operator" has the meaning given to that term in the Rall Safety National Law.

"Safety Management System" has the meaning given to that term in the Rail Safety National Law.

"Security Interest" has the meaning given to that term in clause 16.26(a).

"Service" includes any service facility or item of public or private infrastructure, including railway systems, pedestrian and vehicular corridors, water, electricity, gas, fuel, telephone, existing drainage, sewerage, industrial waste disposal and electronic communications service.

"Site" means:

- (a) the lands and other places described in Schedule 1; and
- (b) any other lands and places made available to the Contractor by the Principal for the purpose of this Contract.

"SOP Act" means the Building and Construction Industry Security of Payment Act 1999 (NSW).

"Statement of Business Ethics" means TfNSW's Statement of Business Ethics, which may be obtained from TfNSW and is located at: www.transport.nsw.gov.au.

"Subcontract" includes an agreement for supply of goods or services (including professional services and plant hire) or both.

"Subcontract Work" means work which:

- (a) a Subcontractor is required to perform under a Relevant Subcontract; and
- (b) forms part of the Contractor's Activities.

"Subcontractor" includes a consultant or a supplier of goods or services (including professional services and plant hire) or both, but excludes Employed Workers.

"Survey Certificate" has the meaning given to that term in the Surveying and Spatial Information Regulation 2006 (NSW).

"Survey Plan" has the meaning given to that term in the Surveying and Spatial Information Act 2002 (NSW).

"Sydney Trains" means the corporation by that name constituted by Part 2A of the Transport Administration (General) Regulation 2005 (NSW).

"Taxes" means income, stamp, indirect or other taxes levies, imposts, deductions, charges, duties (including import duty), compulsory loans and withholdings (including financial institutions duty, debits tax or other taxes whether incurred by, payable by return or passed on to another person) together with interest thereon or penalties, if any, and charges, fees or other amounts made on, or in respect thereof.



"Temporary Works" means any temporary works required to be carried out or provided by the Contractor for the purpose of the execution of the Contractor's Activities but not forming part of the Works.

"Tender" means the response provided by a Tenderer to the Principal's invitation to submit a tender to undertake the Contractor's Activities.

"Tenderer" means an entity or entities that submitted a Tender for the Contractor's Activities.

"TfNSW" means Transport for NSW, a corporation by section 3C of the Transport Administration Act 1988 (NSW).

"TfNSW Standard Requirements" or "TSRs" means the documents which appear as Exhibit A to this Contract.

"Third Party" means a party to a Third Party Agreement other than the Principal.

"Third Party Agreement" means an agreement which appears in Exhibit I.

"Track Possession" means a period during which the Contractor has access to Rail Track for the purpose of carrying out the Contractor's Activities including for the purpose of rectifying Defects.

"Variation" means any change to the Works or the Temporary Works including:

- any addition or increase to, or decrease, omission or deletion from, the Works or the Temporary Works;
- any change to the character or quality, or demolition or removal, of any material or work; or
- (c) any change to the levels, lines, positions or dimensions of any part of the Works or the Temporary Works.

"WHS" means work health and safety.

"WHS Accreditation Scheme" means the Australian Government Building and Construction OH&S Accreditation Scheme established by the Fair Work (Building Industry) Act 2012 (Cth).

"WHS Guidelines" means the NSW Government Work Health and Safety Management Systems and Auditing Guidelines (5th edition), May 2014 or any document issued from time to time which amends or substitutes this document.

"WHS Legislation" means:

- the Work Health and Safety Act 2011 (NSW) and the Work Health and Safety Regulations 2011 (NSW); and
- (b) any legislation in other States and Territories of Australia addressing work health and safety which applies to the Works.

"Works" means the whole of the works, including:

(a) not used; and



(b) all Variations to the Works.

that the Contractor must design, construct, commission, integrate and hand-over to the Principal (or its nominee) under this Contract.

"Works Brief" means the Principal's written requirements for the Works described in:

- (a) Exhibit B, and
- (b) where the Contract includes a Preliminary Design, the Preliminary Design.

1.2 Interpretation

In this Contract unless the context otherwise requires:

- (a) references to a person include an individual, a body politic, the estate of an individual, a firm, a corporation, an authority, an association or joint venture (whether incorporated or unincorporated), or a partnership;
- (b) the words "including", "includes" and "include" will be read as if followed by the words "without limitation";
- (c) a reference to any party to this Contract includes that party's executors, administrators, successors, and permitted substitutes and assigns, including any person taking part by way of novation;
- (d) a reference to any Authority, institute, association or body is:
 - (i) if that Authority, institute, association or body is reconstituted, renamed or replaced or if the powers or functions of that Authority, institute, association or body are transferred to another organisation, deemed to refer to the reconstituted, renamed or replaced organisation or the organisation to which the powers or functions are transferred, as the case may be; and
 - (ii) if that Authority, institute, association or body ceases to exist, deemed to refer to the organisation which serves substantially the same purposes or objects as that Authority, institute, association or body;
- (e) a reference to this Contract or to any other deed, agreement, document or instrument is deemed to include a reference to this Contract or such other deed, agreement, document or instrument as amended, novated, supplemented, varied or replaced from time to time:
- (f) a reference to any legislation or to any section or provision of it includes:
 - any statutory modification or re-enactment of, or any statutory provision substituted for, that legislation, section or provision; and
 - (ii) ordinances, by-laws, regulations of and other statutory instruments issued under that legislation, section or provision;
- (g) words in the singular include the plural (and vice versa) and words denoting any gender include all genders:

Contract Number: ISD-18-7801

- (h) headings are for convenience only and do not affect the interpretation of this Contract;
- (1) a reference to:
 - a party, clause, Schedule or Exhibit is a reference to a party, clause, () Schedule or Exhibit of or to this Contract; and
 - a paragraph or a sub-paragraph is a reference to a paragraph or sub-(ii) paragraph in the clause in which the reference appears;
- subject to clause 3.6, a reference to this Contract includes all Schedules and (i) Exhibits:
- where any word or phrase is given a defined meaning, any other part of speech (k) or other grammatical form of that word or phrase has a corresponding meaning;
- where under this Contract: (1)
 - a direction is required to be given or must be complied with; (1)
 - (ii) payment of money must be made;
 - an unconditional undertaking must be released; or (iii)
 - (iv) a default must be remedied.

within a period of 7 days or less from a specified event, then only Business Days will be counted in computing the number of days;

- (m) for the purposes of clause 10.12:
 - any extension of time to any Date for Completion stated in days; or (i)
 - (ii) any reference to "day",

will include only those days indicated in Schedule 1, or otherwise approved by the Principal's Representative, as working days;

- for all purposes (other than as set out in clauses 1.2(I) and 1.2(m), or where (n) otherwise designated as a Business Day), "day" means calendar day;
- for the avoidance of doubt, a reference to an Other Contractor includes an (o) Interface Contractor:
- a reference to "\$" is to Australian currency; (p)
- a reference to "direction" in the definition of "Claim" in clause 1.1 or in any of (q) clauses 2.1(e), 7.1(a)(i)B, 9.1, 9.8(i), 15 and 17 will be read as also including certificate, decision, demand, determination, instruction, notice, order, rejection, request or requirement but will not include any failure to reject a Document:
- no rule of construction applies to the disadvantage of a party on the basis that (r) the party put forward or drafted this Contract or any part;
- any reference to "information" will be read as including information, (5) representations, statements, data, samples, calculations, assumptions,



deductions, determinations, drawings, design, specifications, models, plans and other documents in all forms including the electronic form in which it was

generated;

the interpretations of the terms Date for Completion, Date of Completion and Completion, and clauses 8, 9.13, 12 and 13, will apply separately to each Portion and references therein to the Works and to the Contractor's Activities will mean so much of the Works and the Contractor's Activities as is comprised in the relevant Portion:

- (u) any reference to "Principal's Design" shall be read as if it is a reference to "Preliminary Design"; and
- (v) any reference to "intended purpose" in:
 - (i) the definition of "Completion" in clause 1.1; or
 - (ii) clauses 1.4, 2.1, 2.3(b), 3.2, 4.1, or 5.1,

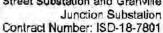
will be read as referring to the intended use or intended purpose having regard to any intended use or intended purpose stated in, contemplated by or ascertainable from the terms of this Contract including the requirement that the Works, when completed will be designed and constructed in compliance with all health and safety requirements of the WHS Legislation.

1.3 Ambiguous terms

- (a) If the Principal's Representative considers, or if the Contractor notifies the Principal's Representative in writing that it considers, that there is an ambiguity, inconsistency or discrepancy in the Contract (including in any Exhibit), the Principal's Representative must, subject to clause 1.4, direct the interpretation of this Contract which the Contractor must follow.
- (b) The Principal's Representative, in giving a direction in accordance with clause 1.3(a), is not required to determine whether or not there is an ambiguity, inconsistency or discrepancy in this Contract.

1.4 Order of Precedence

- (a) In the event of any other inconsistency, ambiguity or discrepancy between the various documents comprising this Contract then:
 - (i) where the inconsistency, ambiguity or discrepancy is between two or more documents that together comprise the Works Brief, then to the extent of any inconsistency, ambiguity or discrepancy, the higher, or more onerous, or more rigorous, requirement will apply; and
 - (ii) otherwise, to the extent of any inconsistency, ambiguity or discrepancy, the order of precedence in Schedule 1 applies.
- (b) The Works Brief, any Preliminary Design and the Planning Approval are to be regarded as mutually explanatory and anything contained in one but not in the other will be equally binding as if contained in all, so as to ensure that the Works comply with this Contract and are fit for their intended purposes.





1.5 Deed Poli by Contractor

If required by Schedule 1 the Contractor must:

- within 10 days of the date of this Contract and as a condition precedent to any (a) obligation of the Principal to pay the Contractor any amount under clause 11.4, provide to the Principal's Representative an executed deed poll in the form set out in Schedule 16 in favour of the persons named in Schedule 1;
- (b) where an Interface Agreement is identified in Schedule 1 as a "Draft" Third Party Agreement, promptly following execution of that Interface Agreement, and as a condition precedent to any obligation of the Principal to pay the Contractor any amount under clause 11.4 following execution of an Interface Agreement, provide to the Principal's Representative an executed deed poll in the form set out in Schedule 24 in favour of the persons named in Schedule 1; and
- where an Interface Agreement has been executed as at the date of this (c) Contract, on or before the date of this Contract and as a condition precedent to any obligation of the Principal to pay the Contractor any amount under clause 11.4, provide to the Principal's Representative an executed deed poll in the form set out in Schedule 24 in favour of the persons named in Schedule 1.

1.6 **Authorities**

- (a) This Contract will not in any way unlawfully restrict or otherwise unlawfully affect the unfettered discretion of:
 - (1) the Principal or any other Rail Transport Agency to exercise any of their respective functions and powers pursuant to any legislation; or
 - (ii) the ASA to exercise any of its functions and powers pursuant to the ASA Charter.
- (b) Without limiting clause 1.6(a), anything the Principal, any other Rail Transport Agency or ASA do, or fail to do or purport to do, pursuant to their respective functions and powers either as an AEO or under any legislation or the ASA Charter, will be deemed not to be an act or omission by the Principal under this Contract.

2. Contractor's obligations

2.1 General

The Contractor:

- (B) must execute the Contractor's Activities, including design, construct. commission and hand-over the Works and each Portion, in accordance with this Contract:
- (b) warrants that the Temporary Works will at all reasonable times be fit for their intended purposes:
- (c) warrants that the Works and each Portion will upon Completion be, and remain, fit for their intended purposes;

Dog ID 607080023/v9



- (d) must employ the person or persons specified in Schedule 1, including the Contractor's Representative, in the performance of the Contractor's Activities;
- (e) must commence and progress the Contractor's Activities expeditiously and in accordance with any directions of the Principal and achieve Completion by the Date for Completion;
- (f) must use all reasonable efforts to inform itself of the requirements of the Principal and regularly consult with the Principal during the performance of the Contractor's Activities; and
- (g) must liaise, cooperate and confer with others as directed by the Principal.

2.2 Subcontracts

- (a) Subject to clause 2.2(b), the Contractor may enter into Subcontracts for the vicarious performance of its obligations under this Contract.
- (b) The Contractor must not enter into any Subcontract with:
 - (i) a Prohibited Subcontractor; or
 - (ii) an initial subcontract price equal to or over the amount specified in Schedule 1 without the prior written approval of the Principal's Representative (which may be conditional but which will not be unreasonably withheld).

Any request by the Contractor for approval to subcontract under this clause 2.2(b) must be in writing and include such details as may be required by the Principal's Representative, including details of the proposed Subcontract conditions, and the proposed Subcontractor's capacity to undertake the relevant work, past performance in undertaking similar work, safety (including work health, safety and rehabilitation issues and providing evidence of compliance with clause 2.2(h)), environmental compliance (including any environmental management system) and other performance, management systems and proposed safe working procedures.

Within 14 days after a request by the Contractor for approval, the Principal's Representative will advise the Contractor whether the request is approved (and, if approved, any relevant Conditions) or not and, where it is not approved, the reasons why approval is not given.

- (c) The Contractor must ensure that each Subcontractor referred to in Schedule 1:
 - (i) effects and maintains professional indemnity insurance which:
 - covers the Subcontractor's liability in respect of breaches of professional duty (whether owed in contract or otherwise) by the Subcontractor or its Subcontractors in carrying out the work under the relevant Subcontract;
 - B. covers the Subcontractor for liability to the Principal or the Contractor for the relevant minimum amount listed in Schedule 1;



- C. unless the Subcontractor using its best endeavours is unable reasonably to procure such a term in the policy, includes at least one automatic reinstatement of the total limit of liability per annum after claims have been paid; and
- remains in place at least until the expiration of a 7 year period from completion of the relevant Subcontract works or professional services; and
- (ii) is obliged under the relevant Subcontract to comply with clause 13.7(c) of this Contract in relation to the insurance referred to in sub-paragraph
 (i).

(d) The Contractor will be:

- (i) fully responsible for the Contractor's Activities despite subcontracting the carrying out of any part of the Contractor's Activities; and
- (ii) vicariously liable to the Principal for all acts, omissions and defaults of its Subcontractors (and those of the employees, Subcontractors and other agents of its Subcontractors) relating to, or in any way connected with, the Contractor's Activities.

(e) The Contractor must:

- (i) without limiting clause 16.22(c), ensure that each of its Subcontracts that has an initial subcontract price of the amount specified in Schedule 1 or more includes provisions to the effect set out in Schedule 5 and a clause to the same effect as this clause 2.2(e)(i) that is binding on the Subcontractor and provide evidence of this to the Principal's Representative when requested by the Principal's Representative;
- (ii) where a Subcontractor is to carry out design work or other professional services, unless not required by the Principal's Representative, procure that Subcontractor to execute a Deed in the form of Schedule 6 and provide this to the Principal's Representative within 7 days of the engagement of that Subcontractor;
- ensure that each Subcontractor (and their Subcontractors) executes a Confidentiality Undertaking in the form of Schedule 3 and provides this to the Principal's Representative within 7 days of the engagement of that Subcontractor;
- (iv) procure that each of its Subcontractors:
 - A. engaged under a Subcontract that has an initial subcontract price equal to or greater than the amount specified in Schedule 1; or
 - in respect of the categories of work set out in Schedule 1 (regardless of subcontract price),

executes a deed in the form of Schedule 14 and provides this to the Principal's Representative within 7 days of being engaged by the Contractor; and



- (v) in respect of all Subcontracts in which it holds retention money from the Subcontractor, comply with all requirements under the Building and Construction Industry Security of Payment Amendment (Retention Money Trust Account) Regulation 2015 (NSW).
- (f) The Contractor must, as a condition precedent to Completion of the Works or a Portion, procure and provide the Principal's Representative with those warranties described in Schedule 1 or elsewhere in this Contract from relevant Subcontractors undertaking or supplying the work or items the subject of the warranty.

These warranties:

- (i) must be in the form set out in Schedule 11 and must be in favour of the Principal and any other entity nominated by the Principal's Representative from time to time, including any Rail Transport Agency; and
- (ii) will not derogate from any rights that the Principal may have against the Contractor in respect of the subject matter of these warranties.
- (g) If directed by the Principal, the Contractor must, without being entitled to compensation, within 5 Business Days of the date of receipt by the Contractor of the direction, execute and deliver to the Principal a deed of novation in the form which appears in Schedule 18, such deed being between the Principal, the Contractor and the Subcontractor stated in Schedule 1.

The Contractor irrevocably and severally appoints the Principal and any authorised representative of the Principal to be the Contractor's attorney to execute, sign, seal and deliver in the name of the Contractor, the deed referred to in this clause 2.2(g) and all notices, deeds and documents for that purpose.

Any direction given by the Principal and any novation occurring pursuant to this clause 2.2(g) will not:

- relieve the Contractor from its liabilities or obligations (including those arising out of any warranties given under this Contract);
- (ii) limit or otherwise affect the Principal's rights against the Contractor (including those arising out of any warranties given under this Contract); or
- (iii) entitle the Contractor to make any Claim,

whether under this Contract or otherwise according to any Law.

- (h) The Contractor must:
 - (i) ensure that, if any Law, including in the State or Territory in which the Works are situated or the Works are carried out (as the case may be), require that:
 - A. a person;
 - be authorised or licensed (in accordance with the WHS Legislation) to carry out any work at that workplace.

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 507060023/49

T2317765 10



that person is so authorised or licensed, and complies with any conditions of such authorisation or licence; and/or

- 2) has prescribed qualifications or experience or, if not, is to be supervised by a person who has prescribed qualifications or experience (as defined in the WHS Legislation), that person has the required qualifications or experience or is so supervised; or
- a workplace, plant or substance (or design), or work (or class of work) be authorised or licensed, that workplace, plant or substance, or work is so authorised or licensed;
- (ii) must not direct or allow a person to carry out or use plant or substance at a workplace unless the requirements of subparagraph (i) are met (Including any requirement to be authorised, licensed, qualified or supervised); and
- (iii) if requested by the Principal's Representative or required by the WHS Legislation, produce evidence of any approvals, certificates, authorisations, licences, prescribed qualifications or experience, or any other information relevant to work health and safety (as the case may be) to the satisfaction of the Principal's Representative before the Contractor or Subcontractor (as the case may be) commences such work.

2.3 Compliance with Law

- (a) Subject to clause 2.3(c)(l), the Contractor must in carrying out the Contractor's Activities:
 - comply with, and ensure that the Works and the Temporary Works comply with, all applicable Law;
 - (ii) give all notices and pay all fees, bonds and other amounts which it is required to pay in respect of the performance of its obligations under this Contract and give the Principal's Representative copies of all notices it gives to Authorities at the time or before it submits such notices to Authorities;
 - (iii) give the Principal's Representative copies of all documents (including Authority Approvals and other notices) that Authorities issue to it;
 - (iv) at all times conform and comply with, and ensure that the Works and the Temporary Works conform and comply with, all Codes and Standards; and
 - (v) not engage in any fraud, bribery or corruption.
- (b) Where there is a Change in Codes and Standards:
 - (I) the Contractor must give a written notice to the Principal's Representative within 20 Business Days of the Change in Codes and Standards containing:



- A. details of the Change in Codes and Standards; and
- an estimate of the Contractor's increased or decreased costs of complying with the Change in Codes and Standards including sufficient information to support the estimate; and
- (ii) if a notice is given by the Contractor which complies with clause 2.3(b)(i), then within 10 Business Days of the notice being given, the Principal's Representative will either:
 - A. direct the Contractor to disregard the Change in Codes and Standards; or
 - B. direct a Variation under clause 6.2(a) in respect of the Change in Codes and Standards.

If there is any change in the Codes and Standards which does not constitute a Change in Codes and Standards the Contractor must comply with the change and will not be entitled to make any Claim against the Principal arising out of or in any way in connection with the change.

(c) The Contractor must:

- (i) obtain all Authority Approvals required for the execution of the Contractor's Activities and occupation and use of the completed Portions (and for that purpose prepare and submit all applications and associated documents to relevant Authorities), except for those Authority Approvals specified in Schedule 7 that either:
 - were obtained by the Principal prior to the date of this Contract;
 or
 - will be obtained by the Principal after the date of this Contract where required;
- (ii) unless otherwise expressly specified in Schedule 4, comply with, satisfy, carry out and fulfil the conditions and requirements of all Authority Approvals (whether obtained by the Contractor or the Principal), including those conditions and requirements that the Principal is required, under the terms of the Authority Approvals, including the Planning Approval, to comply with, satisfy, carry out and fulfil;
- (iii) in respect of any:
 - A. Authority Approvals which are to be obtained by the Principal after the date of this Contract; or
 - conditions and requirements of Authority Approvals which pursuant to Schedule 4 are to be satisfied or fulfilled by the Principal,



provide the Principal with such reasonable assistance as may be reasonably required by the Principal to enable the Principal to obtain the Authority Approvals or satisfy or fulfil the conditions and requirements:

- (iv) for the purpose of obtaining all Authority Approvals as required by clause 2.3(c)(i), prepare all associated studies and reports required because of the design of the Works or Temporary Works proposed by the Contractor; and
- (v) as a condition precedent to Completion of the Works or a Portion, ensure that it has:
 - A. obtained all Authority Approvals it is required to obtain under this Contract;
 - complied with, carried out and fulfilled all conditions and requirements of all Authority Approvals it is required to comply with, carry out and fulfil under this Contract;
 - C. without limiting clauses 2.3(c)(v)A and 2.3(c)(v)B, complied with, carried out and fulfilled all conditions and requirements of the Planning Approval which it is required to comply with, carry out and fulfil (including obtaining the approval of any person for anything) under this Contract; and
 - D. unless it is included in Schedule 7 as an Authority Approval which the Principal will obtain, obtained and supplied to the Principal's Representative certification that the Works or the Portion, as designed and built, comply with the requirements of the Building Code of Australia to the extent applicable,

including for the avoidance of doubt any Authority Approvals, conditions or requirements which must be obtained, carried out or fulfilled to enable the Principal and any Rail Transport Agency to occupy and use the Works or Portion for its intended purpose.

- (d) Where there is a Change in Law:
 - (i) if either party wishes this clause 2.3(d)(i) to apply, then that party must, within 14 days of the Change in Law, give a written notice to the other and the Principal's Representative stating that clause 2.3(d)(i) applies and containing details of the Change in Law, including, where the notice is given by the Contractor, its impact on the Contractor's costs of carrying out the Contractor's Activities and any effect it will have on the Contractor's Program;
 - (ii) if such a notice is given the Principal's Representative will determine:
 - A. where the Change in Law decreases the Contractor's costs of carrying out the Activities in compliance with the Change in Law, a reasonable amount as the amount of the decrease; or
 - where the Change in Law increases the Contractor's costs of carrying out the Activities in compliance with the

Contract Number: ISD-18-7801

Change in Law, the amount of the increased costs reasonably incurred by the Contractor on the basis that the Contractor took all reasonable steps to mitigate those increased costs,

and the will be increased or decreased by that amount; and

- (iii) the Contractor must comply with the Change in Law.
- (e) If a Change in Authority Approval occurs which necessitates a Variation, the Contractor must:
 - if the relevant Authority Approval was obtained by the Principal, within 14 days of the date on which the Contractor becomes aware or ought reasonably to have become aware of the Change in Authority Approval taking effect; or
 - (ii) otherwise within 14 days of the Change in Authority Approval taking effect.

notify the Principal's Representative in writing with detailed particulars of the reason why the Change in Authority Approval necessitates a Variation. If the Contractor gives such a notice and the Change in Authority Approval does necessitate a Variation the Principal's Representative will direct a Variation under clause 6.2(a).

- (f) Other than as set out in clause 2.3(e), the Contractor will not be entitled to make, and the Principal will not be liable upon, any Claim arising out of or in any way in connection with:
 - (i) any Change in Authority Approval:
 - an Authority Approval obtained or issued or which otherwise takes (ii) effect after the date of this Contract:
 - (iii) a change in an Authority Approval after the date of this Contract; or
 - (iv) any:
 - A. assumptions the Contractor makes; or
 - В. failure by the Contractor to adequately satisfy itself,

as to what work methodologies and Temporary Works might be permissible under all Authority Approvals.

- (g) Without limiting the Contractor's obligations under any other clause of this Contract, insofar as the Contractor, in carrying out the Contractor's Activities, is:
 - (i) a person conducting a business or undertaking that designs plant, substances or structures to whom section 22 of the Work Health and Safety Act 2011 (NSW) applies;
 - (11) a person conducting a business or undertaking that manufactures plant, substances or structures to whom section 23 of the Work Health and Safety Act 2011 (NSW) applies:



- (iii) a person conducting a business or undertaking that imports plant, substances or structures to whom section 24 of the Work Health and Safety Act 2011 (NSW) applies;
- (iv) a person conducting a business or undertaking that supplies plant, substances or structures to whom section 25 of the Work Health and Safety Act 2011 (NSW) applies; or
- a person conducting a business or undertaking that installs, constructs or commissions plant or structures to whom section 26 of the Work Health and Safety Act 2011 (NSW) applies,

the Contractor shall comply with the applicable obligations under the WHS Legislation.

2.4 Legal Challenge to Approval

- (a) If there is a legal challenge, proceedings or action in relation to the assessment or determination of an application for an Authority Approval or a modification of an Authority Approval, performance of the Contractor's Activities or the Works, or compliance with any Authority Approval under:
 - (i) the Environmental Planning and Assessment Act 1979 (NSW);
 - (ii) the Protection of the Environment Operations Act 1997 (NSW);
 - (iii) the Environment Protection and Biodiversity Conservation Act 1999 (Cth); or
 - (iv) any other Law.

the Contractor must continue to perform its obligations under this Contract unless, as a result of that legal challenge, proceedings or action, it is otherwise:

- (v) ordered or directed by an Authority;
- (vi) ordered by a court or tribunal; or
- (vii) directed by the Principal or the Principal's Representative.
- (b) Subject to clause 2.4(c), the Principal must pay the Contractor the costs reasonably incurred by the Contractor as a direct result of:
 - (i) an Authority order referred to in clause 2.4(a)(v);
 - (ii) a court order referred to in clause 2.4(a)(vi); or
 - (iii) a direction by the Principal referred to in clause 2.4(a)(vii).

to the extent that such Authority order, court order, or direction prevents the Contractor from achieving Completion of the Works or a Portion by the relevant Date for Completion.

(c) Clause 2.4(b) does not apply to the extent that a legal challenge, proceedings or action of the kind referred to in clause 2.4(a) is brought or upheld due to the Contractor's non-compliance with its obligations under this Contract or any Authority Approval.



2.5 Services

The Contractor must:

- obtain and pay for any Service it needs to perform its obligations under this Contract;
- relocate, remove, modify, support, protect, reinstate and provide all Services necessary for the Contractor to comply with its obligations under this Contract;
- (c) subject to clause 3.5, assume the risk of the existence, location, condition and availability of all Services required for the execution of the Contractor's Activities:
- (d) provide and maintain all signage, line marking, flagmen, barriers and other road traffic devices needed by the Contractor to comply with its obligations under this Contract, including any such devices reasonably required by the Principal's Representative;
- (e) despite any other provision in the Contract to the contrary, ensure that no Services are:
 - (i) damaged or destroyed; or
 - disconnected, disrupted, interfered with or interrupted during normal operating hours,

by reason of the performance of the Contractor's Activities;

- (f) cooperate and coordinate with the owners of all Services, and implement their requirements as part of the Contractor's Activities; and
- indemnify the Principal against any claim, damages, expense, costs, loss, liability, fine or penalty the Principal suffers or incurs arising out of or in any way in connection with any disconnection, interference with, interruption or disruption to any Service arising out of or in any way in connection with the Contractor's Activities, provided that the Contractor's liability to indemnify the Principal will be reduced proportionally to the extent that an act or omission of the Principal, an Other Contractor or an agent of the Principal contributed to the claim, damages, expense, costs, loss, liability, fine or penalty.

Subject to clause 3.5, the Contractor agrees it is responsible for, and assumes the risk of all additional work, increased costs and any damages, expense, loss, liability, delay or disruption (including any delay in achieving Completion) it suffers or incurs arising out of or in any way in connection with the existence, location, condition and availability of all Services required for the execution of the Contractor's Activities.

2.6 Crown Building Work

- (a) The Contractor must, in relation to any part of the Works that is a Crown Building Work, certify (on behalf of the Principal) as required by section 109R of the Environmental Planning and Assessment Act 1979 (NSW).
- (b) Any certification under clause 2.6(a) will not lessen or otherwise affect:

- (i) the Contractor's other liabilities or responsibilities under this Contract or otherwise according to law; or
- (11) the Principal's rights against the Contractor, whether under this Contract or otherwise according to law.

2.7 Unconditional Undertakings and Parent Company Guarantee

- (a) Without limiting clause 2.7(d), the unconditional undertakings to be provided under this clause 2.7 are for the purpose of ensuring the due and proper performance by the Contractor of its obligations under this Contract.
- (b) The Contractor must give the Principal within 10 days of the date of this Contract, two unconditional undertakings:
 - (i) each for an amount equal to \$
 - (ii) each in the form of Schedule 8:
 - (iii) each in favour of the Principal;
 - (iv) each issued by an Institution approved by the Principal that maintains the Required Rating; and
 - (v) where required by Law, duly stamped.
- (c) Subject to its rights to have recourse to the unconditional undertakings and subject to clauses 2.7(g), 14.10 and 14.12, the Principal must:
 - (i) within 28 days after the Date of Completion of the last Portion achieve Completion, release so much of the unconditional undertakings provided by the Contractor under clause 2.7(b) as may be then held by the Principal, so that it then holds \$
 - (11) within 28 days after the expiration of all the Defects Rectification Periods (excluding any extensions under clause 8.6), release so much of the unconditional undertakings provided by the Contractor under clause 2.7(b) as may be then held by the Principal, to such amount as the Principal's Representative determines to be reasonable, having regard to the work to which the remaining Defects Rectification Periods (including any extensions under clause 8.6) apply; and
 - (iii) within 28 days after the Date of Final Completion, release the balance of the unconditional undertakings provided by the Contractor under clause 2.7(b) as may be then held by the Principal.
- (d) The Principal:
 - (i) may have recourse to any unconditional undertaking provided under this clause 2.7 or clause 11.7(b) at any time;
 - (ii) is not obliged to pay the Contractor interest on:
 - any unconditional undertaking; or

- B. the proceeds of any unconditional undertaking if it is converted into cash; and
- (iii) does not hold the proceeds referred to in clause 2.7(d)(ii)B on trust for the Contractor.
- (e) The Contractor must not take any steps to injunct or otherwise restrain:
 - (i) any issuer of any unconditional undertaking provided under this clause 2.7 or clause 11.7(b) from paying the Principal pursuant to the unconditional undertaking:
 - (ii) the Principal from taking any steps for the purposes of making a demand under any unconditional undertaking provided under this clause 2.7 or clause 11.7(b) or receiving payment under any such unconditional undertaking; or
 - (iii) the Principal using the money received under any unconditional undertaking provided under this clause 2.7 or clause 11.7(b).
- (f) The Contractor must within 10 days of the date of this Contract give the Principal a guarantee duly executed by the person referred to in Schedule 1 in favour of the Principal in the form of the Parent Company Guarantee and which is, where required, duly stamped.
- (g) Despite any other provision of this Contract to the contrary, where this Contract may otherwise require the Principal to release an unconditional undertaking or this Contract is terminated by the Principal either pursuant to clause 14 or by reason of the Contractor repudiating this Contract (or otherwise at law), the Principal may continue to hold the unconditional undertaking after the date for its release or the termination of this Contract to the extent of any claim which the Principal may have against the Contractor arising out of, or in any way in connection with, this Contract or the Contractor's Activities whether for damages (including liquidated damages) or otherwise.

2.8 Long Service Leave Levy

Where the Contractor is specified in Schedule 1 as being responsible for payment of the long service leave levy, then, before commencing any construction work under this Contract (including any construction of Temporary Works), the Contractor must:

- (a) pay to the Long Service Corporation or that body's agent all amounts payable for the long service leave levy in respect of the Contractor's Activities under the Building and Construction Industry Long Service Payments Act 1986 (NSW); and
- (b) produce to the Principal's Representative the documents evidencing payment of the amounts referred to in clause 2.8(a).

2.9 Co-operation with Interface Contractors

- (a) The Contractor:
 - (i) acknowledges that:

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.doex
© TfNSW 2014
Doc ID 607060023/ve

T2317765 10



- A. the Contractor's Activities interface with the Interface Work; and
- B. Interface Contractors will be executing work on parts of the Site, or Extra Land, or adjacent to the Site or Extra Land, at the same time as the Contractor is performing the Contractor's Activities:
- the timing of the Interface Contractors' activities will be as discovered by the Contractor;
- D. It may require certain design and work methodology input from Interface Contractors to coordinate the design of the Works and Temporary Works with the Interface Work:
- E. Interface Contractors may require the Contractor to provide design and work methodology information to them to coordinate the design of the Interface Work with the Works and Temporary Works, and this must be provided in a timely manner by the Contractor, and
- F. any delay in the performance of the Contractor's Activities or in the Contractor providing information to, or co-operating and co-ordinating with any Interface Contractor, may adversely impact upon, delay or disrupt any one or more Interface Contractors or the Contractor's Activities in a way which may lead to the Principal suffering or incurring additional costs, losses and damages; and

(ii) must at all times:

- A. permit Interface Contractors to execute the Interface Work on the applicable parts of the Site or Extra Land, or on any adjacent property to the Site or Extra Land:
 - at the same time as the Contractor is performing the Contractor's Activities; and
 - at the times agreed with the Interface Contractor, or failing agreement at the times determined by the Principal's Representative,

and for this purpose ensure they have safe, clean and clear access to those parts of the Site or Extra Land, or property adjacent to the Site or Extra Land, required by them for the purpose of carrying out their work;

- B. protect the Works, Temporary Works and other improvements on the Site or Extra Land from accidental damage by Interface Contractors and provide means of receiving, storing and protecting goods and equipment supplied by Interface Contractors;
- co-operate with Interface Contractors, and do everything reasonably necessary to facilitate the execution of work by Interface Contractors, including providing Interface Contractors

T2317765 10



with such assistance as may be directed by the Principal's Representative:

- D. carefully coordinate and interface the Contractor's Activities with the Interface Work and for this purpose:
 - make proper allowance in all programs for the Interface Work:
 - review all programs provided by Interface Contractors and confirm that they adequately allow for the Contractor's Activities and the interfaces of the Interface Work with the Contractor's Activities;
 - 3) monitor the progress of the Interface Work;
 - 4) notify the Principal's Representative of any interface or sequence of activities that may affect the commencement, progress or Completion of the Works or any Portion;
 - 5) provide the Interface Contractors with sufficient information about the current and expected Contractor's Activities to assist them to coordinate their Interface Work with the Contractor's Activities; and
 - it must cooperate, meet with, liaise and share information so that the Contractor and the relevant Interface Contractor each comply with the provisions of the relevant EPL (if applicable);
- perform the Contractor's Activities so as to minimise any interference with or disruption or delay to the Interface Work;
- F. be responsible for coordinating the Contractor's Activities, including work sequencing, construction methods, safety and industrial relations matters with those affecting, and influenced by, Interface Contractors' personnel and work, including providing to the Principal's Representative copies of working method statements for those parts of the Works or Temporary Works which are adjacent to or interface with any Interface Work, at least 15 Business Days prior to commencing the work described in the work method statement;
- G. provide for the purposes of clause 2.9(a)(ii)F (unless otherwise directed by the Principal's Representative), the number and form of copies of the work method statements specified in Schedule 1:
- H. work directly with Interface Contractors where required to complete the design of the Works and Temporary Works and provide all necessary information to Interface Contractors in respect of the Works and Temporary Works to permit the Interface Contractors to complete the design of the Interface Works so that they are acceptable to the Principal and

T2317765_10



otherwise comply with this Contract, including the Works Brief and the Preliminary Design;

- I. work in accordance with:
 - the Contract Management Plan that has been submitted for review under clause 9.8, and, in respect of which:
 - the Contractor has received the notice referred to in clause 9.8(c)(ii)C; or
 - b) the relevant period of time in clause 9.8(c)(ii) has expired and the Principal's Representative has not rejected the Contractor Management Plan or made any comments on it (except, in the case of comments, where the Contractor has responded to the comments within the required time period and in a manner satisfactory to the Principal's Representative as referred to in clause 9.8(d)); and
 - 2) the TfNSW Standard Requirements;
- J. attend interface coordination meetings chaired by the Principal's Representative with Interface Contractors and others each 14 days, or at other times to be advised by the Principal's Representative, to review current and future issues, including the exchange of information, status, problems, solutions, and newly identified interfaces;
- K. when information is required from an Interface Contractor, provide reasonable written notice which must be at least 10 days (except in special circumstances) or any longer period of notice required under the Works Brief to that Interface Contractor requesting such information and specifying the date by which such information is required, with a copy to the Principal's Representative;
- ensure that any written notice given under clause 2.9(a)(ii)K
 provides the Interface Contractor with the longest possible time
 for the provision of the information;
- M. when any information is requested by Interface Contractors, including confirming the compatibility or suitability of the design of, work methods to be used in, or any other aspect of, the Interface Work with the Works or the Contractor's Activities:
 - provide the information to the Interface Contractor, with a copy to the Principal's Representative, within the time requested by the Interface Contractor provided that this time is reasonable;
 - ensure that such information is provided to interface Contractors by the requested dates; and

T2317705 10



 ensure and warrant that the information provided is accurate; and

- N. use its best endeavours to resolve any problems, and work closely and iteratively, with Interface Contractors, including providing design options, iterations, and work methodologies, to achieve the best solution to such problems, related to:
 - 1) the provision of information;
 - 2) the obtaining of information;
 - the adequacy of information provided to, or received from, Interface Contractors;
 - the compatibility of the Works and Temporary Works with the Interface Work;
 - 5) coordination in accordance with this clause 2.9(a); and
 - technical issues with the information provided to, or received from, Interface Contractors;
- (iii) must, in the event that despite using its best endeavours, and working closely and iteratively with the Interface Contractors, the Contractor and any Interface Contractor fail to resolve a problem between them:
 - give written notice to the Principal's Representative with a copy to the Interface Contractor describing the problem; and
 - B. attend any coordination meetings as requested, and to be chaired, by the Principal's Representative, and in good faith work with those present to attempt to resolve the problem;
- (iv) must promptly advise the Principal's Representative of all matters arising out of the liaison with Interface Contractors that may involve a change to design or construction work under this Contract or otherwise have an adverse effect upon the Contractor's Activities; and
- (v) acknowledges that conditions similar to those in this clause 2.9(a) applying to the Contractor will apply to all Interface Contractors engaged by the Principal, whether working on the Site or on any other site.
- (b) Where the Contractor has complied with all its obligations in clause 2.9(a), the Contractor must promptly give the Principal's Representative written notice of any interface issue or dispute with any Interface Contractor.
- (c) Upon receipt of the Contractor's notice under clause 2.9(b), the Principal's Representative must:
 - within 5 Business Days convene a meeting between the Contractor, the relevant Interface Contractor and any other relevant person (as reasonably determined by Principal's Representative); and

Contract Number: ISD-18-7801

 (ii) work in good faith with the Contractor and the Interface Contractor to resolve the issues or dispute.

(d) The Contractor:

- (i) acknowledges and agrees:
 - A. no act or omission by an Interface Contractor will, whether or not it causes any delay, disruption or interference to the Contractor's Activities, constitute an an act or omission of the Principal or the Principal's Representative (including any breach of Contract or Variation directed by the Principal's Representative); or
 - B. that except where the Principal's Representative directs a Variation in circumstances where the Contractor has fully complied with clause 2.9(a), the Principal will not be liable upon any Claim by the Contractor arising out of or in any way in connection with:
 - the Interface Contractors carrying out their work; or
 - 2) any act or omission of an Interface Contractor; and
- (ii) warrants that the and the Contractor's Program contain sufficient allowances for the assumption by the Contractor of the obligations and risks under clause 2.9(a) and this clause 2.9(d), including the cost of all the design iterations required to accommodate Interface Work.

2.10 Incident Management Reporting

- (a) The Contractor must identify clear guidelines for responding to any Incident arising from the performance of the Contractor's Activities and establish procedures to ensure that the Principal's Representative is promptly notified of any Incident in accordance with the TfNSW Standard Requirements.
- (b) Should an Incident occur which:
 - is reportable under any relevant Law, the Contractor must immediately report the incident to the relevant Authority and the Principal's Representative in accordance with the TfNSW Standard Requirements;
 - (ii) relates to rail safety, the Contractor must notify the Principal and any relevant Rail Transport Agency management centre or the nearest network control officer.
- (c) In relation to any environmental or safety Incident involving Hazardous Material, Contamination, Pollution or other waste that arises during the performance of the Contractor's Activities, the Contractor must:
 - at its own cost promptly take all appropriate action to manage and dispose of all Hazardous Material, Contamination, Pollution or other waste arising from the Incident;



- (ii) comply with all relevant Laws including any requirements to give notice to a relevant Authority; and
- (iii) at its own cost manage the Incident in a manner which minimises damage to the reputation of the Principal including complying with any reasonable request of the Principal's Representative.
- (d) If the Contractor causes or contributes to the occurrence of an Incident and fails to ensure that the Principal is promptly notified, the Principal, may without prejudice to any other right it has under this Contract, immediately terminate the Contract by written notice to the Contractor.
- (e) Without prejudice to the Principal's other rights under this Contract, if the Principal forms the reasonable view, upon the occurrence (or imminent risk of the occurrence) of an Incident, that the Contractor is not taking adequate measures to manage the Incident or control or eliminate the adverse impact or the risk of such an Incident arising in the future, the Principal may (but has no obligation) to take such actions as it deems necessary to overcome and alleviate the cause and consequences of any Incident. If the Principal takes any such action it will be entitled to recover its reasonable costs and expenses from the Contractor as a debt due from the Contractor to the Principal.
- (f) Without prejudice to the Principal's other rights under this Contract, the Principal's Representative may issue a direction under clause 10.14 requiring the Contractor to suspend the carrying out of the whole or any part of the Contractor's Activities in the event:
 - (i) of any incident involving:
 - A. a significant spill of Contamination;
 - any accident or release of Contamination which it believes may pose a danger to health, life or property; or
 - any actual damage or harm to the Environment or a significant risk of harm to the Environment; or
 - (ii) any safety incident occurs which leads to, or has the potential to lead to, a fatality or injury to person (including any incident which must be reported to New South Wales WorkCover Authority) or damage to property.

The Principal will not be liable upon any Claim by the Contractor for any cost, expense, loss, delay, disruption or penalty arising out of or in connection with:

- (iii) any suspension due to a direction to suspend issued, or for the failure to issue a notice to suspend, in the circumstances set out in this clause 2.10(f); and
- (iv) complying with a direction issued under clause 2.10(g), including complying with the steps which Principal's Representative directs that the Contractor must take before the Principal's Representative will issue a direction to recommence the Contractor's Activities.



If the Principal's Representative issues a notice to suspend in the circumstances (g) set out in clause 2.10(f), the Contractor may not recommence the Contractor's Activities in respect of the part of the Contractor's Activities to which the notice relates until the Principal's Representative issues a direction to the Contractor permitting the Contractor to recommence the Contractor's Activities affected by the notice to suspend.

> If the Principal's Representative issues a notice to suspend in the circumstances set out in clause 2.10(f) the Principal's Representative may also direct the Contractor as to the steps which the Contractor must take before the Principal's Representative will issue a direction pursuant to clause 10.14 permitting the Contractor to recommence the Contractor's Activities affected by the notice to suspend. In these circumstances the Contractor must, at its cost, comply with the direction of the Principal's Representative, and only once the Principal's Representative is satisfied that the Contractor has complied with the requirements of the direction issued under this clause 2.10(g) will the Principal's Representative issue a direction to the Contractor permitting the Contractor to recommence the Contractor's Activities affected by the notice to suspend.

(h) The Principal will be entitled to recover its reasonable costs and expenses for any action the Principal's Representative deems necessary to avoid the issue of any notice to suspend in the circumstances set out in clause 2.10(f), as a debt due and payable from the Contractor to the Principal.

Principal Contractor 2.11

In this clause 2.11 the terms 'construction project', 'construction work', 'principal (a) contractor' and 'workplace' have the same meanings assigned to those terms under the WHS Legislation.

> For the purpose of the WHS Legislation and the Contract, the Works and any Other Contractor Work is taken to be part of the same construction project.

- If the Contractor is specified in Schedule 1 as being the principal contractor: (b)
 - the Principal engages the Contractor as the principal contractor in (i) respect of the Contractor's Activities and all Other Contractor Work carried out on the Site;
 - the Principal authorises the Contractor to have management and (ii) control over the Site and of each workplace at which the Contractor's Activities and the Other Contractor Work is to be carried out and to discharge the duties of a principal contractor under the WHS Legislation; and
 - (iii) the Contractor accepts the engagement as principal contractor and agrees to discharge the duties imposed on a principal contractor by the WHS Legislation.
- To the extent not prohibited by law, the Contractor must indemnify the Principal (c) against any damage, expense, loss (including reasonable legal fees) or liability suffered or incurred by the Principal arising out of or in connection with the Contractor's failure to discharge the duties imposed on a principal contractor by



the WHS Legislation that the Contractor is required to discharge in accordance with this clause 2.11.

- (d) Where the Contractor is not specified in Schedule 1 to be the principal contractor, the Contractor:
 - (i) acknowledges that the person who is specified in Schedule 1 is the principal contractor in respect of all construction work carried out by or on behalf of the Principal on that Site during the period which that person is specified as being the principal contractor in Schedule 1; and
 - (ii) must comply with any exercise by the person referred to in subparagraph (i) of such authority as is necessary to enable that person to discharge the responsibilities imposed on a principal contractor by the WHS Legislation.
- (e) Without limiting anything else in this clause 2.11, the Contractor must, in respect of any construction work carried out on all or part of the Extra Land, discharge the duties of a principal contractor under the WHS Legislation in respect of such construction work.

2.12 Third Party Agreements

- (a) The Contractor:
 - acknowledges that the Principal has entered or will enter into the Third Party Agreements;
 - (ii) must:
 - A. unless otherwise expressly specified in Schedule 4, comply with, satisty, carry out and fulfil the conditions and requirements of all Third Party Agreements, including those conditions and requirements that the Principal is required, under the terms of the Third Party Agreements, to comply with, satisfy, carry out and fulfil; and
 - B. comply with and fulfil any conditions, obligations or requirements allocated to the Contractor in Schedule 4 that are additional to or more stringent or onerous than the conditions and requirements described in clause 2.12(a)(ii)A;
 - (iii) must assist the Principal in any way that the Principal reasonably requires to enable the Principal to perform the obligations identified for the Principal to perform in Schedule 4;
 - (iv) must comply with any reasonable directions of the Principal's Representative (who will have regard to any reasonable submissions made by the Contractor to the Principal's Representative) in relation to compliance with the relevant conditions and requirements of each Third Party Agreement;
 - (v) must, where a Third Party Agreement provides for the Principal to provide a document, notice or information to the Third Party, provide such document, notice or information to the Principal (and not to the



Third Party) within a reasonable time sufficient for the Principal to review and comment on the document, notice or information and provide it to the Third Party within the time period required by a Third Party Agreement;

- (vi) must, in carrying out the Contractor's Activities;
 - ensure that no act or omission of the Contractor constitutes, causes or contributes to any breach by the Principal of its obligations to the Third Party under the Third Party Agreement; and
 - otherwise act consistently with the terms of the Third Party Agreement;
- (vii) agrees that whenever, pursuant to the terms of a Third Party
 Agreement, the Principal makes an acknowledgment or gives a release
 or warranty, indemnity, or covenant to the Third Party under any clause
 of the Third Party Agreement then, subject to what is provided in
 Schedule 4 and the other terms of this Contract, the Contractor is
 deemed to make the same acknowledgement or give the same release
 or warranty, indemnity or covenant to the Principal on the same terms
 and conditions as the acknowledgement, release or warranty,
 indemnity or covenant made or given by the Principal under a Third
 Party Agreement in the same way as if the relevant terms of the
 acknowledgement, release or warranty, indemnity or covenant were set
 out in full in this Contract; and
- (viii) acknowledges that to the extent that a Third Party Agreement contains a provision pursuant to which the Third Party is stated to make no representation as to a state of affairs, the Contractor agrees that the Principal similarly makes no representation to the Contractor in respect of that state of affairs in the same way as if the relevant terms of the Third Party Agreement were set out fully in this Contract.
- (b) The parties acknowledge that:
 - (i) as at the date of this Contract:
 - A. the terms and conditions of the Third Party Agreements identified in Schedule 1 as "Draft" have not been finalised between the Principal and the relevant Third Party (each a "Draft Third Party Agreement"); and
 - B. certain Third Party Agreements may need to be replaced with new agreements on different terms (each a "Replacement Third Party Agreement");
 - the Contractor has reviewed the Third Party Agreements executed at the date of this Contract and the Draft Third Party Agreements and has included in the all of its costs (including the cost of all physical works and allowance for any delay or disruption) in complying with its obligations under clause 2.12(a) and the Principal's obligations under the Third Party Agreements executed at the date of this Contract

EXECUTION VERSION –
Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/ve



and the Draft Third Party Agreements other than those identified in Schedule 4 for the Principal to perform;

(iii) following:

- A. finalisation of any Draft Third Party Agreement; or
- B. the execution of any Replacement Third Party Agreement, after the date of this Contract, the Principal must promptly give the Contractor a copy of the:
- C. executed version of the Draft Third Party Agreement or the Replacement Third Party Agreement (as applicable), together with (in the case of a Replacement Third Party Agreement) details of the Third Party Agreement that is replaced; and
- amendments (if any) to Schedule 4 arising out of the execution of the Draft Third Party Agreement or the Replacement Third Party Agreement (as applicable) ("Revised Allocation");
- (v) within 28 days of receipt of an executed copy of a Draft Third Party Agreement or a Replacement Third Party Agreement (as applicable), and the associated Revised Allocation, the Contractor must notify the Principal's Representative in writing if any terms and conditions of:
 - A. the executed version of the Draft Third Party Agreement or the Replacement Third Party Agreement (as applicable); or
 - B. the associated Revised Allocation.

are substantially more onerous than those contained in:

- C. the relevant Draft Third Party Agreement, and
- D. Schedule 4.

("Difference in Conditions") and

- E. where the Difference in Conditions or Revised Allocation will result in additional administration, details of such additional administration costs to be incurred by the Contractor;
- F. where the Difference in Conditions or Revised Allocation will result in additional physical works:
 - 1) not forming part of the Contractor's Activities; and
 - which is otherwise in addition to any physical works contemplated by the Third Party Agreements executed at the date of this Contract and the Draft Third Party Agreements,

details of such additional physical works and the cost of carrying out such additional physical works; and

Contract Number: ISD-18-7801

- where the Difference in Conditions or Revised Allocation alters G. the Contractor's risk profile under this Contract and creates a contingent liability which the Contractor did not previously bear and which may convert to an actual liability on the happening of another event ("Trigger Event"), details of the altered risk profile, contingent liability and Trigger Event and a notice of intention to claim:
- if the Principal does not receive a notice from the Contractor under (v) clause 2.12(b)(iv) within the 28 day period:
 - Schedule 4 is amended in accordance with the Revised Allocation as and from the date of receipt by the Contractor of
 - executed copy of the Draft Third Party Agreement or 1) the Replacement Third Party Agreement (as applicable); and
 - Revised Allocation,

under clause 2.12(b)(iii); and

- the Contractor must carry out its obligations under this Contract B. on the basis of:
 - the executed version of the Draft Third Party 1) Agreement or Replacement Third Party Agreement (rather than the Third Party Agreement that is replaced) (as applicable); and
 - the Revised Allocation, 2)

without any entitlement to make any Claim;

- if the Principal's Representative receives a notice from the Contractor (vi) under clause 2.12(b)(iv) within the 28 day period, then:
 - Schedule 4 is amended in accordance with the Revised Allocation as and from the date of receipt by the Contractor of the:
 - executed copy of the Draft Third Party Agreement or 1) the Replacement Third Party Agreement (as applicable); and
 - Revised Allocation, 2)

under clause 2.12(b)(iii);

- the Contractor must carry out its obligations under this Contract В. on the basis of:
 - the executed version of the Draft Third Party 1) Agreement or Replacement Third Party Agreement



(rather than the Third Party Agreement that is replaced) (as applicable); and

- the Revised Allocation;
- C. the Principal's Representative must:
 - to in clause 2.12(b)(iv)E, give the Contractor a notice setting out the Principal's Representative's determination of the reasonable, additional administration costs incurred or to be incurred by the Contractor in complying with the executed version of the Draft Third Party Agreement, the Replacement Third Party Agreement or Revised Allocation and the will be increased by that amount; and
 - where the Contractor has provided the details referred to in clause 2.12(b)(iv)F, if the terms of any executed version of a Draft Third Party Agreement, the relevant Replacement Third Party Agreement or Revised Allocation require the Contractor to carry out any physical work which:
 - does not form part of the Contractor's Activities; and
 - is additional to any physical works contemplated by the Third Party Agreements executed at the date of this Contract and the Draft Third Party Agreements,

direct the Contractor to carry out such physical work as a Variation under clause 6.2; and

- D. where the Contractor has provided the details referred to in clause 2.12(b)(iv)G, the Principal's Representative's obligation to make a determination in relation to the altered risk profile or contingent liability referred to in clause 2.12(b)(iv)G is deferred until the Trigger Event occurs;
- (vii) if:
 - the Contractor issues a notice under clause 2.12(b)(iv) and provides the details referred to in clause 2.12(b)(iv)G; and
 - B. a Trigger Event occurs during the implementation of:
 - the executed Draft Third Party Agreement or the Replacement Third Party Agreement (as applicable); and
 - the Revised Allocation.



the Contractor may issue a notice to the Principal's Representative providing details of the reasonable costs incurred in satisfying the actual liability which has arisen;

- (viii) if the Principal's Representative receives a notice under clause 2.12(b)(vii), the Principal's Representative must give the Contractor a notice setting out the Principal's Representative's determination of the reasonable, additional costs incurred by the Contractor in satisfying the actual liability which has arisen and the will be increased by that amount; and
- (ix) notwithstanding the provisions of clause 2.12(b), the amount of any additional costs incurred by the Contractor as a result of the circumstances referred to in clause 2.12(b) will not be added to the unless the Contractor has taken all proper and reasonable measures to:
 - A. avoid the Trigger Event; and
 - avoid or minimise the extra costs resulting from such circumstances.
- (c) The Contractor:
 - (i) must indemnify the Principal from and against:
 - A. any claim by a Third Party against the Principal; or
 - B. any liability of the Principal, to a Third Party,

arising out of or in any way in connection with a Third Party
Agreement (including a Draft Third Party Agreement or a
Replacement Third Party Agreement executed after the date of this
Contract) to the extent that the claim or liability arises out of or in any
way in connection with the Contractor's Activities, provided that the
Contractor's responsibility to indemnify the Principal will be reduced to
the extent that an act or omission of the Principal, an Other Contractor
or an agent of the Principal contributed to the claim or liability; and

- (ii) agrees that it:
 - A. bears the full risk of:
 - complying with the obligations under this clause 2.12;
 and
 - 2) any acts or omissions of Third Parties; and
 - B. will not be entitled to make, and the Principal will not be liable upon, any Claim arising out of or in any way in connection with the risks referred to in clause 2.12(c)(ii)A.

2.13 Commissioning and Operational Readiness

The Contractor acknowledges that:



- (a) Commissioning and Operational Readiness are part of the Contractor's Activities; and
- (b) Commissioning and Operational Readiness must be completed as a condition precedent to Completion of Portion 1.

2.14 Contemporaneous Work

The Contractor must:

- inspect all Contemporaneous Work within the periods set out in Schedule 1 after the Principal's Representative gives written notice to the Contractor to do so;
- (b) if it discovers any defects, omissions or other matters in or connected with any Contemporaneous Work that in its opinion will render or are likely to render the Contemporaneous Work unsuitable, unsatisfactory or detrimental in any way to the proper execution of the Works or carrying out of the Contractor's Activities, within 10 Business Days of the Inspection notify the Principal's Representative in writing providing:
 - (i) full particulars of the defects, omissions or other matters identified; and
 - the reasons for the opinion formed by it in respect to the defects, omissions or matters identified;
- not commence or continue with the execution of any part of the Contractor's Activities dependent upon or appreciably affected by the Contemporaneous Work that is the subject of the notice referred to in clause 2.14(b), until the Principal's Representative issues a Variation Order under clause 2.14(e) or issues a direction under clause 2.14(f); and
- (d) commence or continue with all other parts of the Contractor's Activities and mitigate any additional costs and delays resulting from the matters notified.

On receipt of the Contractor's notice under clause 2.14(b), the Principal's Representative will investigate the Contemporaneous Work that is the subject of the Contractor's notice, and within 10 Business Days of the receipt of the notice:

- (e) If the Principal's Representative agrees that the defect, omission or other matter in relation to the Contemporaneous Work necessitates a Variation in order for the proper execution of the Works and carrying out of the Contractor's Activities, issue a Variation Order to the Contractor pursuant to clause 6.2 directing it to carry out a Variation; or
- (f) if the Principal's Representative disagrees with the Contractor, issue a direction to the Contractor to commence or continue with the Contractor's Activities, whereupon the Contractor must nevertheless take such steps as may be necessary to ensure that the part of the Works or Contractor's Activities dependent upon or appreciably affected by the Contemporaneous Work complies with the requirements of this Contract.

If the Contractor fails to:

(g) inspect any Contemporaneous Work as required by this clause 2.14; or



(h) notify the Principal's Representative of any defects, omissions or other matters that should have been detected at the time of such Inspection by a competent and experienced contractor and that may render the Contemporaneous Work unsuitable, unsatisfactory or detrimental in any way for the proper execution of the Works or for carrying out the Contractor's Activities,

and the Contemporaneous Work subsequently proves to be unsuitable, unsatisfactory or detrimental for the proper execution of the Works or the carrying out of the Contractor's Activities, then:

- (i) any work that is required to be executed in order to render the Contemporaneous Work suitable, satisfactory and non-detrimental for the proper execution of the Works or the carrying out of the Contractor's Activities must be performed by the Contractor at its own cost and expense; and
- (j) the Contractor will not be entitled to make, and the Principal will not be liable upon, any Claim arising out of or in any way in connection with any work carried out or to be carried out by the Contractor under clause 2.14(i).

3. The Site and location of the Works

3.1 Access

- (a) The Contractor acknowledges and agrees that access to the Site will be provided progressively to the Contractor as set out in Schedule 1.
- (b) Subject to clause 3.1(c) and any other provision of this Contract affecting access, the Principal must:
 - give, or ensure the Contractor has, access to the Site by the dates set out in Schedule 1 (and if a period is specified in relation to access to a part of the Site, then by the last day of that period); and
 - (ii) once access to a part of the Site is provided to the Contractor, thereafter continue to allow, or ensure that the Contractor is continued to be allowed, access to that part of the Site.
- (c) The Contractor acknowledges and agrees that:
 - (i) access to the Site or any part thereof will only confer on the Contractor a right to such management and control as is necessary to enable the Contractor to execute the Contractor's Activities in accordance with this Contract and to discharge its responsibilities under the WHS Legislation, including to discharge its responsibilities as principal contractor;
 - (ii) the Principal is not obliged to give the Contractor access to any part of the Site until the Contractor has:
 - A. complied with clause 2.7(b) of this Contract;
 - B. submitted the Project Work Health and Safety Management Plan, the Construction Environmental Management Plan and the Construction and Site Management Plan, as required by the TfNSW Standard Requirements, to the Principal's

T2317765, 10



Representative under clause 9.8 and the Principal's Representative has not rejected the proposed Construction Environmental Management Plan, Construction and Site Management Plan or Project Work Health and Safety Management Plan within 15 Business Days after such submission in accordance with clause 9.8(c);

- effected the insurance policies required under clauses 13.4, 13.5 and 13.6;
- complied with clauses 13.4, 13.5 and 13.6 with respect to each insurance policy; and
- E, complied with the matters set out in Schedule 1;
- the Principal is not obliged to provide, and the Contractor may not be given, exclusive access to the Site;
- (iv) the Principal is not obliged to carry out any work or provide any facilities to the Contractor which may be necessary to enable the Contractor to obtain access to the Site or carry out the Contractor's Activities; and
- (v) the Principal and others will engage Other Contractors to work upon or in the vicinity of the Site and Extra Land at the same time as the Contractor.
- (d) The Principal's obligations under clause 3.1(a) and 3.1(b) in respect of each part of the Site will cease upon the issue of a Notice of Completion in respect of the last Portion occupying that part of the Site, except to the extent required to allow the Contractor to comply with its obligations during the Defects Rectification Periods.
- (e) Failure by the Principal to give access as required by clause 3.1(b) will not be a breach of this Contract.

3.2 Temporary Works

The Contractor must carry out all Temporary Works required to execute the Contractor's Activities so that the Temporary Works will be fit for their intended purpose.

3.3 Management and Control of the Site

- (a) At all times after being given access to the Site or a part of the Site under clause 3.1 and before the Date of Completion of the Works or the last Portion to reach Completion, the Contractor:
 - (i) without limiting any right of the Principal or the Principal's Representative under this Contract, and subject to clause 2.11, will be responsible for the management and control of the Site;
 - must control access to, and the security and maintenance of, the Site or that part, except where the Principal's Representative advises otherwise;
 - (iii) must ensure public safety on and adjacent to the Site or that part;



(iv) must provide for the continuous safe passage of the public, road and railway system users on existing roads, footpaths access ways, cycleways and Rail Tracks affected by the Contractor's Activities in

accordance with this Contract;

(v) must, subject to clauses 3.1 and 3.10 and the TfNSW Standard Requirements, and any relevant Law, limit access to the Site to its employees, Subcontractors and their employees and Subcontractors, and those with a legitimate interest in being on the Site as part of the Contractor's Activities:

- (vi) must not impede access or Services to private property without the consent of the Principal's Representative and the relevant owner or occupier; and
- (vii) must ensure that existing buildings (including residences, whether occupied or unoccupied) on the Site are preserved and protected from damage (including from theft and vandalism) until (where relevant) they are due for demolition by the Contractor if that forms part of the Contractor's Activities.

3.4 Land in Addition to the Site

The Contractor must:

- (a) procure for itself and at its own cost the occupation or use of or relevant rights over any land or buildings in addition to the Site, including any land owned by a Rail Transport Agency, which is necessary or which it may require for the purposes of carrying out the Contractor's Activities;
- (b) at its own cost carry out all activities and procure all Services necessary to make the Extra Land suitable for use by the Contractor;
- (c) as a condition precedent to Completion of the Works or any Portion:
 - rehabilitate any Extra Land of the kind referred to in paragraph (a) in accordance with the requirements of all relevant Authorities and other relevant persons; and
 - (ii) unless not required by the Principal's Representative, provide to the Principal's Representative a properly executed certificate in the form of Schedule 13 or a release on terms otherwise satisfactory to the Principal's Representative from all claims or demands (whether for damages or otherwise howsoever arising) from the owner or occupier of, and from other persons having an interest in, such Extra Land; and
- (d) indemnify the Principal against any damage, expense, loss, cost or liability suffered or incurred by the Principal arising out of or in any way in connection with a claim by the owner or occupier of, or any other person having any interest in any Extra Land, provided that the Contractor's liability to indemnify the Principal will be reduced proportionally to the extent that an act or omission of the Principal, an Other Contractor or an agent of the Principal contributed to the damage, expense, loss, cost or liability.



Contract Number: ISD-18-7801

3.5 Latent Conditions

- (a) Subject to the last paragraph of this clause 3.5(a), Latent Conditions are:
 - (i) physical conditions on the Site or its surroundings (including artificial things) which differ materially from the physical conditions which should reasonably have been anticipated by a competent and experienced contractor at the time of the Contractor's Tender if such a contractor had:
 - A. examined all information made available in writing by the Principal to the Contractor for the purpose of tendering (including the Reports);
 - examined all information (including the Reports) relevant to the risks, contingencies and other circumstances having an effect on the Tender and obtainable by the making of reasonable enquiries; and
 - C. inspected the Site and its surroundings;
 - (ii) any Services on the Site which are:
 - A. not identified in the Reports;
 - B. not capable of otherwise having been anticipated by the Contractor at the time of the Contractor's Tender if it had done the things referred to in clause 3.5(a)(i)A, B and C; and
 - C. discovered only after the Contractor has undertaken potholing of the Services identified in the Works Brief, including drawings and specifications, or Reports to confirm their exact location.

Latent Conditions exclude:

- (iii) weather conditions or physical conditions which are a consequence of weather conditions at the Site; and
- (iv) Hazardous Material and Contamination.
- (b) If during the execution of the Contractor's Activities, the Contractor becomes aware of a Latent Condition the Contractor must:
 - (i) promptly; and
 - (ii) where possible before the physical conditions are disturbed.

give written notice thereof to the Principal's Representative.

The Contrector must provide in that notice to the Principal's Representative a statement specifying:

- (iii) the conditions encountered and in what respects the Contractor considers they constitute a Latent Condition;
- the additional work and additional resources which the Contractor estimates to be necessary to deal with the Latent Condition;

Contract Number: ISD-18-7801

- (v) the time the Contractor anticipates will be required to deal with the Latent Condition and the expected delay in achieving Completion (if any) as a result of dealing with the Latent Condition;
- the Contractor's estimate of the cost of the measures necessary to deal with the Latent Condition; and
- (vii) other details reasonably required by the Principal's Representative.

3.6 Information Documents and Materials

- (a) Whether or not any Information Documents and Materials or any part thereof form an Exhibit to this Contract, the Contractor acknowledges that:
 - the Information Documents and Materials or part thereof do not form part of this Contract and that clause 3.6(c) applies to the Information Documents and Materials or part thereof; and
 - (ii) where Information Documents and Materials or any part thereof form an Exhibit to this Contract, they do so only for the purposes of identification of that document or part thereof.
- (b) Without limiting clause 3.6(c):
 - (i) the Contractor acknowledges that the Principal does not warrant, guarantee, assume any duty of care or other responsibility for or make any representation about the accuracy, adequacy, suitability or completeness of the Information Documents and Materials, and the Information Documents and Materials do not form part of this Contract;
 - (ii) subject to clause 3.6(e), the Principal will not be liable upon any Claim by the Contractor arising out of or in any way in connection with:
 - A. the provision of, or the purported reliance upon, or use of the Information Documents and Materials to or by the Contractor or any other person to whom the Information Documents and Materials are disclosed; or
 - B. a failure by the Principal to provide any other information, data or documents to the Contractor.

(c) The Contractor:

- (i) warrants that it did not in any way rely upon:
 - A. any information, data, representation, statement or document made by, or provided to the Contractor, by the Principal or anyone on behalf of the Principal or any other information, data, representation, statement or document for which the Principal is responsible or may be responsible whether or not obtained from the Principal or anyone on behalf of the Principal; or
 - the accuracy, adequacy, suitability or completeness of such information, data, representation, statement or document,



for the purposes of entering into this Contract except to the extent that any such information, statement or document forms part of this Contract;

- (ii) warrants that it enters into this Contract based on its own investigations, interpretations, deductions, information and determinations; and
- (iii) acknowledges that it is aware that the Principal has entered into this Contract relying upon the warranties, acknowledgements and agreements in clauses 3.6(c)(i) and 3.6(c)(ii).
- (d) Subject to clause 3.6(e), the Contractor releases and indemnifies the Principal from and against:
 - (i) any claim against them by, or liability of them to, any person; or
 - (ii) (without being limited by clause 3.6(d)(i)) any costs, expenses, losses or damages suffered or incurred by them,

arising out of or in any way in connection with:

- (iii) the provision of, or the purported reliance upon, or use of the Information Documents and Materials, as referred to in clauses 3.6(b) and 3.6(c)(i), to or by the Contractor or any other person to whom the Information Documents and Materials are disclosed or a failure by the Principal to provide any information, data or documents to the Contractor (other than any information, data or documents which the Principal is required to provide to the Contractor by the terms of this Contract);
- (IV) any breach by the Contractor of this clause 3.6; or
- (v) the Information Documents and Materials being relied upon or otherwise used in the preparation of any information or document, including any information or document which is "misleading or deceptive" or "false or misleading" (within the meaning of those terms in sections 18 and 29 of Schedule 2 of the Competition and Consumer Act 2010 (Cth) or any equivalent provision of State or Territory legislation.
- (e) The acknowledgements, warranties, releases and indemnities referred to in clauses 3.6(a) to 3.6(d) do not affect the Contractor's rights under clauses 3.7 and 3.9.

3.7 Hazardous Material

- (a) The parties acknowledge and agree that:
 - (i) the Contractor has been provided with the Hazardous Material Report;
 - (ii) the Hazardous Material Report identifies Hazardous Material in structures which are located on, in or under the Site;
 - (iii) there may be Hazardous Material (other than that identified in the Hazardous Material Report) in structures which are located on, in or under the Site; and



- (iv) the Contractor's Activities include taking the appropriate steps referred to in this clause 3.7:
 - A. In respect of any Hazardous Material identified in the Hazardous Material Report;
 - B. in respect of any Hazardous Material the Contractor discovers on the Site; and
 - C. regardless of whether the Contractor provides the report and notice referred to in clause 3.7(d) and 3.7(e) (respectively)and whether or not the Hazardous Material was referred to in (or was reasonably able to be inferred from) the Hazardous Material Report.
- (b) Without limiting clause 3.7(a), the Principal does not make any representation or warranty (express or implied) as to the nature or extent of any Hazardous Material that may be present in structures on, in or under the Site.
- (c) The Contractor must provide for the management of any Hazardous Material in any structures in the Construction Environmental Management Plan and Project Work Health and Safety Management Plan and take all measures required to protect workers and others from Hazardous Material in accordance with Law, the WHS Guidelines and the TfNSW Standard Requirements.
- (d) Without limiting clauses 2.3(a)(i) and 3.7(a), the Contractor must carry out a Hazardous Material audit prior to commencing any demolition work or construction work on structures which could potentially contain Hazardous Material and provide a copy of the audit report to the Principal's Representative.
- (e) Without limiting any obligation of the Contractor to comply with the Authority Approvals, the Contractor must submit a notice for the review of the Principal's Representative under clause 9.8 containing details of the works necessary to remove and dispose of any Hazardous Material identified in accordance with clause 3.7(d).
- (f) After the Principal's Representative has had the period referred to in clause 9.8(c)(ii) (or such shorter period as the Principal's Representative may advise to the Contractor in writing) and has not rejected the Contractor's notice under clause 3.7(e) the Contractor must comply with the notice and remove and dispose of any Hazardous Material in structures on, in or under the Site in accordance with relevant Laws, Authority Approvals and any direction of a relevant Authority where applicable.
- (g) Not used.
- (h) Not used

3.8 Things of Value Found

All valuable minerals, fossils, coins, articles or objects of value or antiquity, and other remains or things of geological, archaeological, anthropological or other special interest found on the Site (all "Valuable Finds") are, and will as between the Contractor and the Principal be and remain, the property of the Principal.



The Contractor must:

- (a) immediately notify the Principal's Representative if it discovers a Valuable Find;
- ensure the Valuable Find is protected and not lost, removed, disturbed or damaged; and
- (c) comply with any directions of the Principal's Representative in relation to the Valuable Find.

3.9 Contamination

- (a) The parties acknowledge and agree that:
 - (i) the Contractor has been provided with the Contamination Report;
 - the Contamination Report identifies Contamination on, in, under or migrating from the Site, including in areas under Tracks, surface soils generally and locations which have been filled;
 - (iii) there may be Contamination (other than that identified in the Contamination Report) on, in, under or migrating from the Site including in areas under Tracks, surface soils generally and locations which have been filled:
 - the Principal does not make any representation or warranty (express or implied) as to the nature or extent of any Contamination; and
 - (v) subject to clause 3.9(f), part of the Contractor's Activities include taking the appropriate steps referred to in this clause 3.9:
 - A. in respect of any Contamination identified in the Contamination Report:
 - in respect of any Contamination the Contractor discovers on the Site; and
 - c. regardless of whether the Contractor provides the notice and report referred to in clause 3.9(c) and whether or not the Contamination was referred to in (or was reasonably able to be inferred from) the Contamination Report.

The Contractor must provide for the management of any Contamination that may be present on, in, under or migrating from the Site in the Construction Environmental Management Plan and the Project Work Health and Safety Management Plan and take all measures required to protect workers and others in accordance with the Law, the WHS Guidelines and the TfNSW Standard Requirements.

(b) Without limiting clauses 2.3(a)(i) and 3.9(a), the Contractor must undertake any other investigations it considers reasonable or necessary to delineate the nature and extent of any Contamination on, in, under or migrating from the Site prior to commencing any part of the Contractor's Activities on the Site in order to identify the steps necessary to deal with any Contamination as part of the Contractors Activities.

T2317765 10



(c) Without limiting any obligation of the Contractor to comply with all Authority Approvals, the Contractor must in respect of all Contamination, whether described in or reasonably able to be inferred from the Contamination Report, Additional Contamination or otherwise:

- (i) notify the Principal's Representative in writing within 5 Business Days of becoming aware of the existence of any Contamination on, in, under or migrating from the Site, and thereafter provide the Principal's Representative with such further written details as the Principal's Representative may request including a copy of any investigation report prepared pursuant to clause 3.9(b);
- (ii) promptly after providing a notice under clause 3.9(c)(i), submit a notice for the review of the Principal's Representative under clause 9.8 containing:
 - A. details of the steps which the Contractor proposes to take to:
 - investigate, remediate, dispose of, manage, monitor, contain or otherwise deal with the Contamination so that the Site is remediated to a standard suitable for the proposed use of the Site ("Remediation Steps"). For the avoidance of doubt, the Contractor is permitted to incorporate Remediation Steps to address the Contamination which was present on, in under or migrating off the Site prior to the date of this Contract into the Works where such incorporation is specified in the Works Brief;
 - unless the Principal's Representative directs otherwise, incorporate the Contamination into the Works in preference to its disposal off site where this is technically and economically feasible;
 - dispose of Contamination off-site to a licensed waste disposal facility in accordance with clause 3.13 if:
 - this more economically viable than
 remediating and or otherwise dealing with
 the Contamination in situ; or
 - the Principal's Representative has directed the Contractor to do so; and
 - 4) report to all relevant Authorities if required to do so,
 - in each case in accordance with any relevant Law, Authority Approvals and any written direction from a relevant Authority;
 - B. the Contractor's estimate of any amount which will be payable in respect of any Additional Contamination under paragraph (f) to comply with the Remediation Steps and where the estimate is not a fixed lump sum the proposed administration and



verification measures to evidence the cost of the Remediation Steps; and

- a plan documenting the Remediation Steps determined pursuant to the criteria in clause 3.9(c)(ii)A ("Remediation Action Plan");
- (iii) only after the Principal's Representative has had the period referred to in clause 9.8(c)(ii) (or such shorter period as the Principal's Representative may advise to the Contractor in writing) and has not rejected the Contractor's notice under clause 3.9(c)(ii), implement the Remediation Action Plan in accordance with relevant Laws, Authority Approvals and any direction of a refevant Authority where applicable; and
- (iv) in dealing with any Contamination:
 - take all measures necessary to protect workers and others in accordance with Law and the WHS Guidelines;
 - take all reasonable steps to ensure that the Contamination is quarantined from other in-situ or excavated materials so as to prevent cross-contamination; and
 - provide waste classification reports and documents demonstrating that cross-contamination has not occurred.
- (d) The Contractor must indemnify the Principal against any claim, damage, expense, loss, liability, fine or penalty suffered or incurred by the Principal arising out of or in any way in connection with any failure by the Contractor to comply with any obligation under this clause 3.9, provided that the Contractor's liability to indemnify the Principal will be reduced proportionally to the extent that an act or omission of the Principal, Other Contractors or an agent of the Principal may have contributed to the claim, damage, expense, loss, liability, fine or penalty.
- (e) Not used.
- (f) Not used.

3.10 Principal's Right to Access and Inspect

Subject to clause 3.14, the Contractor must:

- (a) without limiting clauses 3.3 and 3.4, minimise disruption or inconvenience to:
 - (i) the Principal, occupiers (including railway system or rail passengers and other users), tenants and potential tenants of the Site, Extra Land or any other land or buildings above or adjacent to the Site or any Extra Land or a part thereof in their occupation or use of, or attendance upon, any part of the Site or Extra Land, including any occupation or use of the Works, a Portion or a part thereof under clause 12.6; and
 - others having a right of access to the Site, Extra Land or any other land or buildings above or adjacent to the Site or any Extra Land; and



(b) at all times:

- (i) give the Principal's Representative, the Principal and any person authorised by either the Principal's Representative or the Principal access to:
 - A. the Works:
 - B. the Site; or
 - any other areas where the Contractor's Activities are being carried out,

including unobstructed vehicular access through the Site; and

(ii) provide the Principal and the Principal's Representative with every reasonable facility necessary for the Inspection of the Contractor's Activities, including the Contractor's compliance with the Authority Approvals.

3.11 Works to be constructed within Site

The Contractor must ensure that the Works are constructed within the relevant boundaries of the Site stipulated in Schedule 1.

3.12 Condition Surveys

The Principal has undertaken a condition survey of the properties listed in Schedule 1. The Contractor may undertake further condition surveys of these properties.

The Contractor must:

- identify and prepare a condition survey of all property that could be affected or damaged by the Contractor's Activities and as required by the Planning Approval;
- (b) prepare this condition survey a minimum of two weeks prior to commencing any work on the Site, or on any other land which is necessary for performing the Contractor's Activities or undertaking the Works, where that work could damage property on or off the Site; and
- (c) in preparing this condition survey must use suitably skilled, qualified, and experienced personnel or Subcontractor.

3.13 Waste Disposal

- (a) The Contractor must remove from the Site and Extra Land and dispose of any Hazardous Material, Contamination or other waste pursuant to its obligations under this Contract to a licensed waste facility in accordance with all relevant Law and Authority Approvals.
- (b) The Contractor must:
 - ensure that the entity that carries out the storage, treatment, transport and disposal of the Hazardous Material, Contamination or other waste



Contract Number: ISD-18-7801

from the Site holds all relevant Authority Approvals that are necessary; and

- (ii) procure and provide evidence of such Authority Approvals to the Principal's Representative upon request.
- (c) The Contractor must ensure that its employees and agents, as applicable, are suitably trained in correct and safe methods of loading, unloading and handling any Hazardous Material, Contamination or other wastes and that they comply with all applicable Laws.
- (d) The Contractor must indemnify the Principal against any claim, damage, expense, loss, liability, fine or penalty suffered or incurred by the Principal arising out of or in any way in connection with any failure by the Contractor to comply with any obligation under this clause, provided that the Contractor's liability to indemnify the Principal will be reduced proportionally to the extent that an act or omission of the Principal, Other Contractors or an agent of the Principal may have contributed to the claim, damage, expense, loss, liability, fine or penalty.

3.14 Principal not in Control

The Contractor and Principal acknowledge that nothing in this Contract including the right to inspect pursuant to clause 3.10 or any audit by the Principal or the Principal's Representative at any time will be construed to mean or imply that:

- the Principal has any management or control over the Contractor's Activities or the Site or Extra Land; or
- (b) the Principal has any responsibility for any act or omission by the Contractor or its Subcontractors or agents including compliance or non-compliance with any relevant Laws, Authority Approvals or this Contract.

4. Compliance

4.1 Quality of Work

The Contractor must use the materials and standard of workmanship required by this Contract, and otherwise comply with this Contract in the execution of the Contractor's Activities. In the absence of any other requirement, the Contractor must use suitable new materials and ensure that all workmanship and materials are fit for their intended purpose.

4.2 TfNSW Standard Requirements

The Contractor must comply with the requirements of the TfNSW Standard Requirements.

4.3 Environmental Management

The Contractor must:

(a) hold and maintain an environmental management system which complies with the requirements of TfNSW Standard Requirements for so long as any Contractor's Activities are carried out:

Contract Number: ISD-18-7801

- as part of the Contract Management Plan, document, implement and maintain a (b) contract specific Construction Environmental Management Plan for the management of environmental matters in accordance with the TfNSW Standard Requirements:
- carry out the Contractor's Activities in accordance with the Construction (c) Environmental Management Plan;
- supervise Subcontractor's activities and ensure that they are complying with all (d) relevant Law, Authority Approvals and TfNSW Standard Requirements in relation to environmental management on the Site and Extra Land; and
- use, and be able to demonstrate the use of, ecologically sustainable (e) development principles (including any TfNSW sustainability intiatives) in the design and construction of the Works, Temporary Works and all other Contractor's Activities.

4.4 WHS Management

The Contactor must:

- hold and maintain an WHS management system for so long as any Contractor's (a) Activities are carried out that complies with the WHS Guidelines and the TfNSW Standard Requirements;
- as part of the Contract Management Plan, develop, document and implement a (b) contract specific Project Work Health and Safety Management Plan in accordance with the WHS Guidelines and TfNSW Standard Requirements;
- carry out the Contractor's Activities in accordance with the Project Work Health (c) and Safety Management Plan;
- create a safe working environment for ensuring the safety of all authorised (d) personnel on the Site and Extra Land and that no unauthorised individual gains access to the Site; and
- supervise any Subcontractor's activities and ensure that they are complying with (e) all relevant Law, Authority Approvals and the TfNSW Standard Requirements in relation to the WHS management on the Site and Extra Land.

4.5 No Relief from Obligations

The Contractor will not be relieved from any of its liabilities or responsibilities under this Contract (including under clause 8 or otherwise according to law) nor will the rights of the Principal whether under this Contract or otherwise according to law be limited or otherwise affected, by:

- the implementation of, and compliance with, any management system or plan (a) by the Contractor;
- compliance with the Contract Management Plan by the Contractor; (b)
- any release, authorisation, approval or agreement by the Principal's (c) Representative, or any other person acting on behalf of the Principal or the Principal's Representative, particularly those concerning or relating to the



Contractor proceeding past any hold point or witness point identified in the Works Brief, the TfNSW Standard Requirements or otherwise directed by the Principal's Representative;

- (d) any failure by the Principal, the Principal's Representative or any other person acting on behalf of the Principal or engaged by the Principal to detect any Defect, particularly whilst participating in any hold point or witness point procedure, including where such a failure is the result of a negligent act or omission; or
- (e) any inspections arranged by the Principal's Representative under the Contract or any related discussions between the Contractor's Representative and the Principal's Representative.

4.6 Engineering Authorisation

Based on the procedures of, and undertakings given by, the Contractor and its Subcontractors as set out in the Contractor's tender, the Contractor is either an:

- (a) Authorised Engineering Organisation; or
- (b) has been granted a Provisional Authorisation and the Principal authorises:
 - (i) the Contractor; and
 - (ii) the Subcontractors engaged to undertake the Contractor's Activities, to undertake the Contractor's Activities.

4.7 ASA Compliance

- (a) The Contractor must:
 - hold and maintain its ASA Authorisation or Provisional Authorisation (as applicable) for so long as the Contractor's Activities are carried out; and
 - (ii) where it holds a Provisional Authorisation, the Contractor must:
 - make an application to the ASA for Final Authorisation within 45
 Business Days (or an longer period agreed by the parties) of
 the date of this Contract; and
 - B. provide to the ASA any document or other things reasonably required by the ASA under, out of or in connection with the application for Final Authorisation within any time period required by the ASA (acting reasonably).
- (b) The Contractor must (and must ensure that its Subcontractors and all personnel for which the Contractor is responsible) comply with the conditions of the ASA Authorisation or Provisional Authorisation (as applicable).
- (c) If the Contractor holds a Provisional Authorisation and is granted a Final Authorisation prior to Completion, and without limiting or otherwise restricting clause 4.7(d), the Contractor:



- (i) must hold and maintain its Final Authorisation for so long as the Contractor's Activities are carried out; and
- (ii) on and from the date of the granting of Final Authorisation, must (and must ensure that its Subcontractors and all personnel for which the Contractor is responsible) comply with the conditions of the applicable Final Authorisation.
- (d) The Contractor must (and must ensure that its Subcontractors and all personnel for which the Contractor is responsible):
 - (i) implement and comply with the requirements of any ASA Requirements applicable to the Asset Services;
 - (ii) cooperate fully with the ASA in the performance of the ASA's functions;
 - (iii) provide access to premises and resources as reasonably required by the ASA, including so that it can effectively carry out its review, surveillance and audit functions;
 - (iv) comply with the directions, instructions and requirements issued by the ASA;
 - (v) notify the ASA of any matter that could reasonably be expected to affect the exercise of the ASA's functions;
 - (vi) provide the ASA with any information relating to its activities or any documents or other things reasonably required by the ASA in the exercise of its functions; and
 - (vii) provide the Principal with such reasonable assistance as may be reasonably required by the Principal to enable the Principal to cooperate fully with the ASA and to implement and comply with the ASA Requirements.
- (e) The Contractor acknowledges and agrees that it is not entitled to make (and neither the Principal nor the ASA will be liable upon) any Claim arising out of or in connection with the requirement to obtain, or any delays or failure by the ASA in granting the Contractor, Provisional Authorisation or Final Authorisation or the obligation to comply with the requirements of ASA and the Provisional Authorisation or Final Authorisation.

5. Design and Design Documentation

5.1 Contractor's Design

The Contractor:

- (a) must prepare and complete the design of the Works and the Temporary Works (including the Design Documentation), so that:
 - the Civil and Building Works are fit for thier intended purpose and otherwise complies with the requirements of this Contract; and
 - (ii) the balance of the Works comply with the requirements of the Contract;



(b) warrants that:

- it has fully and carefully reviewed the Works Brief including any Preliminary Design;
- (ii) the completed design of the Civil and Building Works and the Temporary Works as represented in the Design Documentation will:
 - A. satisfy the requirements of the Works Brief, (including any Preliminary Design) and the other requirements of this Contract; and
 - B. be fit for their intended purposes; and
- (iii) construction in accordance with the completed design of the Works and the Temporary Works will satisfy the requirements of the Works Brief (including any Preliminary Design) and the other requirements of this Contract.

Without limiting any other requirements of this Contract, the Contractor must use reasonable endeavours to obtain direct Subcontractor and OEM design warranties in favour of the Principal in respect of the Electrical Works.

5.2 Prior Design Work

- (a) This clause 5.2 applies only when a Preliminary Design is included in the Contract.
- (b) When directed by the Principal, the Contractor, without being entitled to compensation, shall promptly execute a Deed of Novation in the form of Schedule 25, such deed being between the Principal, the Contractor and the consultant named in Schedule 1.

For the purpose of effecting such novation only, the Contractor hereby irrevocably appoints the Principal's Representative to be the Contractor's attorney with authority to execute such documents as are necessary to give effect to the novation and to bind the Contractor accordingly.

- (c) Without limiting clause 5.1, the Contractor:
 - (i) acknowledges and agrees that, prior to the date of this Contract, the Preliminary Design was created by the Principal and the Principal's agents and consultants and that it is aware that the Preliminary Design is incomplete and may contain ambiguities, errors, inconsistencies, discrepancies or omissions;
 - (ii) warrants that, prior to the date of this Contract, it checked and carefully reviewed and considered the Preliminary Design to ensure that it complied with the requirements of the Contract, including that it was fit for the intended purpose of the Works; and
 - (iii) acknowledges and agrees that:
 - A. the Contractor's design obligations under clause 5 and the Contractor's warranties (including under clause 5.1), obligations



and liabilities under the Contract and at law, remain unaffected; and

B. the Contractor's obligations to carry out the Contractor's Activities and complete the Works in accordance with this Contract remain unaffected by, and it will bear and continue to bear full liability and responsibility for the carrying out of the Contractor's Activities and the completion of the Works in accordance with this Contract at its cost,

notwithstanding any one or more of the following:

- that design work (including the Preliminary Design) has been carried out by or on behalf of the Principal and included in the Preliminary Design;
- D. that the Contractor has entered into a novation of any prior contract between the Principal and a consultant named in Schedule 1 under clause 5.2(b) and thereafter has retained that consultant in connection with the Contractor's Activities:
- that any ambiguities, errors, inconsistencies, discrepancies or omissions exist in the Preliminary Design; or
- F. that prior to the date of this Contract any part of the Preliminary Design is described or represented by the Principal as having been completed to any particular design stage (including "Approved for Construction", "Preliminary Design Review", "System Concept Review", "Critical Design Review" or otherwise) (the "Relevant Design Stage"), and despite any such description or representation:
 - an ambiguity, error, inconsistency, discrepancy or omission exists in the Preliminary Design which is inconsistent with the Preliminary Design having achieved the Relevant Design Stage; or
 - 2) the Contractor is otherwise required to perform work which is required to be undertaken in order for the Preliminary Design to satisfy the requirements of the Relevant Design Stage, whether or not that work has been undertaken prior to the date of this Contract,

5.3 Design Documentation

- (a) The Contractor must submit all Design Documentation:
 - progressively to the Principal's Representative in accordance with the Contract Management Plan and the requirements of clause 9.8; and
 - (ii) at the times set out in:
 - A. the Works Brief;
 - B. the TfNSW Standard Requirements; and



C. the Contractor's Program.

- (b) The Contractor must upon each submission of the Design Documentation to the Principal's Representative for review (including at the completion of the design of each design package) ensure that the Design Documentation is accompanied by the following documents:
 - (i) the Contractor's Certificate of Design Compliance in the form of Schedule 19:
 - a register of records of design verification and reviews applicable to the design package and other compliance records required by this Contract (all records being satisfactorily completed and signed);
 - (iii) a register of any outstanding design non-conformities and unresolved issues:
 - (iv) a register of deficiency notices and evidence of their close out; and
 - (v) a register of concessions (if any) granted for non-conforming Design Documentation.

5.4 Review of Design Documentation

- (a) The Design Documentation must be submitted to the Principal's Representative.
- (b) Clause 9.8 applies to all Design Documentation.
- (c) Where any Design Documentation comprises a design package which the Contract requires the Principal to submit to the Configuration Control Board, after this Design Documentation has been submitted for the review of the Principal's Representative under clause 9.8, and:
 - the Principal's Representative gives the Contractor the notice referred to in clause 9.8(c)(ii)C in respect of that Design Documentation; or
 - (ii) the relevant period of time in clause 9.8(c)(ii) has expired and the Principal's Representative has not rejected the Design Documentation or made any comments on the Design Documentation (except, in the case of comments, where the Contractor has responded to the comments within the required time period required by clause 9.8(d)(ii) in a manner satisfactory to the Principal's Representative),

the Principal will use reasonable endeavours to obtain a Configuration Change Acceptance Notice (where relevant) for the relevant design package from the Configuration Control Board.

- (d) Not used.
- (e) The Principal's obligations under clause 5.4(c) do not:
 - (i) create any liability for the Principal in respect of the content of the Design Documentation; or
 - relieve the Contractor of its obligations in this Contract in respect of the Design Documentation.



5.5 Copies of Design Documentation

- (a) The Contractor must, in accordance with clause 5.3, progressively submit to the Principal's Representative the number of copies specified in Schedule 1 of all Design Documentation, whether complete or work in progress, which it intends to use for design or construction purposes.
- (b) The Contractor must give the Principal's Representative the number of copies specified in Schedule 1 of:
 - (i) all survey information used in the design of the Works and the Temporary Works; and
 - (ii) all final Design Documentation.

5.6 Availability of Design Documentation

The Contractor must keep available for the use of the Principal's Representative and any person authorised by the Principal's Representative:

- (a) on the Site, at least one complete set of all Design Documentation that the Contractor is entitled to use for construction purposes pursuant to clauses 5.4 and 9.8, and any construction related documents provided by the Principal; and
- (b) at any area on or off the Site where the Contractor's Activities are being carried out, one copy of each of those items specified in paragraph (a) insofar as they are relevant to the Contractor's Activities being carried out in that area.

5.7 Ownership of Contract Documentation and Methods of Working

- (a) Subject to clause 5.7(c)(vii):
 - title to and Intellectual Property in or in relation to the Contract
 Documentation prepared by the Contractor will vest upon its creation for the purposes of this Contract in the Principal;
 - (ii) to the fullest extent permitted by Law, the Contractor hereby assigns to the Principal all of its rights, titles, and interests in, and to, all intellectual Property in or in relation to the Contract Documentation prepared by the Contractor, whenever created; and
 - (iii) upon request by the Principal, the Contractor must do all things necessary to vest that title or that Intellectual Property in the Principal.
- (b) The Principal grants to the Contractor a licence to use and reproduce the Contract Documentation for the Contractor's Activities.
- (c) The Contractor:
 - (i) warrants and must ensure that the Contract Documentation and any methods of working do not and will not infringe any Intellectual Property;
 - (ii) must indemnify the Principal against any claims against, and costs, expenses, losses and damages suffered or incurred by the Principal arising out of, or in any way in connection with, any actual or alleged



infringement of any Intellectual Property in connection with the Works, the Temporary Works, the Contractor's Activities or the Contract Documentation, except to the extent that such actual or alleged infringement arises as a direct result of:

- the Principal having provided the Contractor with material which this Contract permits the Contractor to use for the purpose of the Works, the Contractor's Activities or the Contract Documentation; and
- B. the provision of that material to the Contractor being an infringement of a third party's Intellectual Property rights;
- (iii) must ensure that all Subcontracts between the Contractor and all Subcontractors for design and documentation contain provisions to the same effect as clause 5.7(a);
- (iv) must obtain confirmation of the inclusion of such provisions in the form of a signed acknowledgment from such Subcontractors for design and documentation;
- (v) must, where requested by the Principal's Representative, obtain such an acknowledgement from other Subcontractors;
- (vi) must obtain an assignment to the Principal from any third party who owns any Intellectual Property right in the Contract Documentation;
- (vii) must if it is unable to obtain the assignment referred to in clause 5.7(c)(vi), grant or have granted to the Principal an irrevocable licence:
 - to use the Contract Documentation for the completion of the Works;
 - which arises immediately upon the creation of the Contract Documentation;
 - which extends to any subsequent repairs to, maintenance or servicing of, or additions or alterations to the Works; and
 - which will survive the termination of this Contract on any basis;
 and
- (viii) must ensure that the Intellectual Property created for the purposes of this Contract is not used, adapted or reproduced other than for the purposes of this Contract without the prior written approval of the Principal (which will not be unreasonably withheld, but may be given subject to terms and conditions).

5.8 Delivery Up of Contract Documentation

If this Contract is frustrated or terminated the Contractor must:

(a) immediately deliver the original and all sets and copies of all Contract Documentation (whether complete or not), including fully detailed electronic versions in unlocked native format (with all logic links intact and nothing hidden or protected), then in existence to the Principal; and



(b) provide such details, memoranda, explanations, documentation and other assistance as the Principal reasonably requires in relation to the Contract Documentation.

5.9 Moral Rights

- (a) The Contractor:
 - (i) warrants that the Principal's use of the Contract Documentation, or any other work provided by the Contractor under this Contract, will not infringe any author's moral rights under the *Copyright Act 1968* (Cth) or similar legislation in any jurisdiction; and
 - (ii) must indemnify the Principal against any claims against, or costs, expenses, losses or damages suffered or incurred by the Principal arising out of, or in any way in connection with, any actual or alleged infringement of any author's moral rights under the Copyright Act 1968 (Cth) or similar legislation in any jurisdiction in connection with the Works, the Contractor's Activities or the Contract Documentation.
- (b) For the purposes of clause 5.9(a), the Principal's use of the Contract Documentation includes the Principal's right to reproduce, publish, copy, adapt, communicate to the public, materially distort, destroy, mutilate or in any way change the Contract Documentation or part of the Works to which the Contract Documentation or any other work provided by the Contractor under this Contract relates:
 - (i) with or without attribution of authorship;
 - (ii) in any medium; and
 - (iii) in any context and in any way it sees fit.

6. Variations

6.1 Proposed Variations

At any time prior to the Date of Completion of the Works or the last Portion to reach Completion (but without limiting clauses 8 and 13.3) the Principal's Representative may issue a document titled "Variation Proposal Request" to the Contractor, which will set out details of a proposed Variation that the Principal is considering.

Within 10 Business Days of the receipt of a "Variation Proposal Request", or at such other time as is approved by the Principal's Representative, the Contractor must provide the Principal's Representative with a written notice in which the Contractor sets out such details as may be reasonably required by the Principal's Representative.

The Principal will not be obliged to proceed with any proposed Variation that is the subject of a "Variation Proposal Request".

6.2 Variation Orders

(a) Whether or not the Principal's Representative has issued a "Variation Proposal Request" under clause 6.1, the Principal's Representative may at any time prior to the Date of Completion of the Works or the last Portion to reach Completion

EXECUTION VERSION –
Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014

Doc ID 607060023/v9

T2317765 10



(but without limiting clauses 8 and 13.3) direct the Contractor to carry out a Variation by issuing a written document titled "Variation Order".

- (b) There is no limitation on the power of the Principal's Representative to direct a Variation, and no Variation or direction to carry out a Variation will invalidate this Contract.
- (c) The Contractor must comply with a "Variation Order" irrespective of :
 - (i) the nature, extent or value of the work the subject of the Variation;
 - (ii) the location or timing (including the impact on any Date for Completion) of the work involved in the Variation; or
 - (iii) any Dispute related to the Variation.

	(d)		
6.3			
6.4			

6.5 Omissions

If a Variation the subject of a direction by the Principal's Representative requires the omission or deletion of any part of the Works:

- the Principal may thereafter either perform this work itself or employ or engage any other person or persons to carry out and complete the omitted or deleted work;
- (b) the Principal will not be liable upon any Claim by the Contractor arising out of or in any way in connection with any work being omitted or deleted from the Contractor's Activities whether or not the Principal thereafter performs this work itself or employs or engages any other person or persons to carry out and complete the omitted or deleted work; and

(c)	
5.6	
5.7	

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/v9

T2317765 10



Contractor's Entitlements 6.8

This clause 6 is an exhaustive code of the Contractor's rights in any way in connection with any Variation. The Contractor waives all rights at Law to make any Claim against the Principal in any way in connection with any of the matters set out in this clause 6 otherwise than in accordance with the terms of this Contract.

7. Construction

7.1 Construction

- The Contractor must construct and handover to the Principal the Works and (a) construct the Temporary Works:
 - in accordance with: (i)
 - subject to clause 7.1(b), the Works Brief (including any Preliminary Design) and any Design Documentation that has been prepared by the Contractor in accordance with the requirements of the Contract and not rejected by the Principal's Representative under clause 9.8;
 - any direction of the Principal's Representative given or В. purported to be given under a provision of this Contract, and
 - the other requirements of this Contract; and C.
 - so that the Civil and Building Works are fit for their intended purposes. (ii)
- If there is any ambiguity, discrepancy or inconsistency between this Contract (b) (including the Works Brief and any Preliminary Design) and any Design Documentation which has been prepared by the Contractor and not rejected by the Principal's Representative under clause 9.8, then, unless otherwise directed by the Principal's Representative, the requirements of this Contract will prevail.
- At monthly intervals during the construction work and at the Completion of the (C) Works or each Portion, the Contractor must submit to the Principal's Representative a Certificate of Construction Compliance in the form of Schedule 20.
- Without limiting any other requirements of this Contract, the Contractor must (d) use reasonable endeavours to obtain direct Subcontractor and OEM construction warranties in favour of the Principal in respect of the Electrical Works.

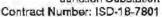
All Work Included 7.2

The Contractor:

- (a) warrants it has allowed for the provision of:
- (b) must undertake and provide; and
- will not be entitled to make, and the Principal will not be liable upon, any Claim (c) except as otherwise provided for in this Contract, relating to the provision of,

T2317765 10

Dec ID 607080023/v9





all Construction Plant, Temporary Works, labour, materials and other work necessary to execute the Contractor's Activities, whether or not expressly mentioned in this Contract or anticipated by the Contractor, and agrees that all such Construction Plant, Temporary Works, labour, materials and work forms part of the Contractor's Activities.

7.3

7.4 Co-operation with Other Contractors

Without limiting or being limited by clause 2.9, the Contractor must:

- (a) permit Other Contractors to carry out their work;
- (b) fully co-operate with Other Contractors;
- carefully coordinate and interface the Contractor's Activities with the work carried out or to be carried out by Other Contractors; and
- (d) carry out the Contractor's Activities so as to minimise any interfering with, disrupting or delaying the work of Other Contractors.

The Principal shall procure that each of its Other Contractors that undertakes work on part of the Site during any period in which the Contractor has been engaged as principal contractor in respect of that part of the Site executes a deed poll in favour of the Contractor, as principal contractor, and the Principal in the form set out in Schedule 23 and provide the Contractor with an executed copy of each such deed poll.

7.5 Setting Out

The Contractor must:

- (a) set out the Works in accordance with the requirements of this Contract, based on information and survey marks (including any survey peg, bench mark, reference mark, signal, slignment, level mark or any other mark for the purpose of setting out, checking or measuring work) identified by the Contractor that are suitable for their purposes;
- (b) carry out any survey (including providing all instruments and things) that may be necessary for this purpose; and
- (c) for this purpose keep all survey marks in their true positions.

If the Contractor discovers an error in the position, level, dimensions or alignment of any part of the Works, the Contractor must immediately notify the Principal's Representative and, unless the Principal's Representative otherwise directs, the Contractor must at its cost rectify the error.

7.6 Survey

The Contractor must, as a condition precedent to Completion of the Works or any Portion, and as otherwise required by the Principal's Representative, submit to the Principal's Representative:



- (a) for its review under clause 9.8 a Survey Plan for the Works or the relevant Portion that:
 - has regard to the setback requirements in the Building Code of Australia;
 - (ii) has regard to any stratum lots whether above or below ground:
 - (iii) has regard to the survey control requirements of any relevant Rail Transport Agency;
 - (iv) shows the location of all Monuments, and their relation to horizontal and vertical boundaries;
 - (v) shows all internal title boundaries;
 - (vi) shows all easements; and
 - (vii) shows the location of the Works and all Services; and
- (b) a Survey Certificate which complies with all Law addressed to the Principal and signed by a land surveyor registered under the Surveying and Spatial Information Act 2002 (NSW) stating that:
 - the whole of the Works or the Portion has been constructed within the relevant boundaries of the Site stipulated in Schedule 1;
 - the elements of the Works or the Portion are in the positions and within the tolerances required by Law and this Contract;
 - (III) the survey Information included in the configuration materials provided pursuant to the TfNSW Standard Requirements complies with the requirements of this Contract; and
 - (iv) any other matter identified by the Principal's Representative, complies with the requirements of this Contract.

7.7 Cleaning Up

In carrying out the Contractor's Activities, the Contractor must:

- (a) keep the Site, Extra Land and the Works clean and tidy and free of refuse:
- (b) regularly remove rubbish, litter, graffiti and surplus material from the Site and Extra Land; and
- (c) as a condition precedent to Completion of the Works or a Portion, remove all rubbish, surplus materials, Construction Plant and Temporary Works from the Site and Extra Land or the part of the Site or Extra Land relevant to the Works or the Portion.

7.8 Safety

- (a) The Contractor must carry out the Contractor's Activities:
 - safely and in a manner that does not put the health and safety of persons at risk; and

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf,doex
© TfNSW 2014
Doc ID 607660023A6

T2317765, 10



(ii) in a manner that protects property.

If the Principal's Representative reasonably considers there is a risk to the health and safety of people or damage to property arising from the Contractor's Activities, the Principal's Representative may direct the Contractor to change its manner of working or to cease working.

(b) The Contractor must:

- (i) ensure that in carrying out the Contractor's Activities:
 - it complies with all Law, including the WHS Law, and other requirements of this Contract for work health, safety and rehabilitation management;
 - B. all Subcontractors comply with the requirements referred to in this clause 7.8 and their respective obligations under the WHS Legislation; and
 - C. it complies with its obligations under the WHS Legislation to consult, cooperate and coordinate activities with all other persons who have a work health and safety duty in relation to the same matter;
- (ii) notify the Principal's Representative immediately (and in the event within 12 hours of such matter arising) of all work health, safety and rehabilitation matters arising out of, or in any way in connection with, the Contractor's Activities, unless otherwise directed by the Principal;
- (iii) institute systems to obtain regular written assurances from all Subcontractors about their ongoing compliance with the WHS Legislation including the due diligence obligation contained therein;
- (iv) provide the Principal's Representative with the written assurances obtained pursuant to subparagraph (iii), together with written assurance(s) from the Contractor about the Contractor's ongoing compliance with the WHS Legislation;
- (v) provide the Principal's Representative with a written report at each meeting in accordance with clause 9.5, on all work health, safety and rehabilitation matters (including matters concerning or arising out of, or in any way in connection with, this clause 7.8), or any other relevant matters as the Principal's Representative may require from time to time, including a summary of the Contractor's compliance with the WHS Legislation;
- (vi) consult, cooperate and coordinate with all Other Contractors and the Principal to ensure that all parties are able to comply with their respective obligations under the WHS Legislation;
- (vii) exercise a duty of the utmost good faith to the Principal in carrying out the Works to enable the Principal to discharge the Principal's duties under the WHS Legislation;



- (viii) ensure that it does not do anything or fail to do anything that would cause the Principal to be in breach of the WHS Legislation; and
- ensure its subcontracts include provisions equivalent to the obligations of this clause 7.8.
- (c) Without limiting clause 16.14 the Principal may take any action necessary to protect or to prevent or minimise risks to, the Works, the Environment, other properly or the health or safety of people.

If the action taken by the Principal is action which the Contractor was required to take under this Contract but did not take, the amount of any penalty, fine, damage, expense, cost (including any reasonable legal fees), loss or liability that the Principal suffers or incurs arising out of or in any way in connection with:

- (i) taking the action contemplated in this clause 7.8(c); or
- (ii) the Contractor's failure to take that action,

will, except to the extent prohibited by Law, be a debt due from the Contractor to the Principal.

- (d) Where clause 16.28 applies, the Contractor:
 - (i) warrants that it is accredited under the WHS Accreditation Scheme;
 and
 - (ii) must comply with all the requirements of, and maintain accreditation under, the WHS Accreditation Scheme while "building work" (as defined in section 5 of the Fair Work (Building Industry) Act 2012 (Cth)) is carried out.

7.9 Construction Plant and Materials Removal

Except for the purpose of achieving Completion as contemplated by clause 7.7(c), the Contractor must not remove from the Site or the Contractor's Activities any:

- (a) significant materials or major items of Construction Plant; or
- (b) materials or Construction Plant specified in any written notice issued by the Principal's Representative.

without the prior written approval of the Principal's Representative, which approval will not be unreasonably withheld.

7.10 Principal Supplied Items

- (a) The Principal must:
 - make available the Principal Supplied Items to the Contractor:
 - A. at its own cost:
 - at the respective places referred to in Schedule 27; and
 - by the respective date referred to in Schedule 27; and

use its best endeavours to procure that the Contractor has the benefit (ii) of any warranty obtained by the Principal in respect of any Principal Supplied Item.

The Contractor: (b)

agrees that, in respect of Principal Supplied Items, the: (i)

Contractor.

- warrants that it has reviewed the Works Brief and any 1) relevant specification, and made whatever other enquiries and investigations it considers necessary relating to each of the Principal Supplied Items and is satisfied that they satisfy and will allow the Contractor to satisfy the requirements of this Contract;
- will not be entitled to make, and the Principal will not 2) be liable upon, any Claim arising out of or in any way in connection with any Principal Supplied Item except under clause 10 if a Principal Supplied Item is not made available by the relevant date set out in Schedule 27; and
- is not relieved from and remains liable for complying 3) with, all of its obligations under this Contract, despite the Principal making available the Principal Supplied Items: and
- Sale of Goods Act 1923 (NSW) does not apply to the Principal's B. obligations under clause 7.10(a) and the Principal makes no representation as to the quality, performance, merchantability or fitness of the Principal Supplied Items; and

(ii) must:

- at its own cost and risk, transport each Principal Supplied Item from the respective place referred to in Schedule 27 to the Site or Extra Land (as applicable); and
- as part of the Contractor's Activities, incorporate each Principal В. Supplied Item into the Works.

Rail Safety 7.11

- In carrying out any part of the Contractor's Activities which require Accreditation (a) as a Rail Infrastructure Manager, the Contractor:
 - must comply with all conditions of the Principal's Accreditation as a Rail (1) Infrastructure Manager and the Principal's Safety Management System;
 - must not do anything that may cause the Principal to breach its (ii) obligations under the Rail Safety National Law; and



- (iii) must ensure that the Contractor's Subcontractors engaged in or in connection with the Contractor's Activities, comply with clauses 7.11(a)(i) and 7.11(a)(ii).
- (b) In carrying out any part of the Contractor's Activities which require Accreditation as a Rolling Stock Operator, the Contractor must:
 - ensure that the Contractor, or one of the Contractor's Subcontractors, holds the necessary Accreditation for that part of the Contractor's Activities; and
 - (ii) comply with the conditions of that Accreditation.
- (c) Without limiting or otherwise affecting any other provision under this Contract, the Contractor must, and must ensure that the Contractor's Subcontractors, comply with all obligations under the Rail Safety National Law including entering into interface agreements required by Part 3 of the Rail Safety National Law in respect of any part of the Contractor's Activities which require Accreditation as a Rolling Stock Operator.
 - (d) To the extent not prohibited by Law, the Contractor must indemnify the Principal against any damage, expense, loss or liability suffered or incurred by the Principal arising out of or in any way in connection with the Contractor's failure to comply with this clause 7.11.

8. Defects

8.1 Defects Liability

Subject to clause 8.2, the Contractor must rectify all Defects whether or not they are identified and notified by the Principal's Representative.

Without limiting the previous paragraph, the Contractor must rectify any Defects in the Works or any Portion which existed at Completion of the Works or that Portion as soon as possible after Completion of the Works or that Portion.

EXECUTION VERSION -

Doc ID 607060023/v9

T2317765 10

When rectifying Defects which existed at Completion, the Contractor must do so at times and in a manner which causes as little inconvenience to the occupants or users of the Works or Other Contractors as is reasonably possible.

Defect Notification 8.2

If at any time prior to the expiration of any Defects Rectification Period (including for the avoidance of doubt prior to Completion of the Works or any Portion), the Principal's Representative discovers or believes there is a Defect, the Principal's Representative may give the Contractor a direction which identifies the Defect and does one or more of the following:

- requires the Contractor to rectify the Defect, or any part of it, and specifying the (a) time within which this must occur;
- advises the Contractor that the Principal will accept the work, or any part of it, (b) despite the Defect; or
- in respect of any Defect to which clause 8.3(b) applies, advises the Contractor (c) that an Other Contractor will rectify (or has rectified) the Defect, or any part of it. or carry out (or has carried out) a Variation to overcome the Defect, or any part of it.

Rectification of Defect 8.3

If a direction is given under clause 8.2(a):

- the Contractor must rectify the Defect (or the part of it notified): (a)
 - within the times specified in the Principal's Representative's direction, which will generally be limited to the periods during which the rectification work will cause minimal or no inconvenience to the operators, including any Rail Transport Agency (where relevant), and occupants of the Works; and
 - if after Completion of the Works or relevant Portion: (1)
 - at other times otherwise agreed with the Principal's A. Representative:
 - in accordance with the requirements of the operators of the B. Works, including any Rail Transport Agency (where relevant), and any other relevant Authority;
 - C. so as to minimise the impact on the use of the Works or the Portion; and
 - D. in a manner which causes as little inconvenience as possible to users of the Works or the Portion or the public, any Service or any access to the Works or the Portion; and
- (b) if the Contractor does not comply with clause 8.3(a)(i), the Principal's Representative may, without prejudice to any other rights that the Principal may have against the Contractor with respect to the Defect under this Contract or otherwise at Law, give the Contractor a direction under clause 8.2(c) and have



the rectification work carried out at the Contractor's expense, and the cost of the rectification work incurred by the Principal will be a debt due from the Contractor to the Principal.

The Contractor must pay the Principal all costs incurred by the Principal in providing access to the Works, or arranging the availability of any resources (including the resources of any other Rail Transport Agency), as may be necessary for the Contractor to rectify any Defect during the Defect Rectification Period.

8.4

8.5 Acceptance of Work

If a direction is given under clause 8.2(b) in relation to a Civil and Building Defect:

- (a) where the value to the Principal of the Works is reduced (which will include having regard to any additional operating or maintenance costs) arising out of or in any way in connection with the Defect (or the part notified), the Contractor must pay to the Principal (as a debt due) the amount determined by the Principal's Representative as the higher of the cost of rectifying the Defect (or the part notified) and the diminution in the value to the Principal of the Works; or
- (b) where the value to the Principal of the Works increases because of the acceptance of the Defect (or the part notified):
 - the Principal's Representative will determine an amount by subtracting the cost of rectifying the Defect from the increased value of the Works; and
 - (ii) the Contract Sum will:
 - A. be reduced by the amount determined by the Principal's Representative, where that amount is negative; and
 - not be changed where the amount determined by the Principal's Representative is positive.

8.6 Extension of Defects Rectification Period

If:

- the Principal's Representative gives the Contractor a notice under clause 8.2(a) during any Defects Rectification Period; and
- (b) the Contractor rectifies the Defect (or the part notified),

T2317765 10



the relevant Defects Rectification Period for the work required by the notice will be extended by the period set out in Schedule 1, commencing upon completion of the rectification of the Defect (or the part notified).

Defect Rectification by Other Contractor 8.7

Where a direction is given under clause 8.2(c):

- without limiting or otherwise affecting clauses 2.9 or 7.4, the Contractor must (a) not impede the Other Contractor from having sufficient access to the Site or Extra Land to rectify the Defect or carrying out the Variation; and
- any costs, losses or damages suffered or incurred by the Principal arising out of (b) or in any way in connection with, the Other Contractor rectifying the Defect or carrying out the Variation, will be a debt due from the Contractor to the Principal if the relevant Defect is a Civil and Building Defect.

Rights Not Affected 8.8

Neither the Principal's rights, nor the Contractor's liability, whether under this Contract or otherwise according to Law in respect of Defects, whether before or after the expiration of any relevant Defects Rectification Period, will be in any way affected or limited by:

- the rights conferred upon the Principal or the Principal's Representative by this (a) clause 8 or any other provision of this Contract;
- the exercise of, or the failure by the Principal or the Principal's Representative to (b) exercise, any such rights; or
- any notice or direction of the Principal's Representative under clause 8.2. (c)

Administration 9.

Principal's Representative 9.1

The Principal must ensure that at all times until Final Completion there is a (a) Principal's Representative. The Contractor acknowledges and agrees that the Principal's Representative will give directions and carry out all its other functions under this Contract as the agent of the Principal (and not as an independent certifier, assessor or valuer) and is subject to the directions of the Principal.

> A discretion (including an absolute or sole discretion), or power or decision of the Principal's Representative is validly and properly exercised or made for the purposes of this Contract if exercised or made (or if it is not exercised or made) by the Principal's Representative:

- (i) independently;
- after consultation with the Principal and its advisers; or (ii)
- as directed by the Principal. (iii)

Any control or influence exercised by the Principal over the Principal's Representative does not:



- (iv) affect the valid and proper exercise of any power or discretion (including an absolute or sole discretion) or the making of a decision by the Principal's Representative; or
- (v) entitle the Contractor to make any Claim against the Principal's Representative or the Principal, or to challenge the effect or validity of the discretion (including an absolute or sole discretion), power, or decision.

The Contractor must comply with any direction by the Principal's Representative given or purported to be given under a provision of this Contract.

Except where this Contract otherwise provides, the Principal's Representative may give a direction orally but will as soon as practicable confirm it in writing.

(b) The parties acknowledge that any direction by the Principal's Representative under one of the clauses referred to in Schedule 1 is an interim position only and that, without limiting the rights of the Principal's Representative under clause 11.3, either party may seek to have any such direction opened up, reviewed, decided and substituted pursuant to clause 15 by giving a notice of dispute to the other party and the Principal's Representative in accordance with clause 15.1.

The Principal will not be liable upon any Claim by the Contractor arising out of or in connection with any such direction by the Principal's Representative in circumstances where it is incorrect, subsequently overturned pursuant to clause 15 or is unreasonable (other than in accordance with the corrected determination). The Contractor acknowledges and agrees that its sole means of redressing any errors contained in or associated with any such direction by the Principal's Representative is by giving a notice of dispute in accordance with clause 15.1.

9.2 Replacement of the Principal's Representative

The Principal may at any time replace the Principal's Representative, in which event the Principal must appoint another person as the Principal's Representative and notify the Contractor of that appointment.

Any substitute Principal's Representative appointed under this clause 9.2 will be bound by anything done by the former Principal's Representative to the same extent as the former Principal's Representative would have been bound.

9.3 Delegation of Functions

- (a) The Principal's Representative may:
 - by written notice to the Contractor appoint persons to exercise any of the Principal's Representative's functions under this Contract;
 - (ii) not appoint more than one person to exercise the same function under this Contract; and
 - (iii) revoke any appointment under clause 9.3(a)(i) by notice in writing to the Contractor.



(b) The Principal's Representative may continue to exercise a function under this Contract despite appointing another person to exercise the function under clause 9.3(a)(i).

(c) All references in this Contract to the Principal's Representative include a reference to an appointee appointed under clause 9.3(a)(i).

9.4 Contractor's Personnel

- (a) The Contractor must notify the Principal's Representative in writing of the name of the Contractor's Representative (who at the date of this Contract is the relevant person listed in Schedule 1) and of any subsequent changes.
- (b) The Contractor must:
 - employ the individuals nominated by the Contractor and listed in Schedule 1 in the positions specified in Schedule 1 or equivalent positions;
 - (ii) subject to clause 9.4(b)(iii), not replace the individuals referred to in clause 9.4(b)(i) without the Principal's Representative's prior written approval which will not be unreasonably withheld; and
 - (iii) if any of the individuals referred to in clause 9.4(b)(i):
 - A. dies;
 - B. becomes unable to continue in their positions due to illness;
 - C. resigns from the employment of the Contractor (other than to accept other employment with the Contractor or any "related body corporate" of the Contractor (as that term is defined in section 9 of the Corporations Act 2001 (Cth)); or
 - becomes the subject of a direction under clause 9.4(c),

replace them with personnel of at least equivalent experience, ability, knowledge and expertise approved by the Principal's Representative.

- (c) The Principal's Representative may, at its absolute discretion and without being obliged to give any reasons, by notice in writing direct the Contractor to remove any person (including a person referred to in clause 9.4(a) or clause 9.4(b)) from the Site and the Contractor's Activities. The Contractor must then cease to engage that person in the Contractor's Activities and must appoint a replacement.
- (d) The Contractor must ensure that any person the subject of a direction under clause 9.4(c) is not again employed in the Contractor's Activities or on the Site.
- (e) Any direction under clause 9.1(a) will be deemed to have been given to the Contractor if given to the Contractor's Representative. Matters within the knowledge of the Contractor's Representative will be deemed to be within the knowledge of the Contractor.



9.5 Site Meetings

The Contractor must convene meetings on the Site or such other place (or places) as the Principal's Representative may direct at:

- (a) prior to the Date of Completion of the Works or the last Portion to reach Completion, weekly or such longer intervals as may be directed in writing by the Principal's Representative; and
- (b) monthly intervals after the Date of Completion of the Works or the last Portion to reach Completion until all Defects Rectification Periods (including any extension under clause 8.6), have expired or at such other intervals as may otherwise be agreed.

9.6 Environmental Representative

The Contractor acknowledges and agrees that:

- the Principal has appointed the Environmental Representative as required by an Authority Approval;
- (b) the Environmental Representative:
 - (i) is independent of the parties;
 - (ii) shall oversee the implementation of all environmental management plans and monitoring programs required under the Planning Approval, and shall advise the Principal upon achievement of the outcomes contemplated in the Planning Approval;
 - (iii) shall advise the Principal and the Principal's Representative on the Contractor's compliance with the Planning Approval; and
 - (iv) shall have the authority and independence to:
 - A. direct the Contractor as to; or
 - B. advise the Principal's Representative to direct the Contractor as to,

reasonable steps the Contractor must take to avoid or minimise unintended or adverse environmental impacts;

- (c) it must comply with the directions of the Environmental Representative or the Principal's Representative as contemplated by clause 9.6(b)(iv); and
- (d) it bears the full risk of complying with any directions given by the Environmental Representative or the Principal's Representative as contemplated by clause 9.6(c) and none of the Principal, the Principal's Representative or the Environmental Representative will be liable upon any Claim arising out or in any way in connection with such directions.

9.7 Industrial Relations

The Contractor must in carrying out the Contractor's Activities:



- (a) assume sole responsibility for and manage all aspects of industrial relations for the Contractor's Activities;
- (b) ensure all Subcontractors manage all aspects of the industrial relations with their employees appropriately;
- (c) ensure that the rates of pay and conditions of employment specified in all relevant industrial, enterprise and project based agreements and awards, and any relevant Law, for all employees engaged in any capacity by any person in connection with the Contractor's Activities, are always observed in full;
- (d) keep the Principal's Representative fully and promptly informed of industrial relations problems or issues that affect or are likely to affect the carrying out of the Contractor's Activities and Other Contractors' activities;
- (e) without limiting clauses 2.3 and 20, comply with all the requirements of the NSW Code and the NSW Guidelines;
- (f) conduct its industrial relations affairs in accordance with the Workplace Relations Management Plan developed and submitted by the Contractor as part of the Contract Management Plan, in accordance with the TfNSW Standard Requirements and clause 9.8;
- (g) prepare, document and implement a project Workplace Relations Management Plan which must be based on the draft outline Industrial Relations Management Plan (if any) submitted with the Contractor's Tender;
- (h) not commence any work on the Site or Extra Land until the Workplace Relations Management Plan has been submitted to the Principal's Representative and the Principal's Representative has not rejected it under clause 9.8;
- (i) submit to the Principal's Representative, before beginning work on the Site or Extra Land, a statement detailing:
 - the location of time and wage records and other documents that are required to be kept to verify ongoing compliance with all employment and legal obligations;
 - the names of each award or enterprise agreement that is likely to cover the Contractor and Subcontractors involved in the Contractor's Activities; and
 - (iii) the names of those responsible for coordinating industrial relations for the Contractor's Activities;
 - not do, or omit to do, anything that is, or is likely to be, prejudicial to the performance of the Contractor's Activities;
 - (k) before beginning work on the Site or Extra Land, submit a statement on the Contractor's letterhead and signed by an authorised person, attesting to the Contractor's compliance, in the preceding twelve months, with all employment and legal obligations, including:
 - payment of remuneration to employees;
 - (ii) annual leave provisions;



(iii) Long Service Leave Payment Scheme registration;

- (iv) obligations to register workers under the Building and Construction Industry Long Service Payments Act 1986 (NSW);
- (v) workers' compensation insurance, including self-insurance arrangements;
- (vi) superannuation fund membership and contributions; and
- (vii) over-award payments such as redundancy fund contributions; and
- (I) continue to provide during the Contractor's Activities appropriate information to verify compliance with the awards, enterprise and workplace agreements and all other legal obligations relating to the employment of people for the Contractor's Activities.

If the Contractor engages an independent industry or employer association or other specialist organisation to audit and verify compliance with employment and legal obligations, a statement or declaration from that organisation may be submitted instead of the statement by the Contractor under paragraph (i).

The industrial relations requirements contained in this Contract, the NSW Code and the NSW Guidelines:

- (m) are in addition to, but are not in substitution for, any requirements of Law; and
- (n) do not limit the powers of the Principal or the liabilities and responsibilities of the Contractor.

The Contractor warrants and acknowledges that it has allowed for all the costs and expenses involved with complying with all the requirements of this Contract relating to industrial relations and all relevant awards, enterprise and industrial agreements and project specific agreements and awards.

9.8 Submission for Review by the Principal's Representative

- (a) The Contractor must submit each Document:
 - (i) in accordance with the times stated in this Contract or otherwise progressively and in timely manner to ensure that the Contractor's Activities are commenced, progressed and completed by the times required under this Contract, and by the times or within the periods:
 - identified in the Contractor's Program which is not rejected by the Principal's Representative; or
 - in the absence of a time or period in the Contractor's Program, required by the Principal's Representative; and
 - (ii) under cover of a written notice entitled "Submit for Review", which identifies:
 - A. the Document; and



- the provision of this Contract under which the Document is submitted.
- (b) A Document will be deemed not to have been submitted to the Principal's Representative unless and until:
 - the Document covers, fully details and co-ordinates the whole of discrete areas of work so as to allow the area of work to be fully understood; and
 - (ii) the Contractor has otherwise complied with this clause 9.8, in addition to any other requirement of this Contract relating to the submission of that Document.
- (c) The Principal's Representative may, after the submission of a Document which satisfies the requirements of clause 9.8(b):
 - review the Document, or any resubmitted Document, prepared and submitted by the Contractor; and
 - (ii) where submitted or resubmitted in accordance with a program which has not been rejected by the Principal's Representative, within 15 Business Days of submission by the Contractor of such Document or resubmitted Document:
 - reject the Document if in its opinion the Document (or any part)
 does not comply with the requirements of this Contract, stating
 the nature of the non-compliance;
 - B. make comments on the Document; or
 - notify the Contractor that it has no (or has no further) comments to make.
- (d) If any Document is:
 - rejected or deemed to be rejected, the Contractor must submit an amended Document to the Principal's Representative within 10 Business Days of the date of such rejection or deemed rejection and this clause 9.8 will re-apply; or
 - (ii) not rejected and the Principal's Representative responds to the submission with comments, the Contractor must respond to the comments within 10 Business Days or such other period as may be directed by the Principal's Representative.

If the Contractor fails to respond to the Principal's Representative's comments within this period in a manner satisfactory to the Principal's Representative the Document will be deemed to be rejected.

(e) The Contractor must not commence construction of any part of the Works to which any Document (other than the Contractor's Program) submitted to the Principal's Representative applies, unless the Principal's Representative has had the period referred to in clause 9.8(c)(ii) to review the Document and has not rejected the Document or made any comments on the Document (except in



the case where the Contractor has responded to the Principal's Representative's comments within the required time period and in a manner satisfactory to the Principal's Representative as referred to in clause 9.8(d)).

- (f) The Contractor must not amend for construction purposes any Document that has:
 - (i) been submitted to the Principal's Representative; and
 - (ii) not been rejected or not had comments made about it under clause 9.8(c)(ii),

unless the Contractor submits the proposed amendments to the Principal's Representative, in which case this clause 9.8 will re-apply.

- (g) The Principal's Representative does not assume or owe any duty of care or other responsibility to the Contractor to review, or in reviewing, a Document submitted by the Contractor, including for errors, omissions or non-compliance with this Contract.
- (h) The Contractor will not be entitled to make, and the Principal will not be liable upon, any Claim arising out of or in any way in connection with the Principal's Representative not detecting and notifying the Contractor of any errors, omissions or non-compliance with the requirements of this Contract in any Document submitted.
- (i) No review of, comment upon or rejection of, or failure to review or comment upon or reject, a Document prepared by the Contractor, or any other direction by the Principal's Representative in connection with the Document, will:
 - constitute a direction to carry out a Variation pursuant to clause 6.2, unless it is in a written document titled "Variation Order" and describes the nature of the Variation in accordance with clause 6.2(a);
 - (ii) relieve the Contractor from or alter its liabilities or obligations, whether under this Contract or otherwise according to any Law; or
 - (iii) limit or otherwise affect the Principal's rights against the Contractor, whether under this Contract or otherwise according to any Law.
- (j) In considering any Document, the Principal's Representative may consult with and take into account any views or requirements of any relevant Authority.
- (k) Unless otherwise advised by the Principal's Representative, the Contractor must submit the number of copies of a Document stated in this Contract, or if no number is stated then:
 - an electronic version on CD (in both pdf and native formats), which must be virus free;
 - (ii) 1 printed original; and
 - (iii) 3 printed copies (2 bound and 1 unbound).



9.9 Work Method

Whether or not this Contract prescribes a particular work method or a work method is otherwise a part of this Contract or reviewed or approved (expressly or impliedly) by the Principal's Representative, the fact that any work method that the Contractor adopts or proposes to adopt is impractical or impossible or that the Contractor, with or without the approval of the Principal's Representative, uses another work method will:

- (a) not entitle the Contractor to make any Claim against the Principal arising out of or in any way in connection with the work method proving to be impractical or impossible or any change in the work method; and
- (b) not cause the Contract to be frustrated.

9.10 Exchange of Information between Government Agencies

The Contractor authorises the Principal, its employees and agents to make information concerning the Contractor (including any information provided under clause 9.11) available to NSW government departments or agencies. Such information may include, but need not be limited to, any information provided by the Contractor to the Principal and any information relating to the Contractor's performance under this Contract.

The Contractor acknowledges that any information about the Contractor from any source, including but not limited to substantiated reports of unsatisfactory performance, may be taken into account by the Principal and NSW government departments and agencies in considering whether to offer the Contractor future opportunities for NSW government work.

The Contractor also acknowledges that the Principal has in place processes for assessing the performance of its contractors, that these processes will apply to the Contractor's performance under this Contract and that it will participate in the Principal's "Contractor Performance Reporting" process.

9.11 Financial Assessment

Without limiting or otherwise restricting clause 9.10, the Contractor acknowledges and agrees that:

- (a) the Principal may, during the term of the Contract, either itself, or through the engagement of private sector service providers, undertake ongoing financial assessments (Financial Assessment) of the Contractor and any Subcontractors:
- (b) the Financial Assessment may be undertaken at three monthly (or longer) intervals from the date of commencement of the Works; and

it must, if requested by the Principal's Representative, within 10 Business Days of receiving such request, provide any documents, information and evidence as is reasonably required by the Principal's Representative under, out of, or in connection with the Financial Assessment.

9.12 Employment of Aboriginal and Torres Strait Islander People

The Contractor must:



- (a) use its best endeavours to provide employment opportunities to Aboriginal and Torres Strait Islander people in accordance with the NSW Government Policy on Aboriginal Participation in Construction (May 2015);
- (b) as part of the numan resources input to and the documentation and implementation of the Contract Management Plan, address the employment of Aboriginal and Torres Strait Islander people and compliance with the NSW Government Policy on Aboriginal Participation in Construction (May 2015); and
- (c) provide reports to the Principal's Representative in such format and within such times as may be required by the Principal's Representative which record the performance of the Contractor in relation to Aboriginal participation.

9.13 Waste Reduction and Purchasing Policy

The Contractor must:

- use its best endeavours to reduce wastage and increase the use of recycled materials in accordance with the NSW Government Resource Efficiency Policy ("GREP");
- (b) address as part of the Construction Environment Management Plan the measures to be taken to reduce wastage and increase the use of recycled materials in the areas of paper products, office consumables, vegetation and landscaping materials, and construction and demolition materials; and
- (c) provide reports to the Principal's Representative in such format and within such times as may be required by the Principal's Representative for the use by the Principal in complying with its GREP obligations to report performance.

9.14 Training Management

- (a) Subject to the express provisions of the Contract, the Contractor must comply with the NSW Government "Training Management Guidelines", February 2009.
- (b) Training management requirements specified in the Contract and the NSW Government "Training Management Guidelines" may be in addition to, but are not in substitution for, any training obligations of the Contractor under statute, industrial award, enterprise or workplace agreement, or other workplace arrangements approved under Federal or NSW law.
- (c) Where applicable, as Indicated in Schedule 1, at least 14 days before starting work on the Site the Contractor must document and submit a Project Training Management Plan which complies with the NSW Government "Training Management Guidelines", February 2009.
- (d) The Contractor must systematically manage its training management processes in accordance with the systems, plans, standards and codes specified in the Contract.
- (e) The Contractor must demonstrate to the Principal, whenever requested, that it has met and is meeting at all times its obligations under this clause 9.14.



9.15 National Greenhouse and Energy Reporting Act 2007 (Cth)

The Contractor acknowledges and agrees that:

- if any of the Contractor's Activities, or the activities of any of the Contractor's (a) personnel, in connection with the Contractor's Activities (the "Relevant Matters") constitute a "facility" within the meaning of the NGER Legislation, then, for the purposes of the NGER Legislation, the Contractor has operational control of that facility and will comply with any obligations arising in respect of the Principal's activities under the NGER Legislation:
- (b) if, despite the operation of clause 9.15(a), the Principal incurs, or (but for this clause) would incur, a liability under or in connection with the NGER Legislation as a result of or in connection with any of the Relevant Matters, and the NGER Legislation provides that such liability can be transferred by the Principal or the NSW Government or any of its agencies to the Contractor, the Contractor must, on the written request of the Principal, do all things reasonably necessary to ensure the liability is transferred to the Contractor;
- if the Principal requests it, the Contractor must provide Greenhouse Data to the (c) Principal:
 - (i) to the extent that, in a manner and form that, and at times that, will enable the Principal to comply with the NGER Legislation irrespective of whether the Principal or the Contractor or any other person has an obligation to comply with the NGER Legislation in connection with any Relevant Matters; and
 - otherwise as requested by the Principal from time to time; (ii)
- (d) the Contractor must also provide to the Principal all Greenhouse Data and other information which the Contractor provides to any other person under the NGER Legislation in connection with any Relevant Matters, at the same time as the Contractor provides that Greenhouse Data or other information to that other person;
- the Contractor must: (e)
 - collect and record all such Greenhouse Data as may be required to (i) enable reporting under the NGER Legislation or enable the Contractor to discharge its obligations under this clause 9.15, and keep that Greenhouse Data for at least 7 years after the end of the year in which the Relevant Matters occur; and
 - (ii) permit any persons appointed or authorised by the Principal to examine, monitor, measure, copy, audit and/or verify the Greenhouse Data and co-operate with and provide all reasonable assistance to any such persons (including by doing such things as giving access to premises, plant and equipment, producing and giving access to documents and answering any relevant questions);
- (f) the Principal may provide or otherwise disclose the Greenhouse Data and any other information which the Principal obtains under this clause 9.15 to any other



person, and may otherwise use the Greenhouse Data and other information for any purpose as the Principal sees fit; and

(g) nothing in this clause 9.15 is to be taken as meaning that the Principal has agreed to perform any statutory obligation that the Contractor may have regarding the provision of Greenhouse Data to any Authority.

10. Time and Progress

10.1 Rate of Progress

The Contractor must:

- (a) regularly and diligently progress the Contractor's Activities;
- (b) proceed with the Contractor's Activities with due expedition and without delay;
- (c) use its best endeavours to achieve Completion of the Works and each Portion by the relevant Date for Completion.

Without limiting the Contractor's rights under the SOP Act, the Contractor must not suspend the progress of the whole or any part of Contractor's Activities except where directed by the Principal's Representative under clause 10.14.

Without limiting the next paragraphs of this clause 10.1 or clause 10.4, the Contractor must give the Principal's Representative reasonable advance notice of any information, documents or directions required by the Contractor to carry out the Contractor's Activities in accordance with this Contract.

The Principal and the Principal's Representative will not be obliged to furnish information, documents or directions earlier than the Principal or the Principal's Representative, as the case may be, should reasonably have anticipated at the date of this Contract.

The Principal's Representative may, by written notice expressly stated to be pursuant to this clause 10.1, direct in what order and at what time the various stages or parts of the Contractor's Activities must be performed. If the Contractor can reasonably comply with the direction, the Contractor must do so. If the Contractor cannot reasonably comply, the Contractor must notify the Principal's Representative in writing, giving reasons. For the avoidance of doubt, no direction by the Principal's Representative will constitute a direction under this clause 10.1 unless the direction is in writing and expressly states that it is a direction under this clause 10.1.

If compliance with a written direction expressly stated to be pursuant to this clause 10.1 causes the Contractor to incur more or less cost than otherwise would have been incurred, the difference will be dealt with through the calculation of the Contract Sum in accordance with this Contract.

Such costs shall be the Contractor's sole entitlement, and the Contractor will not be entitled to make, and the Principal will not be liable upon, any other Claim, arising out of or in any way in connection with any direction pursuant to this clause 10.1.

10.2 The Contractor's Programming Obligations

The Contractor must:



- (a) prepare and provide a Contractor Program that complies with and includes the details required by this Contract and any requirements of the Principal's Representative;
- (b) submit the Contractor Program to the Principal's Representative for its review in accordance with clause 9.8 within the earlier of:
 - (i) 20 Business Days of the date of this Contract; or
 - (ii) any time required by the TfNSW Standard Requirements;
- (c) when directed to do so by the Principal's Representative, prepare and submit to the Principal's Representative specific detailed programs and schedules for the Contractor's Activities within 5 Business Days of receipt of such a direction;
- (d) update, revise and submit to the Principal's Representative an updated Contractor Program:
 - to allow for delays to non-critical activities, extensions of time granted by the Principal's Representative to any Date for Completion, the actual progress made by the Contractor, Variations and any other changes to the Contractor's Activities; and
 - on a monthly basis or whenever directed to do so by the Principal's Representative;
- (e) not used;
- (f) comply with the requirements of the Principal's Representative and its other obligations under this Contract in preparing and using programs, including the requirements in clause 9.8; and
- (g) not depart from the current version of the Contractor Program that has been submitted to the Principal's Representative for review under clause 9.8 and not been rejected by the Principal's Representative within 15 Business Days.

10.3 Contractor not Relieved

Without limiting clause 9.8, no submission of, review of or comment upon, acceptance or rejection of, or any failure to review or comment upon or reject, a program (including the Contractor Program) prepared by the Contractor, by the Principal's Representative in connection with the program, will:

- relieve the Contractor from or alter its liabilities or obligations under this Contract, including the obligation under clause 10.1;
- evidence or constitute notification of a delay or a direction by the Principal's Representative to compress, disrupt, prolong or vary any, or all, of the Contractor's Activities; or
- (c) affect the time for the performance of the Principal's or the Principal's Representative's obligations under this Contract.

10.4



Importance of Completion on Time 10.5

The Contractor acknowledges:

- the importance of complying with its obligations under clause 10.1; and
- (b) not used.

10.6 Risk and Notice of Delay

The Contractor must within 5 days of the commencement of an occurrence causing any delay or which is likely to cause delay, give the Principal's Representative written notice of any delay or likely delay to the carrying out of the Contractor's Activities, details of the cause and how any Date of Completion is likely to be affected (if at all).



10.12 Unilateral Extensions

The Principal's Representative may, in its absolute discretion, for any reason and at any time, from time to time by written notice to the Contractor and the Principal, unliaterally extend any Date for Completion by any period specified in a notice to the Contractor and the Principal.

The Principal's Representative is not required to exercise its discretion under this clause 10.12 for the benefit of the Contractor.

The discretion to grant an extension of time under this clause 10.12 may only be exercised by the Principal's Representative and the exercise or failure to exercise that discretion is not a "direction" which can be the subject of a Dispute pursuant to clause 15 or in any other way opened up, reviewed or exercised by any other person in any forum (including in any expert, arbitration or litigation proceedings).

10.13



10.14 Suspension

The Principal's Representative may direct the Contractor to suspend and, after a suspension has been directed, to re-commence, the carrying out of all or a part of the Contractor's Activities. Nothing in this clause limits the Principal's rights under clause 2.10.

If the suspension under this clause 10.14 arises in the circumstance set out in clause 2.10(f) then clauses 2.10(f) and 2.10(g) will apply, otherwise where it arises as a result of:

- (a) the Contractor's failure to carry out its obligations in accordance with this Contract (including under clause 4.6 or clause 4.7 or where the Contractor otherwise fails to comply with its obligations in relation to engineering authorisation or ASA compliance in accordance with this Contract or where any process, procedure, test method, calculation, analysis or report required by this Contract has resulted in or will result in a non-conformance), the Contractor will not be entitled to make, and the Principal will not be liable upon, any Claim arising out of, or In any way in connection with, the suspension; or
- (b) a cause other than the Contractor's failure to perform its obligations in accordance with this Contract;
 - (i) not used
 - the Contractor must take all steps possible to mitigate the extra costs incurred by it as a result of the suspension; and
 - (III) not used.

11. Payment

11.1 Contractor's Payment Entitlements

- (a) Subject to clause 16.12 and to any other right to set-off that the Principal may have, the Principal must pay the Contractor the Contract Sum and any other amounts expressly payable by the Principal to the Contractor under this Contract,
- (b) The Contract Sum is not subject to rise and fall.

11.1A Cost control

(a)

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014

Dec ID 607050023/v9

(b) (0) (d) (e)

11.2 Payment Claims

The Contractor may give the Principal's Representative a claim for payment on account of the Contract Sum and any other amount expressly payable by the Principal to the Contractor under the Contract on the latter of:

- satisfaction of the conditions precedent to the Contractor's entitlement to make a payment claim set out in clause 11.6; and
- (b) the following dates:
 - prior to the time for submission of the Final Payment Claim, upon the 6th Business Day of each month;



- (ii) for the Completion Payment Claim within the time required by clause 11.9; and
- (iii) for the Final Payment Claim within the time required by clause 11.11.

The Contractor agrees with the Principal that each date prescribed in this clause 11.2 as the date on which the Contractor may make a payment claim is, for the purposes of section 8 of the SOP Act, a "reference date".

Each claim for payment must:

(c)	be in such form as the Principal's Representative reasonably requires;
(d)	
(e)	for each monthly claim pursuant to clause 11.2(b)(i) (a "Progress Claim"), set out the amount claimed for work completed in accordance with the Contract and

- (e) for each monthly claim pursuant to clause 11.2(b)(i) (a "Progress Claim"), set out the amount claimed for work completed in accordance with the Contract and incorporated in the Works or to which clause 11.7 applies, to the end of the previous month and details of how the amount has been calculated;
- (f) include such further information and evidence in respect of the payment claim as is reasonably required by the Principal's Representative.

The Contractor may not include in any payment claim under this clause 11 any amount:

- (g) for the provision of Asset Management Information until all of the Information has been submitted to the Principal in accordance with the Contract and to the satisfaction of the Principal;
- in respect of a Claim which is barred by clause 17.6 or any other provision of this Contract; or

(i)



11.3 Payment Statements

The Principal's Representative must (on behalf of the Principal), within 10 Business Days of receiving a Progress Claim which complies with the requirements of clause 11.2, a Completion Payment Claim under clause 11.9 or a Final Payment Claim under clause 11.11, issue to the Contractor and the Principal a payment statement which, identifies the Progress Claim, Completion Payment Claim or Final Payment Claim to which it relates, and which sets out:

- its determination of the value of the Contractor's Activities carried out in accordance with this Contract, using the methodology in clause 11.2(e) where the payment statement relates to a Progress Claim;
- (b) the amount already paid to the Contractor;
- (c) the amount the Principal is entitled to retain, deduct, withhold or set-off under this Contract;
- (d) the amount (if any) which the Principal's Representative believes to be then payable by the Principal to the Contractor on account of the Contract Sum and which the Principal proposes to pay to the Contractor or the amount which the Principal's Representative believes to be then payable by the Contractor to the Principal; and
- (e) if the amount in paragraph (d) is less than the amount claimed in the Progress Claim, Completion Payment Claim or Final Payment Claim:
 - the reason why the amount in paragraph (d) is less than the amount claimed in the relevant Progress Claim, Completion Payment Claim or Final Payment Claim; and
 - (ii) if the reason for the difference is that the Principal proposes to retain, deduct, withhold or set-off payment for any reason, the reason for the Principal retaining, deducting, withholding or setting-off payment.

The issue of a payment statement by the Principal's Representative does not constitute approval of any work nor will it be taken as an admission or evidence that the part of the Works or Contractor's Activities covered by the payment statement has been satisfactorily carried out in accordance with this Contract.

Failure by the Principal's Representative to set out in a payment statement an amount, or the correct 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.

The Contractor agrees that the amount referred to in the payment statement in respect of paragraph (d) above for the purposes of section 9 and 10 of the SOP Act, is the amount of the "progress payment" (as defined in the SOP Act) calculated in accordance with the terms of this Contract to which the Contractor is entitled in respect of this Contract.

Where the Principal has notified the Contractor in accordance with clause 18(f)(iv) that it no longer proposes to issue a recipient created tax invoice for a taxable supply made by the Contractor for the Principal, the Contractor must, within 2 Business Days after receipt of the payment statement issued by the Principal's Representative give the Principal's



Representative a tax invoice (which complies with the GST Legislation) for the amount of the payment statement.

11.4 Payment

- (a) Where, pursuant to clause 11.3(d), the Principal's Representative sets out in a payment statement an amount payable by the Principal to the Contractor, subject to clauses 11.1, 11.2, 11.6, 11.8, 14.3, 14.7(a) and 16.2, the Principal must, within 15 Business Days of receipt of the payment claim to which the payment statement relates pay the Contractor the amount set out in the payment statement referred to in clause 11.3:
- (b) Where, pursuant to clause 11.3(d), the Principal's Representative sets out in a payment statement an amount payable by the Contractor to the Principal, the Contractor must, within 5 Business Days of the Principal's Representative issuing the payment statement under clause 11.3, pay the Principal the amount set out in the payment statement referred to in clause 11.3.

11.5 Payment on Account

A payment of moneys under clause 11.4(a) is not:

- an admission or evidence of the value of work or that work has been satisfactorily carried out in accordance with this Contract;
- (b) an admission of liability; or
- approval by the Principal or the Principal's Representative of the Contractor's performance or compliance with this Contract,

but is only to be taken as payment on account.

11.6 Conditions Precedent

It is a condition precedent to the Contractor's entitlement to make a payment claim under clause 11.2, and the Principal's obligation to make a payment under clause 11.4(a), that prior to submitting the payment claim the Contractor has:

- (a) complied with clauses 1.5, 2.2(e)(i), 2.2(e)(ii), 2.2(e)(iv) and 10.2;
- (b) provided the Principal with the unconditional undertakings and the Parent Company Guarantee (if any) required under clause 2.7;
- (c) provided the Principal's Representative with:
 - a statutory declaration by the Contractor, or where the Contractor is a corporation, by a representative of the Contractor who is in a position to know the facts attested to, in the form of Schedule 12, made out not earlier than the date of the payment claim;
 - (ii) a Contractor's Certificate of Design Compliance and a Contractor's Certificate of Construction Compliance, in the form of Schedules 19 and 20;
 - (iii) where clause 11.16(g) applies, the statement and the evidence (if any) required to be provided by the Contractor pursuant to that clause; and;



- (d) in relation to any unfixed plant and materials which the Contractor proposes to claim in a payment claim, provided the evidence and documents required by, and otherwise satisfied the requirements of, clause 11.7:
- effected or procured to be effected the insurances required to be effected by the Contractor by clauses 13.4, 13.5 and 13.6 and (if requested) provided evidence of this to the Principal's Representative;
- (f) provided such evidence as the Principal's Representative may require that this Contract has been properly executed by or on behalf of the Contractor and that the Contractor is bound under this Contract; and
- (g) done everything else that it is required to do under this Contract before being entitled to make a payment claim or receive payment.

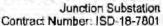
Unless the Contractor has complied with the conditions precedent set out above the Contractor will have no entitlement to submit a payment claim under clause 11.2.

11.7 Unfixed Plant and Materials

The Contractor is only entitled to make a claim for payment for plant or materials intended for incorporation in the Works but not yet incorporated, and the Principal is only obliged to make payment for such plant or materials in accordance with clause 11.4(a) if:

- (a) the Contractor provides evidence of;
 - (i) ownership of the plant or materials;
 - (ii) identification and labelling of the plant and materials as the property of the Principal;
 - (lii) adequate and secure storage and protection;
- (b) security acceptable to the Principal in the form of the unconditional undertaking in Schedule 8 issued by an Institution approved by the Principal in an amount equal to the payment claimed for the unfixed plant and materials has been provided by the Contractor to the Principal;
- the plant and materials are on the Site or are available for immediate delivery to the Site;
- (d) the insurance held and the storage arrangements for the unfixed plant and materials are acceptable to the Principal's Representative;
- the condition of the unfixed plant and materials has been confirmed in an inspection by the Principal's Representative; and
- (f) if the PPS Law applies, the Contractor has registered a Security Interest in the unfixed plant and materials in favour of the Principal in accordance with clause 16.23.

The only such unfixed plant or materials to be allowed for in a payment statement are those that have become or (on payment) will become the property of the Principal. Upon a payment against a payment statement that includes amounts for unfixed plant and materials, title to the unfixed plant and materials included will vest in the Principal.





The security provided in accordance with clause 11.7(b) will be released once the applicable unfixed plant and materials are incorporated into the Works and are fit for their intended purpose.

11.8 Payment of Employees and Subcontractors

- When submitting any Progress Claim, Completion Payment Claim or Final (a) Payment Claim, the Contractor must give the Principal's Representative a statutory declaration in accordance with clause 11.6(c)(i).
- If any moneys are shown as unpaid in the Contractor's statutory declaration (b) under clause 11.6(c)(i), the Principal may withhold the moneys so shown until the Contractor provides evidence to the satisfaction of the Principal's Representative that the moneys have been paid to the relevant persons.
- (c) If an employee or a Subcontractor obtains a court order in respect of the moneys payable to him, her or it in respect of his, her or its employment on, materials supplied for, or work performed with respect to, the Contractor's Activities, and produces to the Principal the court order and a statutory declaration that it remains unpaid, the Principal may (but is not obliged to) pay the amount of the order and costs included in the order to the employee or Subcontractor, and the amount paid will be a debt due from the Contractor to the Principal.
- (d) If the Principal receives notice of any Insolvency Event in relation to the Contractor the Principal will not make any payment to an employee or Subcontractor without the concurrence of the administrator, provisional liquidator, liquidator, trustee or official receiver, as the case may be, of the Contractor.
- (e) Nothing in this clause 11.8 limits or otherwise affects the Principal's right under section 175B(7) of the Workers Compensation Act 1987 (NSW), section 18(6) of schedule 2 of the Payroll Tax Act 2007 (NSW) or section 127(5) of the Industrial Relations Act 1996 (NSW).

11.9 Completion Payment Claim

No later than 28 days after the issue of the Notice of Completion for the Works or the last Portion to reach Completion, but subject to clause 11.6 the Contractor may lodge with the Principal's Representative a payment claim marked "Completion Payment Claim" stating;

- (a) the Contract Sum:
- (b) all payments received on account of the Contract Sum; and
- (c) the balance, if any, due to the Contractor.

The Completion Payment Claim must be accompanied by such information as the Principal's Representative may reasonably require.

With the Completion Payment Claim the Contractor must lodge with the Principal's Representative a First Statement of Outstanding Claims. The First Statement of Outstanding Claims must identify all Claims that the Contractor wishes to make against the Principal in respect of any fact, matter or thing arising out of, or in any way in



connection with, the Contractor's Activities, the Works or this Contract which occurred prior to the date of submission of the Completion Payment Claim.

The Completion Payment Claim and First Statement of Outstanding Claims must address all facts, matters or things arising out of, or in any way in connection with, the Contractor's Activities, the Works or this Contract up to the date of submission of the Completion Payment Claim in respect of all Claims included in the Completion Payment Claim and First Statement of Outstanding Claims.

11.10 Release after Completion Payment Claim

The Contractor releases the Principal from any Claim in respect of any fact, matter or thing arising out of, or in any way in connection with, the Contractor's Activities, the Works or this Contract that occurred prior to the date of submission of the Completion Payment Claim, except for any Claim which:

- (a) has been included in the Completion Payment Claim or First Statement of Outstanding Claims which is given to the Principal's Representative within the time required by, and in accordance with clause 11.9; and
- (b) has not been barred under another provision of this Contract.

11.11 Final Payment Claim

No later than 28 days after the expiration of the last Defects Rectification Period, but subject to clause 11.6 the Contractor may lodge with the Principal's Representative a payment claim marked "Final Payment Claim" stating:

- (a) the Contract Sum;
- (b) all payments received on account of the Contract Sum; and
- (c) the balance, if any, due to the Contractor.

The Final Payment Claim must be accompanied by such information as the Principal's Representative may reasonably require.

With the Final Payment Claim the Contractor must lodge with the Principal's Representative a Second Statement of Outstanding Claims. The Second Statement of Outstanding Claims must identify all Claims that the Contractor wishes to make against the Principal in respect of any fact, matter or thing arising out of, or in any way in connection with, the Contractor's Activities, the Works or this Contract which occurred prior to the date of submission of the Final Payment Claim.

The Final Payment Claim and Second Statement of Outstanding Claims must address all such facts, matters or things arising out of or in any way in connection with the Contractor's Activities the Works or this Contract up to the date of submission of the Final Payment Claim in respect of all Claims included in the Final Payment Claim and Second Statement of Outstanding Claims.

11.12 Release after Final Payment Claim

The Contractor releases the Principal from any Claim in respect of any fact, matter or thing arising out of, or in any way in connection with, the Contractor's Activities, the Works



or this Contract that occurred prior to the date of submission of the Final Payment Claim, except for any Claim which:

- (a) has been included in the Final Payment Claim or Second Statement of Outstanding Claims which is given to the Principal's Representative within the time required by, and in accordance with, clause 11.11; and
- (b) has not been barred under another provision of this Contract.

11.13 Interest

If any moneys due to either party remain unpaid after the date upon which, or the expiration of the period within which, they should have been paid, then interest will be payable thereon from but excluding the date upon which, or the date at the end of the expiration of the period within which, they should have been paid to and including the date upon which the moneys are paid.

The rate of interest will be the rate from time to time prescribed for judgement debts under the *Uniform Civil Procedure Rules 2005* (NSW). Interest will be compounded at six monthly intervals.

This will be the party's sole entitlement to interest, including damages for loss of use of, or the cost of borrowing, money.

11.14 Correction of Payment Statements

The Principal's Representative may, in any payment statement:

- (a) correct any error; and
- (b) modify any assumptions or allowances made,

in any previous payment statement issued by the Principal's Representative.

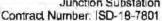
11.15 Costs Allowed by Contractor



- (ii) all Contract Documentation; and
- (d) all fluctuations in the value of the Australian dollar against other currencies.

11.16 Security of Payment Act

- (a) When an adjudication occurs under the SOP Act and the Principal has paid an adjudicated amount to the Contractor:
 - the amount will be taken into account by the Principal's Representative in issuing a payment statement under clause 11.3;
 - (ii) if it is subsequently determined pursuant to the Contract that the Contractor was not entitled under the Contract to payment of some or all of the adjudicated amount that was paid by the Principal ("overpayment"), the overpayment will be a debt due and payable by the Contractor to the Principal which the Contractor must pay to the Principal upon demand and in respect of which the Contractor is not entitled to claim or exercise any set-off, counterclaim, deduction or similar right of defence;
 - (iii) if the adjudicator's determination is quashed, overturned or declared to be void, the adjudicated amount then becomes a debt due and payable by the Contractor to the Principal upon demand and in respect of which the Contractor is not entitled to claim or exercise any set-off, counterclaim, deduction or similar right of defence;
 - (iv) the Principal's Representative:
 - A. is not bound by the adjudication determination;
 - may reassess the value of the work that was valued by the adjudicator; and
 - may, if it disagrees with the adjudication determination, express its own valuation in any payment statement; and
 - (v) the payment statement referred to in clause 11.16(a)(iv)C will be treated as a final determination of the value of the relevant work, subject to the provisions of clause 15.
- (b) For the purposes of section 17(3) of the SOP Act the Contractor irrevocably chooses the Institute of Arbitrators & Mediators, Australia, as the "authorised nominating authority" (as that term is defined in the SOP Act) for any adjudication application it may make under the SOP Act in respect of the subject matter of this Contract.
- (c) Without limiting clauses 11.8 or 16.12, the Principal may withhold any amount that is less than or equal to the amount claimed to be owed under a payment withholding request served on the Principal pursuant to Division 2A of the SOP Act.





- (d) If the Principal withholds from money otherwise due to the Contractor any amount that is less than or equal to the amount claimed to be owed under a payment withholding request served on the Principal pursuant to Division 2A of the SOP Act, then:
 - the Principal may plead and rely upon Division 2A of the SOP Act as a defence to any claim for the money by the Contractor from the Principal; and
 - (ii) the period during which the Principal retains money due to the Contractor pursuant to an obligation under Division 2A of the SOP Act will not be taken into account for the purpose of determining:
 - any period for which money owed by the Principal to the Contractor has been unpaid; and
 - the date by which payment of money owed by the Principal to the Contractor must be made.
- (e) The Contractor agrees not to commence proceedings to recover any amount withheld by the Principal pursuant to a payment withholding request served on the Principal pursuant to Division 2A of the SOP Act.
- (f) Any amount paid by the Principal pursuant to section 26C of the SOP Act will be a debt due from the Contractor to the Principal.
- (g) If the Principal withholds money pursuant to a payment withholding request served on the Principal pursuant to Division 2A of the SOP Act and the Contractor:
 - pays the amount claimed to be due under the adjudication application to which the payment withholding claim relates; or
 - becomes aware that the adjudication application to which the payment withholding claim relates has been withdrawn.

then the Contractor must so notify the Principal within 5 days of the occurrence of the event in sub-paragraph (i) or (ii) above (as applicable) by providing to the Principal a statement in writing in the form of a statutory declaration together with such other evidence as the Principal may require evidencing that the amount has been paid or the adjudication application has been withdrawn (as the case may be).

11.17 Title

Title in all items forming part of the Works will pass progressively to the Principal on the earlier of payment for or delivery of such items to the Site. Risk in all such items remains with the Contractor until Completion.

12. Completion

12.1 Progressive Inspection and Testing

At any time prior to Completion of the Works or a Portion, the Principal's Representative may direct that any materials or work forming part of the Contractor's Activities in respect



of the Works or that Portion be tested. The Contractor must provide such assistance, documentation, records, personnel (including Subcontractors) and samples and make accessible such parts of the Contractor's Activities or Works as may be required. On completion of any test the Contractor must make good the Contractor's Activities or Works so that they fully comply with this Contract.

The Principal's Representative may direct that any part of the Contractor's Activities or the Works must not be covered up or made inaccessible without the Principal's Representative's prior approval.

The tests prescribed in this Contract must be conducted by the Contractor as and when provided for in this Contract, or may be conducted by the Principal's Representative or a person (that may include the Contractor) nominated by the Principal's Representative.

Any testing required to be done by an independent authority must be carried out by an authority recognised by the Joint Accreditation System of Australia and New Zealand.

Unless otherwise stated in this Contract before conducting a test under this Contract the Principal's Representative or the Contractor must give not less than two Business Days notice in writing to the other of the time, date and place of the test. If the other party does not then attend, the test may nevertheless proceed.

Without prejudice to any other rights or remedies under this Contract, If the Contractor or the Principal's Representative delays in conducting a test, the other, after giving reasonable notice in writing of intention to do so, may conduct the test.

Each party must promptly make the results of tests available to the other and to the Principal's Representative.

Where the Principal's Representative directs that materials or work be tested, the costs of and incidental to testing must be borne by the Principal or paid by the Principal to the Contractor unless:

- (a) this Contract provides that the Contractor must bear the costs or the test is one which the Contractor was required to conduct other than pursuant to a direction under clause 12.1;
- (b) the test shows that the material or work is not in accordance with this Contract;
- (c) the test is in respect of a part of the Contractor's Activities or the Works covered up or made inaccessible without the Principal's Representative's prior approval where such was required; or
- (d) the test is consequent upon a failure of the Contractor to comply with a requirement of this Contract.

Where the extra costs are not to be borne by the Principal, they will be borne by the Contractor and will be a debt due from the Contractor to the Principal or paid by the Contractor to the Principal on demand.

12.2 Contractor to Notify

(a) The Contractor must give the Principal's Representative written notice 21 days before it anticipates achieving Completion of the Works or a Portion.



- (b) Following the issue by the Contractor of a notice under clause 12.2(a) the Contractor must:
 - prepare a detailed procedure for the progressive inspection by the Principal's Representative of the Works or that Portion; and
 - (ii) unless otherwise required under the TfNSW Standard Requirements, provide a draft defects management plan (without identifying any defects in respect of the Works or that Portion).
- (c) The procedure and draft defects management plan referred to in clause 12.2(b) must be submitted to the Principal's Representative and, prior to the inspection under clause 12.3(a) must, if required by the Principal's Representative, be amended to ensure that the:
 - (i) procedure provides the Principal's Representative with sufficient time to properly carry out this progressive inspection and the final inspection which the Principal's Representative is required to undertake under clause 12.3 to determine whether Completion of the Works or a Portion (as the case may be) has occurred; and
 - draft defects management plan fully addresses the matters the Principal's Representative directs.

12.3 Inspection before Completion

- (a) The Principal's Representative and the Contractor's Representative must, within 7 days of receipt by the Principal's Representative of the notice referred to in clause 12.2(a), jointly inspect the Works or the Portion at a mutually convenient time.
- (b) Following the joint inspection under clause 12.3(a), the Principal's Representative must issue a notice to the Principal and the Contractor either:
 - containing a list of the items that are apparent and it believes must be completed before Completion of the Works or the Portion is achieved; or
 - (ii) stating that it believes the Contractor is so far from achieving Completion of the Works or the Portion that it is not practicable to issue a list as contemplated in clause 12.3(b)(i).
- (c) When the Principal's Representative issues a notice under either clause 12.3(b)(i) or clause 12.3(b)(ii), the Contractor must continue to proceed to bring the Works or the Portion to Completion and thereafter when the Contractor considers it has achieved Completion of the Works or the Portion, the Contractor must notify the Principal's Representative in writing by means of a Contractor's Certificate of Completion in the form of Schedule 21.

Thereafter the Principal's Representative and the Contractor's Representative must jointly inspect the Contractor's Activities at a mutually convenient time.

(d) Following the joint inspection under clause 12.3(c), the Principal's Representative must within 21 days of receipt of a notice under clause 12.3(c),



or of receipt of a notice under clause 12.3(e), issue a notice to the Principal and the Contractor:

- if satisfied that Completion of the Works or the Portion has been achieved:
 - A. stating the date on which the Principal's Representative determines Completion of the Works or the Portion was achieved; and
 - B. containing a list of any minor Defects, of the type described in paragraph (a) of the definition of "Completion" in clause 1.1, that are apparent; or
- (ii) if not satisfied that Completion of the Works or the Portion has been achieved:
 - containing a list of the items that are apparent and it believes must be completed before Completion of the Works or the Portion is achieved; or
 - B. stating that it believes the Contractor is so far from achieving Completion of the Works or the Portion that it is not practicable to issue a list as contemplated by clause 12.3(d)(ii)A.
- (e) If the Principal's Representative Issues a notice under either clause 12.3(d)(ii)A or clause 12.3(d)(ii)B, the Contractor must continue to proceed to bring the Works or the Portion to Completion and thereafter when it considers it has achieved Completion of the Works or the Portion, the Contractor must notify the Principal's Representative by notice in writing, after which the second paragraph of clause 12.3(c), clause 12.3(d) and this clause 12.3(e) will reapply.
- (f) Where there are Portions, for the purposes of this Contract and without affecting the Contractor's obligation to achieve Completion of each Portion by the relevant Date for Completion of each Portion:
 - no separate Date for Completion of the Works is specified in this Contract;
 - (ii) Completion of the Works is achieved by achieving Completion of all Portions;
 - (iii) Completion of the Works will be taken to have occurred once Completion of all Portions has occurred; and
 - (iv) the Date of Completion of the Works will be taken to be the Date of Completion of the last Portion to reach Completion.

12.4 Unilateral Issue of Notice of Completion

If at any time a notice required to be given by the Contractor to the Principal's Representative under either of clauses 12.3(c) or 12.3(e) is not given by the Contractor yet the Principal's Representative is of the opinion that Completion of the Works or a Portion has been achieved, the Principal's Representative may at any time and for any



reason in its absolute discretion issue a Notice of Completion under clause 12.3(d)(i) for the Works or the Portion.

12.5 Hand Over upon Completion

The Contractor acknowledges that the Principal will require a progressive handover of the Works and that this handover will take place by the Contractor handing over each Portion once that Portion has reached Completion. The Principal's obligations under clause 3.1(b) in respect of the Site will then cease in respect of so much of the Site, access to which was provided for that Portion which is handed over to the Principal.

12.6 Part of the Works or a Portion

- (a) Without limiting clause 12.6(b), further Portions may be created by the Principal's Representative by issuing a written direction to the Contractor which clearly identifies for each, the:
 - (i) portion of the Works;
 - (ii) Date for Completion; and
 - (iii) respective amounts for security and liquidated damages (which will unless otherwise stated in the Principal's Representative's direction all be calculated pro-rata according to the ratio of the Principal's Representative's valuation of the Portion to the Contract Sum).
- (b) Without limiting clause 12.6(a), the Principal may, after the Contractor is given written notice by the Principal's Representative, occupy or use any part of the Works or a Portion although the whole of the Works or the Portion has not reached Completion.
- (c) If the Principal's Representative gives a notice under clause 12.6(b):
 - (i) the Principal must allow the Contractor reasonable access to the part of the Works or the Portion referred to in the notice and being occupied or used by the Principal, to enable the Contractor to bring the Works or the relevant Portion of which the area being occupied or used forms part to Completion; and
 - (ii) this will not otherwise limit or affect the obligations of the parties under this Contract, including the obligation of the Contractor to achieve Completion of the Works or the relevant Portion of which the area being occupied or used forms part, by the relevant Date for Completion.

12.7 Not used

12.8 Final Completion

- (a) The Contractor must give the Principal's Representative written notice two months before it anticipates completing all the work to be completed prior to achieving Final Completion.
- (b) The Principal's Representative and the Contractor's Representative must, within 28 days before the date the Principal's Representative expects Final Completion

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/vg



to occur, but no earlier than 28 days before the end of the latest Defect Rectification Period, jointly inspect the Works at a mutually convenient time.

- (c) Following the joint inspection under clause 12.8(b), the Principal's Representative must issue a notice to the Principal and the Contractor containing a list of the items that are apparent and it believes must be completed before Final Completion is achieved.
- (d) If the Principal's Representative issues a notice under clause 12.8(c), the Contractor must continue to bring the Works to Final Completion and thereafter when the Contractor considers it has achieved Final Completion, the Contractor must notify the Principal's Representative in writing by means of a Contractor's Certificate of Final Completion in accordance with Schedule 22. Thereafter, the Principal's Representative and the Contractor's Representative must jointly inspect the Works at a mutually convenient time.
- (e) Following the joint inspection under clause 12.8(d), the Principal's Representative must within 21 days of receipt of a notice under clause 12.8(d), or of receipt of a notice under clause 12.8(f), issue a notice to the Principal and the Contractor:
 - if satisfied that Final Completion has been achieved, stating the date on which the Principal's Representative determines Final Completion was achieved; or
 - (ii) if not satisfied that Final Completion has been achieved:
 - containing a list of the items which it believes must be completed before Final Completion is achieved; or
 - B. stating that it believes the Contractor is so far from achieving Final Completion that it is not practicable to issue a list as contemplated by clause 12.8(e)(ii)A.
- (f) If the Principal's Representative issues a notice under clause 12.8(e)(ii)A or clause 12.8(e)(ii)B, the Contractor must continue to proceed to bring the Works to Final Completion and thereafter when it considers it has achieved Final Completion of the Works the Contractor must notify the Principal's Representative in writing after which the second sentence of clause 12.8(d), clause 12.8(e) and this clause 12.8(f) will reapply.

12.9 Effect of Notice of Completion or Final Completion

A notice issued under clause 12.3(d)(i) or 12.8(e)(i) will not:

- (a) constitute approval by the Principal or the Principal's Representative of the Contractor's performance of its obligations under this Contract;
- (b) be taken as an admission or evidence that the Works or the Portion complles with the requirements of this Contract; or
- (c) prejudice any rights or powers of the Principal or the Principal's Representative.

13. Care of the Works, Risks and Insurance

13.1 Care of the Works

Except where it arises from an Excepted Risk, and without limiting the generality of the Contractor's obligations, the Contractor:

- (a) from and including the earlier of the date of commencement of work and the date on which the Contractor is given access to the Site, or a part of the Site, until 4:00pm on the Date of Completion of the Works or the last Portion to reach Completion will:
 - (i) be responsible for the care of and will bear the risk of, and indemnify the Principal against any loss of, or damage to:
 - A. the Contractor's Activities:
 - B. the Works;
 - C. Temporary Works;
 - D. Construction Plant;
 - unfixed plant and materials (whether on or off the Site) the value of which has been included in a payment statement under clause 11.3; and
 - F. things entrusted to the Contractor by the Principal or brought onto the Site by a Subcontractor for the purpose of carrying out the Contractor's Activities; and
 - (ii) provide the storage and protection necessary to preserve these things;
- (b) after the time after which the Contractor ceases to be responsible under paragraph (a) for the care of a part of the Works or any other thing referred to in subparagraph (a)(i), will bear the risk of, and indemnify the Principal against, any loss of or damage to that part of the Works or other thing, arising from:
 - any act or omission of the Contractor during the Defects Rectification Period (including any extension under clause 8.6) or any other Contractor's Activities; or
 - (ii) any event which occurred while the Contractor was responsible for the care of the relevant part of the Works or other thing under paragraph (a) in connection with the Contractor's Activities.

13.2 Indemnity

The Contractor must indemnify the Principal against:

- (a) any loss of or damage to property of the Principal;
- (b) any liability to or claims by a third party in respect of loss of or damage to property, the loss of use of or access to property, or injury to or death of persons; and



for NSW

(c) without limiting or otherwise affecting paragraph (a), any loss or damage to existing property in or upon which the Contractor's Activities are being carried out.

caused by, or arising out of, or in any way in connection with, the Contractor's Activities, but the Contractor's responsibility to indemnify the Principal will be reduced proportionally to the extent than an act or omission by the Principal, the Principal's Representative, other agents of the Principal or an Other Contractor contributed to the loss, damage, injury or death provided that the Contractor has complied with its obligations under clause 2.9(a)(ii)B.

The indemnity in this clause 13.2 will not:

- (d) exclude any other right of the Principal to be indemnified by the Contractor; or
- apply to the extent to which the Contractor must indemnity the Principal under clause 13.1.

13.3 Reinstatement

During the period during which the Contractor bears the risk of loss or damage, and while the Contractor is responsible for its care, if loss or damage occurs to anything for which the Contractor is responsible under clause 13.1, the Contractor must:

- subject to paragraph (b), promptly replace or otherwise make good the loss or repair the damage; and
- (b) where the loss or damage arises from an Excepted Risk, without fault or omission on the part of the Contractor, only comply with paragraph (a) to the extent directed by the Principal's Representative.

The Contractor will bear the cost of such replacement, making good or repair except to the extent that the loss or damage arises from an Excepted Risk, in which event this replacement, making good or repair will, to the extent the loss or damage arises from an Excepted Risk (but subject to paragraph (b)), be treated as if it were a Variation the subject of a direction by the Principal's Representative.

13.4 Works Insurance - Alternative 1

This alternative applies if so stated in Schedule 1.

The Principal will effect and maintain insurances on the terms of the summary which is included in Exhibit C. This insurance will cover the Contractor, the Principal, the Principal's Representative and all subcontractors employed by the Contractor in respect of the Contractor's Activities.

This insurance is subject to the exclusions, conditions and excesses noted in Exhibit C, and is deemed to satisfy the Principal's obligation to effect insurance. The Contractor acknowledges and agrees that prior to the date of this Contract it reviewed and examined Exhibit C and:

 has satisfied itself as to the nature and extent of the cover provided by those insurance policies;

Doc ID 607060023/v9

- (b) acknowledges that the policies of insurance summarised in Exhibit C do not cover every risk to which the Contractor might be exposed and are subject to deductibles and limits and the Contractor may, if it chooses to do so, at its cost effect appropriate insurance for any risk or liability which is not covered by the policies of insurance summarised in Exhibit C; and
- (c) where it bears the risk of the relevant loss or damage, or is required to indemnify the Principal, agrees to bear the cost of any excesses in the insurance policies summarised in Exhibit C or any insurance taken out under this clause 13.4.

13.4 Works Insurance - Alternative 2

This alternative applies if so stated in Schedule 1.

Before commencing the Contractor's Activities, the Contractor must insure all the things referred to in clause 13.1 against loss or damage resulting from any cause until the Contractor ceases to be responsible for their care.

Without limiting the generality of the obligation to insure, such insurance must cover the Contractor's liability under clause 13.3 and things in storage off site and in transit to the site but may exclude:

- (a) the cost of making good fair wear and tear or gradual deterioration, but shall not exclude the loss or damage resulting therefrom;
- (b) the cost of making good faulty workmanship and materials, but shall not exclude the loss or damage resulting therefrom;
- consequential loss of any kind, but shall not exclude loss of or damage to the Works;
- (d) damages for delay in completing or for the failure to complete the Works;
- (e) loss or damage resulting from ionising radiations or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel resulting from any cause; and
- (f) loss or damage resulting from the Excepted Risk referred to in paragraph (a) of the definition of Excepted Risk.

The insurance cover must be for an amount not less than the aggregate of the:

- (g) value of the Works (as determined by the Principal's Representative, acting reasonably);
- (h) provision in Schedule 1 to provide for costs of demolition and removal of debris;
- (i) provision in Schedule 1 for consultants' fees and Principal's consultants' fees;
- value in Schedule 1 of any materials or things to be supplied by the Principal for the purposes of the Contractor's Activities; and
- (k) additional amount or percentage in Schedule 1 of the total of the items referred to in sub-paragraphs (g) to (j) of this paragraph.

Doc ID 607060023A/9



Insurance shall be in the joint names of the parties, must cover the parties, consultants and subcontractors whenever engaged in the Contractor's Activities for their respective rights, interests and liabilities and, except where the Contract otherwise provides, must be with an insurer and in terms both approved in writing by the Principal (which approvals must not be unreasonably withheld).

13.5 Public Liability Insurance - Alternative 1

This alternative applies if so stated in Schedule 1.

The Principal will effect and maintain insurance on the terms of the summary which is included in Exhibit C. The insurance will cover the Contractor, the Principal, the Principal's Representative and all subcontractors employed by the Contractor in respect of the Contractor's Activities.

This insurance is subject to the exclusions, conditions and excesses noted on the policies, and is deemed to satisfy the Principal's obligation to effect insurance. The Contractor acknowledges and agrees prior to the date of this Contract it reviewed and examined Exhibit C and:

- has satisfied itself as to the nature and extent of the cover provided by those insurance policies;
- (b) acknowledges that the policies of insurance summarised in Exhibit C do not cover every risk to which the Contractor might be exposed and are subject to deductibles and limits and the Contractor may, if it chooses to do so, at its cost effect appropriate insurance for any risk or liability which is not covered by the policies of insurance summarised in Exhibit C; and
- (c) where it bears the risk of the relevant loss or damage, or is required to indemnify the Principal, agrees to bear the cost of any excesses in the insurance policies summarised Exhibit C, or any insurance taken out under this clause 13.5.

13.5 Public Liability Insurance – Alternative 2

This alternative applies if so stated in Schedule 1.

Before commencing the Contractor's Activities, the Contractor must effect and maintain for the duration of the Contract, a public liability policy.

The policy must:

- (a) be in the joint names of the parties;
- (b) cover the:
 - respective rights and interests; and
 - (ii) liabilities to third parties,

of the parties, the Principal's Representative, consultants and subcontractors from time to time, whenever engaged in the Contractor's Activities;

(c) cover the parties' respective liability to each other for loss or damage to property (other than property required to be insured by clause 13.4 Alternative 2) and the



death of or injury to any person (other than liability which the law requires to be covered under a workers compensation insurance policy):

- (d) be endorsed to cover the use of any Construction Plant not covered under a comprehensive or third party motor vehicle insurance policy;
- (e) provide insurance cover for an amount in respect of any one occurrence of not less than the sum in Schedule 1; and
- (f) be with an insurer and otherwise in terms both approved in writing by the Principal (which approvals must not be unreasonably withheld).

13.6 Contractor's Other Insurance Obligations

The effecting of insurance will not limit the liabilities or obligations of a party under any other provision of this Contract.

The Contractor must, or in the case of asbestos liability insurance, either the Contractor or its specialist asbestos removal Subcontractor must (if required by clause 13.6(a)(iii) below), before the Contractor commences the Contractor's Activities or as otherwise required by this Contract:

- (a) effect and have in place the following insurance with insurers of the Required Rating and on terms satisfactory to the Principal's Representative:
 - (i) workers compensation insurance, employers indemnity insurance or similar insurance, in accordance with the Laws of any State, Territory or other jurisdiction where the Contractor's Activities are being performed;
 - (ii) an insurance policy covering loss or damage to the Construction Plant;
 - (iii) if the Contractor's Activities include any work involving asbestos or asbestos decontamination, including stripping, encapsulation or removal, asbestos liability insurance;
 - (iv) a single professional indemnity insurance policy covering both entitles of the joint venture comprising the Contractor;
 - (v) motor vehicle insurance covering all mechanically propelled vehicles used in connection with the Contractor's Activities, whether registered, capable of being registered or required under the Law to be registered, extended specifically to cover the transportation of items and substances, and including:
 - insurance against personal injury or death, as required under all applicable Laws; and
 - in addition to the public liability insurance required under this Contract, insurance for third party property damage and personal injury or death;
 - (vi) if the things the care of which the Contractor is responsible for under clause 13.1 are in transit (including storage and transhipment) from any place outside of Australia, marine transit insurance on an "all risks" basis, including war, riots, strikes and civil commotion coverage.



- covering those things until they are delivered to the Site, unpacked, inspected and confirmed as in sound condition;
- (vii) any insurance that the Contractor is required to obtain by virtue of any Law or Change in Law; and
- (viii) appropriate insurance (for replacement value) in respect of all materials being or to be fabricated overseas for the Works and any other insurance that the Principal may reasonably require the Contractor to obtain.

for amounts not less than the amounts (if any) referred to in Schedule 1;

- (b) ensure the Construction Plant insurance, motor vehicle insurance (except for compulsory third party insurance for bodily injury as required by the law), asbestos liability insurance, marine transit insurance and any insurance required by sub-paragraph (a)(vii):
 - (i) are policies in the joint names of the Principal and the Contractor, and cover the Principal, the Principal's Representative (including any appointee under clauses 9.2 or 9.3), the Contractor and all its Subcontractors, for their respective rights and interests, and their liabilities to third parties and liability to each other;
 - (ii) cover loss or damage to property (other than property described in clause 13.1 and the death of or injury to any person (other than liability which the law requires to be covered under a workers compensation insurance or similar insurance policy), arising out of, or in any way in connection with, the Contractor's Activities;
 - (iii) includes a cross-liability clause in accordance with clause 13.10; and
 - (iv) is for an amount in respect of any occurrence not less than the amount referred to in Schedule 1:
- ensure the asbestos liability insurance is in place before any work involving asbestos or asbestos decontamination work commences;
- ensure that any insurance policy required by sub-paragraph (a)(vii) is in place before the Contractor's Activities covered by such policies commence;
- (e) ensure the professional indemnity insurance:
 - covers claims for breach of professional duty (whether owed in contract or otherwise) by the Contractor or its Subcontractors in carrying out the Contractor's Activities;
 - (ii) covers the Contractor for liability to the Principal arising from errors or omissions in:
 - design or documentation of the Works or the Temporary Works;
 or
 - B. other professional services,

carried out by the Contractor or any of its Subcontractors; and



(lii) provide:

- A. cover for any amount in respect of any one claim of not less than:
- B. cover for an amount in the aggregate of not less than; and
- C. for an excess not greater than,

the amount stated in Schedule 1:

- (f) in relation to the workers compensation insurance or similar insurance:
 - where permitted by Law, extend the insurance policy to provide indemnity to the Principal for its statutory liability to the Contractor's employees;
 - ensure that each of its Subcontractors has such workers compensation insurance or similar insurance covering the Subcontractor's employees;
 and
 - (iii) ensure it insures against liability for death of or injury to persons employed by the Contractor or its Subcontractors as required by any Law for an amount not less than the amount stated in Schedule 1 (if any) for any one event, subject to the maxima or minima imposed by relevant Law; and
- (g) in relation to marine transit insurance, ensure that the policy:
 - (i) is in the joint names of the Principal and Contractor, and covers the Principal, the Principal's Representative, the Contractor and all its Subcontractors as separate insureds, for their respective rights and interests:
 - (ii) includes a cross-liability clause in accordance with clause 13.10; and
 - (iii) includes a delayed unpacking clause and a 50:50 clause.

13.7 General Insurance Requirements

The Contractor must:

- (a) in respect of any insurance policy (including an insurance policy which this Contract requires the Contractor to procure to be effected by a Subcontractor) which it is required to effect or procure to be effected, pursuant to this Contract and where required by the Principal's Representative, provide the Principal's Representative (or other person nominated for this purpose by the Principal's Representative) within 5 days of a request with:
 - (i) a certificate of currency and any other evidence satisfactory to the Principal's Representative demonstrating that the policy is current and in compliance with the Contractor's obligation to insure (or procure insurance), or (where relevant) a licence as a self-insurer or other proof of being a self-insurer under the Workers Compensation Act 1987 (Cth); and

- (ii) a certified copy of the insurance policy and any other evidence which
 may be reasonably necessary to satisfy the Principal's Representative
 that the policy is current and complies with the requirements of this
 Contract;
- ensure that (except for professional indemnity or workers compensation or similar insurance);
 - the Principal receives at least 30 days notice of any cancellation or material change of any insurance policy effected under clause 13.4, 13.5 or 13.6;
 - (ii) a notice of claim given to the insurer by the Principal, the Contractor or a Subcontractor will be accepted by the insurer as a notice of claim by the Principal, the Contractor and the Subcontractor, and
 - (iii) upon becoming aware of any fact, matter or thing entitling the insurer to cancel the policy, give immediate notice in writing to the Principal about that fact, matter or thing at least 30 days prior to the insurer giving any notice of cancellation; and
- (c) ensure that it:
 - does not do anything which prejudices any insurance;
 - (ii) where required, rectifies anything which might prejudice any insurance;
 - (iii) reinstates an insurance policy if it lapses;
 - (iv) does not cancel, vary or allow an insurance policy to lapse without the prior written consent of the Principal's Représentative;
 - (v) immediately notifies the Principal's Representative of any event that may result in an insurance policy lapsing or being cancelled, and replaces that insurance policy prior to it lapsing or being cancelled; and
 - (vi) 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.

If the Contractor fails to:

- (d) provide copies of any insurance policy (Including an insurance policy which this Contract requires the Contractor to procure a Subcontractor to effect) which the Contractor is required to effect together with evidence satisfactory to the Principal's Representative that the policy is current; or
- effect or procure to be effected insurance which is with insurers of the Required.
 Rating and on terms satisfactory to the Principal's Representative,

as required by clauses 2.2(c), 13.4, 13.5, 13.6 or this clause 13.7, the Principal may, at its sole discretion and without prejudice to any other rights that it may have, take out that insurance and the cost will be a debt due from the Contractor to the Principal.



The Principal may refuse payment until the Contractor produces evidence of compliance with its insurance obligations under clauses 2.2(c), 13.4, 13.5 and 13.6 to the satisfaction of the Principal. The rights given by this clause 13.7 are in addition to any other right.

13.8 Period of Insurance

The insurance the parties are required to have in place under this clause 13 must be maintained:

- (a) in the case of the works and public liability insurance policy required by clauses 13.4, and 13.5 so as to provide cover until the latest to occur of:
 - Contractor ceases to be responsible under clause 13.1 for the care of anything; and
 - the Principal's Representative issues a notice under clause 12.8(e)(i) stating the date on which Final Completion was achieved;
- (b) In the case of the Construction Plant insurance:
 - until the Contractor ceases to bear the risk of loss of or damage to anything under clause 13.1; and
 - (ii) at any time it is being used in connection with the Contractor's Activities:
- (c) in the case of the workers compensation insurance and motor vehicle insurances, until the Principal's Representative issues a notice under clause 12.8(e)(i) stating the date on which Final Completion was achieved;
- (d) in the case of professional indemnity insurance, before commencing work covered by the policy referred to in clause 13.6(e) until at least the period specified in Schedule 1 after the Date of Final Completion;
- (e) In the case of asbestos liability insurance, marine transit insurance and insurance required under clause 13.6(a)(viii), for so long as there is a risk that an event covered by the insurance may occur in relation to the Works or the Contractor's Activities; and
- (f) in the case of insurance required under clause 13.6(a)(vii), during the period required by any Law.

13.9 Notice of Potential Claim

The Contractor must:

- (a) as soon as possible inform the Principal in writing of any occurrence that may give rise to a claim under an insurance policy required by this Contract (except for the professional indemnity insurance policy);
- (b) keep the Principal informed of subsequent developments concerning the claim;
 and
- (c) ensure that its Subcontractors similarly inform the Contractor and the Principal in respect of occurrences that may give rise to a claim.



13.10 Cross Liability

Where this Contract requires insurance to be effected in joint names the party effecting the insurance must ensure that the insurance policy provides that:

- (a) insofar as the policy may cover more than one insured, all insuring agreements and endorsements (with the exception of limits of liability) will operate in the same manner as if there were a separate policy of insurance covering each named insured;
- the insurer waives all rights, remedies or relief to which it might become entitled by subrogation against any of the parties covered as an insured;
- (c) failure by any insured to observe and fulfil the terms of the policy will not prejudice the insurance in regard to any other insured;
- (d) any non-disclosure by one insured does not prejudice the right of any other insured to claim on the policy; and
- (e) a notice to the insurer by one insured will be deemed to be notice by all insured parties.

13.11 Risk of Deductibles

The Contractor must pay all insurance deductibles or excesses in respect of any event and claim made under a policy referred to in this clause 13.

14. Default or Insolvency

14.1 Contractor's Default

If the Contractor commits a breach of this Contract referred to below, the Principal may give the Contractor a written notice.

The breaches by the Contractor to which this clause applies are:

- (a) not commencing or not progressing the Contractor's Activities regularly and diligently in accordance with the requirements of this Contract, in breach of clause 10.1;
- (b) suspension of work, or failing to proceed with the Contractor's Activities with due expedition and without delay, in breach of clause 10.1;
- (c) failing to provide the security, in breach of clause 2.7;
- (d) failing to provide evidence of insurance, in breach of clause 13;
- failing to use the materials or standards of workmanship required by this Contract, in breach of clause 4.1;
- (f) not complying with any direction of the Principal's Representative made in accordance with this Contract, in breach of clause 9.1(a);
- (g) not complying with the requirements of this Contract regarding the Contract Management Plan in a material respect;



- (h) not complying with its obligations under:
 - the TfNSW Standard Requirements with regard to the Contract Management Plan; or
 - (ii) the TfNSW Standard Requirements TSR T Technical Management;
- (i) not complying with its environmental obligations under this Contract;
- not complying with its obligations under this Contract regarding work health and safety;
- (k) the failure to comply with all applicable Law, including the failure to comply with, carry out and fulfil the conditions and requirements of all Authority Approvals in breach of clause 2.3; or
- any other failure to comply with a material obligation under the Contract.

14.2 Contents of Notice

A written notice under clause 14.1 must:

- (a) state that it is a notice under clause 14.1 or clause 14.3 (as the case may be);
- (b) specify the alleged breach;
- (c) require the Contractor to remedy the breach or, in the case of a notice by the Principal where the breach is not capable of being remedied, make other arrangements satisfactory to the Principal; and
- (d) specify the time and date by which the Contractor must remedy the breach or make other arrangements satisfactory to the Principal (which time must not be less than 21 clear days after the notice is given).

14.3 Rights of the Principal Following Notice

Upon giving a notice under clause 14.1, the Principal may suspend payments to the Contractor until the date upon which the Contractor remedies the breach or makes arrangements satisfactory to the Principal.

If, by the time specified in a notice under clause 14.1, the Contractor fails to remedy the breach or make arrangements satisfactory to the Principal, the Principal may, by notice in writing to the Contractor:

- take out of the hands of the Contractor the whole or part of the work remaining to be completed; or
- (b) terminate this Contract.

14.4 Immediate Termination on Take-Out

If:

- (a) an Insolvency Event occurs:
 - (i) to the Contractor;



- (ii) where the Contractor comprises more than one person, any one of those persons: or
- (iii) to a person specified in Schedule 1; or
- the Contractor causes or contributes to the occurrence of an Incident and fails to (b) ensure that the Principal is promptly notified as set out in clause 2.10(d).

then, whether or not the Contractor is then in breach of this Contract, the Principal may, without giving a notice under clause 14.1, exercise the right under clause 14.3(a) or 14.3(b).

14.5 Principal's Common Rights After Take-Out or Termination

f:

- (a) the Principal:
 - exercises its rights under clause 14.3(a); or (i)
 - terminates this Contract under clauses 14.3(b), 14.4 or 14.9;
- the Contractor repudiates this Contract and the Principal otherwise terminates (b) this Contract: or
- (c) this Contract is frustrated under the Law.

then:

- (d) the Contractor:
 - must novate to the Principal or the Principal's nominee those (i) Subcontracts between the Contractor and its Subcontractors that the Principal directs:
 - irrevocably appoints (for valuable consideration) the Principal and any (ii) authorised representative of the Principal to be the Contractor's attorney to:
 - A. execute, sign, seal and deliver all notices, deeds and documents: and
 - B. undertake actions in the name of the Contractor,

for the purposes referred to in clause 14.5(d)(i); and

- (iii) must immediately hand over to the Principal's Representative all copies of:
 - A. any documents provided by the Principal to the Contractor;
 - B. all Contract Documentation prepared by the Contractor to the date on which the Principal exercises its rights under clauses 14.3(a) or 14.3(b) (whether complete or not); and
 - C. any other documents or information in existence that is to be provided to the Principal under the terms of this Contract; and

DOC ID 807060023/V9



(e) the Principal:

- (i) will be entitled to require the Contractor to remove from the Site or any area affected by the Works, any Construction Plant and Temporary Works and all materials, equipment and other things intended for the Works;
- (ii) may complete that work;
- (iii) may take possession of such of the Construction Plant, Temporary Works and other things on or in the vicinity of the Site or Extra Land as are owned by the Contractor and are reasonably required by the Principal to facilitate completion of the work; and
- (iv) must, if it takes possession of the Items referred to in clause 14.5(e)(iii);
 - A. for the period during which it retains possession of the Construction Plant, Temporary Works or other things pay to the Contractor rent for the use of the Construction Plant, Temporary Works or other things at a market rate to be agreed by the parties or, failing agreement, to be determined pursuant to clause 15; and
 - B. maintain the Construction Plant, Temporary Works or other things and, subject to clause 14.6, on completion of the work return to the Contractor the Construction Plant, Temporary Works and any things taken under clause 14.5(e)(iii) which are surplus.

This clause 14.5 will survive the termination or frustration of this Contract.

14.6 Principal's Entitlements after Take-Out

- (a) If the Principal exercises the right under clause 14.3(a), the Contractor will not be entitled to any further payment in respect of the work taken out of the hands of the Contractor unless a payment becomes due to the Contractor under this clause 14.6.
- (b) When work taken out of the hands of the Contractor under clause 14.3(a) is completed, the Principal's Representative will ascertain the cost incurred by the Principal in completing the work and will issue a certificate certifying the amount.
- (c) If the cost incurred by the Principal is greater than the amount that would have been paid to the Contractor if the Contractor had completed the work, the difference will be a debt due from the Contractor to the Principal. If the cost incurred by the Principal is less than the amount that would have been paid to the Contractor if the Contractor had completed the work, the difference will be a debt due to the Contractor from the Principal.
- (d) Without limiting clause 14.6(c), if the Principal exercises the right under clause 14.3(a), the Principal will be entitled to recover from the Contractor any costs, expenses, losses or damages incurred or suffered by it as a result of, or arising out of, or in any way in connection with, the exercise of such right.



(e) If the Contractor is indebted to the Principal, the Contractor grants to the Principal a lien over the Construction Plant, Temporary Works or other things taken under clause 14.5 such that the Principal may retain that property until the debt is met. If after reasonable notice, the Contractor fails to pay the debt, the Principal may sell the Construction Plant, Temporary Works or other things and apply the proceeds to satisfaction of the debt and the costs of sale. Any excess will be paid to the Contractor.

14.7 Principal's Rights after Termination

Subject to clause 14.11, if the Principal terminates this Contract under clauses 14.3 or 14.4, or if the Contractor repudiates this Contract and the Principal otherwise terminates this Contract the Principal will:

- (a) not be obliged to make any further payments to the Contractor, including any money that is the subject of a payment claim under clause 11.2 or a payment statement under clause 11.3:
- (b) be absolutely entitled to call upon, convert and have recourse to and retain the proceeds of any unconditional undertaking held under clause 2.7; and
- be entitled to recover from the Contractor any costs, expenses, losses or (c) damages incurred or suffered by it as a result of, or arising out of, or in any way in connection with, such termination.

This clause 14.7 survives the termination of this Contract.

14.8 Contractor's Rights after Repudiation or Wrongful Termination

- (a) If the Principal:
 - repudiates this Contract and the Contractor terminates this Contract; or
 - (ii) wrongfully:
 - exercises or attempts to exercise any right or power conferred A. on it by clauses 14.3, 14.4 or 14.9; or
 - B. determines or purports to determine this Contract at common

then the:

- (iii) Principal's actions will be deemed to have been a lawful termination in accordance with clause 14.9 and the Contractor's sole rights in such circumstances will be those set out in clause 14.10; and
- (iv) Contractor:
 - A. will not be entitled to the payment of damages;
 - B. will not be entitled to any payment on a quantum meruit basis;
 - C. waives all other rights it has to make a Claim in such circumstances.



(b) This clause 14.8 will survive the termination of this Contract.

14.9 Termination for Convenience

Without prejudice to any of the Principal's other rights or entitlements or powers under this Contract, the Principal may:

- (a) at any time for its sole convenience, and for any reason, by written notice to the Contractor terminate this Contract effective from the time stated in the notice or if no such time is stated, at the time the notice is given to the Contractor; and
- (b) thereafter, at the Principal's absolute discretion complete the uncompleted part of the Contractor's Activities or the Works either itself or by engaging Other Contractors.

14.10 Payment for Termination for Convenience

If the Principal terminates this Contract under clause 14.9, the Contractor:

- (a) will be entitled to payment of the following amounts as determined by the Principal's Representative:
 - (i) for work carried out prior to the date of termination, the amount which would have been payable if this Contract had not been terminated and the Contractor submitted a payment claim under clause 11.2 for work carried out to the date of termination:
 - (ii) the cost of plant and materials reasonably ordered by the Contractor for the Works and for which it is legally bound to pay provided that:
 - A. the value of the plant or materials have not been previously paid or included in the amount payable under sub-paragraph (a)(i); and
 - title in the plant and materials vests in the Principal upon payment;
 - (III) the reasonable cost of removing from the Site all labour, Construction Plant, Temporary Works (where required by the Principal) and other things used in the Contractor's Activities that are not part of, or to be part of, the Works;
 - (iv) not used; and
 - the amount of \$1 for all overheads and profit associated with, and to the extent not included in, the work and costs determined under subparagraphs (a)(ii), (a)(iii) and (a)(iv); and
- (b) must take all steps possible to mitigate the costs referred to in sub-paragraphs(a)(ii) and (a)(iii).

To the extent it has not had recourse to them, the Principal will return all unconditional undertakings then held by it under clause 2.7 when the Contractor has complied with all its obligations under this clause.



The amount to which the Contractor is entitled under this clause 14.10 will be a limitation upon the Principal's liability to the Contractor arising out of, or in any way in connection with, the termination of this Contract and the Principal will not be liable to the Contractor upon any Claim arising out of, or in any way in connection with, the termination of this Contract other than for the amount payable under this clause 14.10.

This clause 14.10 will survive the termination of this Contract by the Principal under clause 14.9.

14.11 Preservation of Rights

Subject to clauses 14.8, nothing in this clause 14 or that the Principal does or fails to do pursuant to this clause 14 will prejudice the right of the Principal to exercise any right or remedy (including recovering damages or exercising a right of set-off under clause 16.12) which it may have where the Contractor breaches (including repudiates) this Contract.

14.12 Termination by Frustration

If under the law this Contract is frustrated the Principal will:

- (a) pay the Contractor the following amounts as determined by the Principal's Representative:
 - an amount calculated in accordance with clause 14.10(a)(i) for work carried out prior to the date of frustration;
 - (II) the costs calculated in accordance with the terms of, and subject to the conditions in, clauses 14.10(a)(ii); and
 - (iii) the costs calculated in accordance with the terms of clauses 14.10(a)(iii) and 14.10(a)(iv); and
- (b) to the extent it has not had recourse to them, return all unconditional undertakings then held by it under clause 2.7 when the Contractor has complied with its obligations under this clause.

The amount to which the Contractor is entitled under this clause 14.12 will be a limitation upon the Principal's liability to the Contractor arising out of, or in any way in connection with, the frustration of this Contract and the Principal will not be liable to the Contractor upon any Claim arising out of, or in any way in connection with, the frustration of this Contract other than for the amount payable under this clause 14.12.

Without limiting any other provision of this Contract, this clause 14.12 will survive the frustration of this Contract.

14.13 Codification of Contractor's Entitlements

This clause 14 is an exhaustive code of the Contractor's rights arising out of or in any way in connection with any termination and the Contractor:

- (a) cannot otherwise terminate, rescind or treat this Contract as repudiated; and
- (b) waives all rights at Law to terminate, rescind or treat this Contract as repudiated,

otherwise than in accordance with this clause 14.



15. Disputes

15.1 Notice of Dispute

If a dispute or difference arises between the Contractor and the Principal or between the Contractor and the Principal's Representative in respect of any fact, matter or thing arising out of, or in any way in connection with, the Contractor's Activities, the Works or the subject matter of this Contract, ("Dispute") the Dispute must be determined in accordance with the procedure in this clause 15.

Where such a Dispute arises, either party may give a notice in writing to the Principal's Representative and the other party ("Notice of Dispute"). The Notice of Dispute must:

- (a) specify the Dispute;
- (b) provide particulars of the party's reasons for being dissatisfied;
- (c) set out the position which the party believes is correct; and
- in the case of a Dispute in respect of a direction of the Principal's
 Representative under one of the clauses referred to in Schedule 1 (a "Schedule 1 Dispute"), be given in accordance with clause 15.2.

Where the notice is given by the Contractor, if the Contractor fails to provide sufficient particulars of the Dispute to enable the Principal's Representative to properly consider the matter, then the Principal's Representative may request the Contractor to provide further particulars of the Dispute in which event the Contractor must provide the further particulars within 14 days of receipt of the request to provide the further particulars.

15.2 Time for Submitting Notice Concerning Principal's Representative's Direction

If the Contractor wishes to have a direction by the Principal's Representative under one of the clauses referred to in Schedule 1 opened up, reviewed, decided and substituted the Contractor must give a Notice of Dispute in respect of the Dispute to the Principal and the Principal's Representative within 14 days of the date of the direction, after which the Principal's Representative may review the Dispute and make a determination in accordance with clause 15.3.

If the Contractor fails to give such a Notice of Dispute to the Principal and the Principal's Representative within the time period required by this clause 15.2:

- the direction will be final and binding and will not be capable of being challenged, opened up or reviewed in any forum; and
- (b) where the direction relates to the rejection or deemed rejection of a Claim pursuant to clause 17.4, the Claim will be barred in accordance with clause 17.6.

15.3 Determination of Schedule 1 Disputes by the Principal's Representative

Upon receipt of a Notice of Dispute in respect of a Schedule 1 Dispute which is given in accordance with clause 15.2, the Principal's Representative may review and make a determination in respect of the Dispute.



The determination of the Principal's Representative in respect of any such Notice of Dispute:

- (a) must be in writing;
- (b) must be given within 21 days after the Notice of Dispute is given or where further particulars have been requested under clause 15.1, within 21 days after the further particulars have been provided to the Principal's Representative;
- (c) will be substituted for the relevant direction the subject of the Notice of Dispute;
 and
- (d) is to be given effect to by the parties unless and until it is reversed, overturned or otherwise changed under the procedure in the following clauses.

If the Principal's Representative fails to make a determination as required by this clause 15.3 the direction the subject of the Notice of Dispute will be deemed to be confirmed by the Principal's Representative.

15.4 Response to Notice of Dispute

Where a Notice of Dispute has been given in accordance with clause 15.1 and 15.2 (where applicable) then the party to whom the Notice of Dispute is addressed must:

- (a) if the Notice of Dispute does not relate to a Schedule 1 Dispute, within 21 days of the date of:
 - (i) receipt of the Notice of Dispute; or
 - if any further particulars have been requested under clause 15.1, receipt of those particulars; or
- (b) if the Notice of Dispute does relate to a Schedule 1 Dispute and if the direction is confirmed, or deemed to have been confirmed, by the Principal's Representative under clause 15.3, within 42 days of the receipt of the Notice of Dispute,

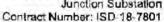
provide a response in writing indicating whether or not it agrees with the position set out in the Notice of Dispute.

15.5 Executive Negotiation

- (a) If the Dispute is not resolved within 14 days of:
 - the date of receipt of the response to the Notice of Dispute pursuant to clause 15.4; or
 - if no response is received, the date specified for the provision of a response pursuant to clause 15.4,

(the "Referral Date") either party may by notice in writing refer the Dispute to the persons described in Schedule 1 who must:

- (iii) meet and undertake genuine and good faith negotiations with a view to:
 - A. clarifying and narrowing the issues in dispute in the event that litigation is commenced in respect of the Dispute; and





- B. resolving the Dispute; and
- if they cannot resolve the Dispute, endeavour to agree upon a procedure to resolve the Dispute.
- (b) If appropriate in the circumstances, at or prior to the meeting referred to in clause 15.5(a) the parties will exchange documents critical to the resolution of the Dispute.

15.6 **Expert Determination**

If a dispute relating to a Schedule 1 Dispute is referred for resolution under clause 15.5 and it is not resolved within 21 days after the Referral Date, the dispute must be submitted to an expert determination.

The dispute will be referred to an expert determination whether or not the persons described in Schedule 1 have complied with clauses 15.5(a) and 15.5(b).

15.7 The Expert

The expert determination under clause 15.6 is to be conducted by:

- an independent industry expert agreed by the Principal and the Contractor; or (a)
- (b) where the parties are unable to agree upon an independent industry expert within 42 days after the Referral Date, or where an independent industry expert appointed under this clause 15.7:
 - is unavailable: (i)
 - (ii) declines to act;
 - does not respond within 14 days to a request by one or both parties for advice as to whether he or she is able to conduct the determination; or
 - does not make a determination within the time required by clause (iv) 15.8(e),

an independent industry expert appointed by the President of the Institute of Arbitrators & Mediators Australia.

15.8 Rules of Expert Determination

- An expert determination conducted under this clause 15 is not an arbitration and (a) the expert is not an arbitrator. The expert may reach a decision from his or her own knowledge and expertise.
- The expert determination must be made in accordance with the rules for the (b) expert determination process included in the agreement which appears in Schedule 26 or such other rules as the parties and the expert may agree.
- (c) The expert must:
 - disclose to the parties any interest he or she has in the outcome of the (1) determination; and

Dog ID 607060023/v9

- (ii) not communicate with one party to the determination without the knowledge of the other.
- (d) Each party will:
 - (i) bear its own costs in respect of any expert determination; and
 - (ii) pay one-half of the expert's costs.
- (e) Unless otherwise agreed between the parties, the expert must notify the parties of his or her decision upon an expert determination conducted under this clause 15 within the period set out in the agreement between the parties and the expert.

15.9 Agreement with Expert

The expert will not be liable to the parties arising out of, or in any way in connection with, the expert determination process, except in the case of fraud.

The parties must enter into an agreement with the appointed expert on the terms set out in Schedule 26 or such other terms as the parties and the expert may agree.

15.10 Determination of Expert

The determination of the expert:

- (a) must be given to the parties in writing;
- (b) will be:
 - substituted for the relevant direction of the Principal's Representative;
 and
 - (ii) final and binding,

unless a party gives a notice of appeal to the other party within 21 days of receipt of the determination; and

(c) is to be given effect to by the parties unless and until it is reversed, overturned or otherwise changed by way of litigation.

Where a party gives a notice of appeal under this clause 15.10, either party may commence litigation in respect of the Dispute.

15.11 Litigation

If a Dispute does not relate to a Schedule 1 Dispute and is referred for resolution under clause, then whether or not the persons described in Schedule 1 have complied with clause 15.5(a)(iii) and (iv), if the Dispute is not resolved, or no agreement on a procedure to resolve the Dispute has been reached, within 14 days after the Referral Date, or within such longer period of time as these persons may agree in writing, either party may commence litigation in respect of the Dispute.

15.12 Survive Termination

This clause 15 will survive the termination of this Contract.



15.13 Continuation of Work

Despite the existence of a Dispute between the parties this Contract, the Contractor must:

- (a) continue to carry out the Contractor's Activities; and
- (b) otherwise comply with its obligations under this Contract.

15.14 Urgent Relief

Nothing in this clause 15 will prejudice the right of a party to seek urgent injunctive or declaratory relief from a court.

16. General

16.1 Notices

- (a) Any notices contemplated by this Contract must be in writing and delivered or posted to the relevant address or sent to the facsimile number shown in Schedule 1 (or to any new address or facsimile number that a party notifies to the others).
- (b) A notice sent by post will be taken to have been received:
 - in the case of international post, 7 Business Days after the date of posting; and
 - (ii) in the case of posting within Australia, 2 Business Days after the date of posting.
- (c) A notice sent by facsimile will be taken to have been received on the next day after the day shown on the transmission record showing the number of the person to whom it is addressed in accordance with paragraph (a), which is a Business Day.

16.2 Governing Law

This Contract is governed by and will be construed according to the Laws of New South Wales.

16.3 No Waiver

- (a) Failure to exercise or enforce or a delay in exercising or enforcing or the partial exercise or enforcement of any right, power or remedy provided by Law or under this Contract by the Principal will not in any way preclude, or operate as a waiver of, any exercise or enforcement, or further exercise or enforcement of that or any other right, power or remedy provided by Law or under this Contract.
- (b) Any waiver or consent given by the Principal under this Contract will only be effective and binding on the Principal if it is given or confirmed in writing by the Principal.
- (c) No waiver by the Principal of:
 - a breach of any term of this Contract; or

(ii) any other failure by the Contractor to comply with a requirement of this Contract, including any requirement to give any notice which it is required to give in order to preserve its entitlement to make any Claim against the Principal,

will operate as a waiver of another breach of that term or failure to comply with that requirement or of a breach of any other term of this Contract or failure to comply with any other requirement of this Contract.

16.4 Assignment

The Contractor cannot assign, transfer or novate any of its rights or liabilities under this Contract without the prior written consent of the Principal and except on such terms and conditions as are determined in writing by the Principal.

16.5 Entire Agreement

This Contract constitutes the entire agreement and understanding between the parties and will take effect according to its tenor despite, and supersede:

- any prior agreement (whether in writing or not), negotiations and discussions between the parties in relation to the subject matter of this Contract; and
- (b) any correspondence or other documents relating to the subject matter of this Contract that may have passed between the parties prior to the date of this Contract and that are not expressly included in this Contract.

16.6 Joint and Several Liability

The rights and obligations of the Principal and the Contractor, if more than one person, under this Contract, are joint and several. Each person constituting the Contractor acknowledges and agrees that it will be causally responsible for the acts and omissions (including breaches of this Contract) of the other as if those acts or omissions were its own and the Principal may proceed against any or all of them.

16.7 Severability

If at any time any provision of this Contract is or becomes illegal, invalid or unenforceable in any respect under the Law of any jurisdiction, that will not affect or impair:

- the legality, validity or enforceability in that jurisdiction of any other provision of this Contract; or
- (b) the legality, validity or enforceability under the Law of any other jurisdiction of that or any other provision of this Contract.

16.8 Indemnities to Survive

Each Indemnity in this Contract is a continuing obligation, separate and independent from the other obligations of the parties, and survives termination, completion or expiration of this Contract.

Nothing in this clause 16.8 prevents any other provision of this Contract, as a matter of interpretation also surviving the termination of this Contract.



It is not necessary for a party to incur expense or make any payment before enforcing a right of indemnity conferred by this Contract.

16.9 Stamp Duty and Other Fees

The Contractor must pay all stamp duties and other fees payable in respect of the execution of this Contract and the performance of its obligations in respect of this Contract.

16.10 Taxes

Without limiting clause 2.3 but subject to clause 18, the Contractor must pay all Taxes that may be payable in respect of the Contractor's Activities, including any customs duty or tariff, and primage applicable to imported materials, plant and equipment required for the Contractor's Activities.

16.11 Confidentiality

- (a) Subject to clause 16.11(b), the Contractor must:
 - keep confidential this Contract and any information relating to the Contractor's Activities and any discussions concerning this Contract;
 - (ii) not use the information referred to in sub paragraph (a)(i) except as necessary for the performance of the Contractor's Activities; and
 - ensure that each of its officers, employees and Subcontractors complies with the terms of sub-paragraphs (a)(i) and (a)(ii).
- (b) The Contractor is not obliged to keep confidential any information:
 - (i) which is in the public domain through no default of the Contractor; or
 - (ii) the disclosure of which is:
 - A. required by Law:
 - B. consented to in writing by the Principal; or
 - given to a court in the course of proceedings to which the Contractor is a party.

(c) The Contractor must:

- execute and submit to the Principal within 14 days of this Contract a Confidentiality Undertaking in the form in Schedule 3;
- ensure that all employees of the Contractor that have access to the information described in the Confidentiality Undertaking are aware of their obligations under the terms of the Confidentiality Undertaking; and
- (iii) ensure that each Subcontractor, including suppliers and consultants, to the Contractor execute and submit a Confidentiality Undertaking to the Principal.



- (d) The Contractor acknowledges that the Principal may disclose this Contract (and information concerning the terms of this Contract) under or in accordance with any one or more of the following:
 - (i) the Government Information (Public Access) Act 2009 (NSW);
 - to satisfy the disclosure requirements of the New South Wales Auditor General or to satisfy the requirements of Parliamentary accountability;
 - (iii) any other Law.
- (e) The Contractor must provide to the Principal any other information which the Principal reasonably requires to comply with its obligations under the items referred to in clause 16.11(d).

16.12 Right of Set-Off

The Principal may at any time withhold, set-off or deduct from moneys otherwise due to the Contractor:

- any debt or other moneys due from the Contractor to the Principal (including any debt due from the Contractor to the Principal pursuant to section 26C of the SOP Act);
- any amount that is less than or equal to the amount claimed to be owed under a
 payment withholding request served on the Principal pursuant to Division 2A of
 the SOP Act; or
- any claim to money which the Principal may have against the Contractor whether for damages (including liquidated damages) or otherwise,

whether under this Contract or otherwise at Law.

If those moneys are insufficient, the Principal can have recourse to the security held under clause 2.7.

16.13 Entire Contract

Despite any progress payments that may be made to the Contractor under clause 11.4, this Contract is an entire contract.

16.14 Principal May Act

- (a) The Principal may, either itself or by a third party, perform an obligation under this Contract that the Contractor was obliged to perform but which it failed to perform. The costs, losses, expenses and damages suffered or incurred by the Principal in so performing such an obligation will be a debt due from the Contractor to the Principal.
- (b) Where the Principal or the Principal's Representative is entitled under this Contract to exercise any right or power to:
 - direct or instruct the Contractor to; or
 - (ii) itself step in to.



take any action or omit to take any action, it is not obliged to exercise that right or power, and may do so in their absolute discretion.

Where the Principal or the Principal's Representative does exercise any such right or power, the Contractor remains responsible for, controls and assumes the risk of all environmental, health and safety issues relating to the Works.

16.15 Process Agent

If the Contractor is a foreign company (as defined in the Corporations Act 2001 (Cth)), the Contractor must:

- (a) appoint a local process agent acceptable to the Principal as its agent to accept service of process under or in any way in connection with this Contract. The appointment must be in a form acceptable to the Principal and may not be revoked without the Principal's consent; and
- (b) obtain the process agent's consent to the appointment.

16.16 Indemnity

The Contractor must indemnify the Principal against:

- (a) any liability to or claim by any other person; and
- (b) all costs, expenses, losses, damages, fines and penalties suffered or incurred by the Principal,

arising out of, or in any way in connection with:

- (c) the Contractor's breach of a term of this Contract; and
- (d) any Civil and Building Defect or the consequence of any Civil and Building Defect.

provided that the Contractor's liability to indemnify the Principal will be reduced proportionally to the extent that an act or omission of the Principal, an Other Contractor or an agent of the Principal may have contributed to the liability claim, costs, losses, damages, fines or penalties.

16.17 Variations

This Contract may only be varied by a document signed by or on behalf of both the Principal and the Contractor.

16.18 Provisions Limiting or Excluding Liability

Any provision of this Contract which seeks to limit or exclude a liability of the Principal or the Contractor is to be construed as doing so only to the extent permitted by Law.

16.19 Limit of Contractor's Liability

Subject to clause 16.21, the liability of the Contractor to the Principal, whether arising under or in connection with this Contract or the performance or non-performance thereof or anything incidental thereto, and whether by way of indemnity, by statute (to the extent



that it is possible to exclude such liability), in tort (for negligence or otherwise) or on any basis in Law or equity, is limited to \$

16.20 Economic or Consequential Loss

Subject to clause 16.21, the Contractor will have no liability whatsoever to the Principal for loss of use, production, profil, revenue, business, data, contract or anticipated saving or for any financing costs or increase in operating costs.

16.21 Qualification on Limitation of Liability

Clauses 16.19 and 16.20 do not apply to limit or restrict in any way:

- any liability to the extent to which the Contractor is (or will be) entitled to be (a) indemnified pursuant to an insurance policy in respect of that liability;
- (b) any liability for which, but for a failure by the Contractor to comply with its obligations under this Contract or under an insurance policy, the Contractor would have received payment or been indemnified under an insurance policy effected in accordance with this Contract;
- (c) not used:
- (d) the Contractor's liability to indemnify the Principal under clauses 2.11(c), 3.4(d), 3.6(d), 3.9(d), 3.13, 5.7(c)(ii), 5.9(a)(ii) or 13.2;
- the Contractor's liability for costs, losses and damage caused by the malicious (e) or fraudulent acts of employees of the Contractor or its Subcontractors or its agents;
- liability which is otherwise limited by another provision of this Contract; (f)
- the Contractor's liability to indemnify a Rail Transport Agency under the deed (g) poll executed in the form of Schedule 16;
- (h) the Contractor's liability where it abandons the performance of its obligations under this Contract; or
- (i) liability out of which by Law the Contractor cannot contract.

16.22 Proportionate Liability

To the extent permitted by law, Part 4 of the Civil Liability Act 2002 (NSW) (and (a) any equivalent statutory provision in any other state or territory) is excluded in relation to all and any rights, obligations or liabilities of either party under or in any way in connection with this Contract whether such rights, obligations or liabilities are sought to be enforced in contract, tort or otherwise.

Without limiting the above, the rights, obligations and liabilities of the Principal and the Contractor under this Contract with respect to proportionate liability are as specified in this Contract and not otherwise, whether such rights, obligations or liabilities are sought to be enforced by a claim in contract, in tort or otherwise.

(b) To the extent permitted by Law:



- 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
- (ii) 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).

(c) The Contractor must:

- (i) in each subcontract into which it enters for the carrying out of the work under this Contract or for the supply of materials or services, include a term that (to the extent permitted by law) excludes the application of Part 4 of the Civil Liability Act 2002 (NSW) in relation to all and any rights, obligations or liabilities of either party under or in any way in connection with each Subcontract whether such rights, obligations or liabilities are sought to be enforced by a claim in contract, tort or otherwise; and
- (ii) require each Subcontractor or supplier of materials or services to include, in any further contract that it enters into with a third party for the carrying out of the work under this Contract, a term that (to the extent permitted by law) excludes the application of Part 4 of the Civil Liability Act 2002 (NSW) in relation to all and any rights, obligations or liabilities of either party under or in any way in connection with each further agreement whether such rights, obligations or liabilities are sought to be enforced by a claim in contract, tort or otherwise.
- (d) The Contractor must ensure that all policies of insurance covering third party liability it is required by this Contract to effect or maintain (including the professional indemnity policy referred to in clause 13.6(e)):
 - cover the Contractor for potential liability to the Principal assumed by reason of the exclusion of Part 4 the Civil Liability Act 2002 (NSW); and
 - (ii) do not exclude any potential liability the Contractor may have to the Principal under or by reason of this Contract.
- (e) The powers conferred and restrictions imposed on a court by Part 4 of the Civil Liability Act 2002 (NSW) are not conferred on an expert appointed in accordance with the provisions of this Contract.

An expert has no power to make a binding or non-binding determination or any award in respect of a claim by applying or considering the provisions of Part 4 of the Civil Liability Act 2002 (NSW) (and any equivalent statutory provisions in any other state or territory) which might, in the absence of this provision, have applied to any dispute referred to the expert.



16.23 Prior Work

The Contractor agrees that the work in connection with the Contractor's Activities carried out by the Contractor (including all work carried out under the JV Contracts) prior to the date of this Contract will be deemed to be governed by the provisions of this Contract and will be deemed to be part of the Contractor's Activities and any payments made to the Contractor by the Principal prior to the date of this Contract in respect of the Contractor's Activities will be treated as part payments of the amount required to be paid by the Principal under this Contract.

16.24 Design Life

- (a) The Contractor waives any and all rights it may have under sections 14 and 16 of the Limitation Act 1969 (NSW) and section 109ZK of the Environmental Planning and Assessment Act 1979 (NSW) in respect of the design lives of the asset elements referred to in clause 4.1 of the Works Brief where those design lives are for periods longer than those provided for in those Acts.
- (b) If the waiver referred to in clause 16.24(a) is held to be without effect or otherwise unenforceable, or if it is severed from this Contract, the Contractor shall indemnify and keep the Principal indemnified at all times from and against all costs that the Principal may suffer or incur out of the Principal's loss of the benefit of the waiver.
- (c) The indemnity in clause 16.24(b) is to continue and remain in full force and effect until the expiration of the last of the design lives referred to in clause 4.1 of the Works Brief.
- (d) The parties agree that any action by the Principal on the indemnity in clause 16.24(b) is not a "building action" for the purposes of section 109ZI of the Environmental Planning and Assessment Act 1979 (NSW).

16.25 Counterparts

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

16.26 Personal Property Securities Act

- (a) By signing this Contract, the Contractor acknowledges and agrees that if this Contract and the transactions contemplated by it, operate as, or give rise to, a security interest for the purposes of the PPS Law (Security Interest), the Contractor shall do anything (including amending this Contract or any other document, executing any new terms and conditions or any other document, obtaining consents, getting documents completed and signed and supplying information) that the Principal considers necessary under or as a result of the PPS Law for the purposes of:
 - ensuring that the Security Interest is enforceable, perfected or otherwise effective and has the highest priority possible under PPS Law;



- (ii) enabling the Principal to apply for any registration, or give any notification, in connection with the Security Interest, including the registration of a financing statement or financing change statement; or
- (iii) enabling the Principal to exercise rights in connection with the Security Interest and this Contract.
- (b) If Chapter 4 of the PPS Act applies to the enforcement of the Security Interest, the Confractor agrees that sections 95, 120, 121(4), 125, 130, 132(3)(d), 132(4), 135, 142 and 143 of the PPS Act will not apply to the enforcement of the Security Interest.
- (c) The Contractor:
 - (i) acknowledges that the Security Interests created under or pursuant to this Contract relate to collateral and all proceeds in respect of that collateral (until the Principal is paid in full for the collateral);
 - (ii)acknowledges that to the maximum extent permitted by law, it waives any right to receive a verification statement under the PPS Law in respect of the Security Interest; and
 - (iii) undertakes it will not register a financing change statement without the prior written consent of the Principal.
- The parties agree that neither of them will disclose information of the kind (d) referred to in section 275(1) of the PPS Act and that this clause constitutes a confidentiality agreement within the meaning of the PPS Law.
- The Contractor agrees to waive any right it may have, or but for this clause may (e) have had, under section 275(7)(c) of the PPS Act to authorise the disclosure of the above information.

16.27 Vienna Convention

The United Nations Convention on Contracts for the International Sale of Goods does not apply to this Contract.

16.28 Australian Government Requirements

(a) This clause 16.28 applies if so stated in Schedule 1.

The Building Code is applicable to the Works.

The Contractor must comply, and ensure that its Subcontractors comply, in the performance of this Contract, with the requirements of the Building Code.

Copies of the Building Code are available at

www.deewr.gov.au/BuildingCode.

(b) Compliance with the Building Code will not relieve the Contractor from its responsibility to perform this Contract, or from liability for any Defect in the Works arising from compliance with the Building Code.



- (c) Where a change in this 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.
- (d) The Contractor must maintain adequate records of the compliance with the Building Code by:
 - (i) the Contractor;
 - (ii) its Subcontractors; and
 - (iii) the Contractor's related entities (as defined in section 3(2) of the Building Code).
- (e) 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 and Workplace Relations, the Code Monitoring Group or the Commonwealth, without prejudice to any rights that would otherwise accrue, those parties will 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.
- (f) 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 that have a demonstrated commitment to:
 - (i) adding and/or retaining trainees and apprentices;
 - (ii) increasing the participation of women in all aspects of the industry; or
 - (iii) promoting employment and training opportunities for Indigenous Australians in regions where significant indigenous populations exist.
- (g) The Contractor must not appoint a Subcontractor in relation to the Works where:
 - the appointment would breach a sanction imposed by the Minister for Employment and Workplace Relations; or
 - (ii) the Subcontractor 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 Subcontractor has not fully complied, or is not fully complying with the order.
- (h) The Contractor must provide, and must ensure its Subcontractors and related entities (as defined in section 3(2) of the Building Code) 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:
 - (i) Inspect any work, material, machinery, appliance, article or facility;



- inspect and copy any record relevant to the Works and the Contractor's Activities; and
- (iii) interview any person,

as is necessary to demonstrate compliance with the Building Code.

- (i) The Contractor agrees that it and its related entities (as defined in section 3(2) of the Building Code) 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.
- (j) The Contractor must ensure that all Subcontracts impose obligations on Subcontractors equivalent to the requirements of this clause 16.28.

17. Notification of Claims

17.1 Notice of Variation

If a direction by the Principal's Representative, other than a "Variation Order" under clause 6.2, constitutes or involves a Variation, the Contractor must, if it wishes to make a Claim against the Principal arising out of, or in any way in connection with, the direction:

- (a) within the time specified in Schedule 1 of receiving the direction and before commencing work on the subject matter of the direction, give notice to the Principal's Representative, that it considers the direction constitutes or involves a Variation;
- (b) within the time specified in Schedule 1 of giving the notice under paragraph (a), submit a written Claim to the Principal's Representative, which includes the details required by clause 17.3(b); and
- (c) continue to carry out the Contractor's Activities in accordance with this Contract and all directions of the Principal's Representative, including any direction in respect of which notice has been given under this clause 17.1.

17.2 Notice of Other Claims

If the Contractor wishes to make any Claim (other than an Excluded Claim) against the Principal in respect of any direction of the Principal's Representative or any other event, circumstance, act, omission, fact, matter or thing (including a breach of this Contract by the Principal) under, arising out of, or in any way in connection with, this Contract, the Contractor's Activities or the Works, including anything in respect of which:

- (a) It is otherwise given an express entitlement under this Contract; or
- (b) this Contract expressly provides that:
 - specified costs are to be added to the Contract Sum; or
 - (ii) the Contract Sum will be otherwise increased or adjusted,

as determined by the Principal's Representative,



the Contractor must give the Principal's Representative the notice required by clause 17.3(a) and a Claim in accordance with clause 17.3(c).

17.3 **Prescribed Notices**

- (a) Any written notice referred to in clauses 17.1(a) and 17.2 must:
 - be provided not later than the time specified in Schedule 1 after the first occurrence of the direction, event, circumstance, act, omission, fact, matter or thing which gave rise to the alleged entitlement, and
 - (11) expressly specify:
 - A. that the Contractor proposes to make a Claim; and
 - B. the direction event, circumstance, act, omission, fact, matter, or thing, which gave rise to the alleged entitlement in the Claim.
- (b) Any written Claim referred to in clause 17.1(b) must include:
 - (i) detailed particulars, including the date or dates, of the direction. including any related event, circumstance, act, omission, fact, matter or thing upon which the Claim is based:
 - (ii) the provisions of this Contract or other legal basis upon which the Claim is based; and
 - details of the amount claimed and how it has been calculated. (III)
- Any written Claim referred to in clause 17.2 must: (c)
 - be provided not later than the time specified in Schedule 1 of giving the (i) written notice under clause 17.3(a); and
 - (ii) include:
 - A. detailed particulars, including the date or dates, of the direction, event, circumstance, act, omission, fact, matter or thing upon which the Claim is based:
 - B. the legal basis for the Claim, whether based on a term of this Contract or otherwise, and if based on a term of this Contract, clearly identifying the specific term:
 - C. the facts relied upon in support of the Claim in sufficient detail to permit verification; and
 - D. details of the amount claimed and how it has been calculated.

17.4 Submission of Claims

Claims submitted by the Contractor under clauses 17.1(b) and 17.2 will be considered in the first instance by the Principal's Representative who may accept or reject the Claim in part or in full.

If within 28 days after first receipt of a Claim the Principal's Representative has not made a decision on the Claim, the Claim will be deemed to have been rejected on that 28th day.

EXECUTION VERSION -

17.5 Continuing Events

If the direction, event, circumstance, act, omission, fact, matter or thing upon which a Claim is based, or their consequences are continuing, the Contractor must continue to give the information required by clause 17.3(b) or 17.3(c) every 28 days after the written Claim under clause 17.1(b) or 17.2 (as the case may be) was submitted or given to the Principal's Representative, until after the direction, event, circumstance, act, omission, fact, matter or thing or the consequences thereof have ceased.

17.6 Bar

If the Contractor fails to comply with clauses 2.3(d), 15.2, 17.1, 17.2, 17.3 or 17.5:

- (a) the Principal will not be liable upon any Claim by the Contractor; and
- the Contractor will be absolutely barred from making any Claim against the Principal,

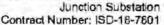
arising out of or in any way in connection with the relevant direction, event, circumstance, act, omission, fact, matter or thing (as the case may be) to which those clauses apply.

17.7 Other Provisions Unaffected

Nothing in clauses 17.1 to 17.6 will limit the operation or effect of any other provision of this Contract that requires the Contractor to give notice to the Principal's Representative in order to preserve an entitlement to make a Claim against the Principal.

18. General Provisions Relating to GST

- (a) The parties acknowledge that unless otherwise expressly stated all amounts of monetary consideration in this Contract are exclusive of GST.
- (b) If GST is or becomes payable on a supply made by a party ("Supplier") under or in connection with this Contract, including the Contractor's Activities or the Works, the party providing consideration for the supply ("Recipient") must pay an additional amount to the Supplier equal to the GST payable by the Supplier (or representative member of a GST group of which the Supplier is a member) in relation to the supply.
- (c) Any amount payable under clause 18(b) will be paid to the Supplier at the same time as the consideration for the supply is paid to the Supplier.
- (d) If any party is required under this Contract to reimburse or pay to the other party an amount (other than any payment on account of the Contract Sum) calculated by reference to a cost, expense, or an amount paid or incurred by that party, the amount of the reimbursement or payment will be reduced by the amount of any input tax credits to which that party (or representative member of a GST group of which that party is a member) is entitled in respect of any acquisition relating to that cost, expense or other amount.
- (e) Notwithstanding any other provision of this Contract, where the Recipient is the Contractor it will not be obliged to pay any amount in respect of GST to the Principal (whether under this clause 18 or otherwise) in respect of a taxable supply made by the Principal unless the Principal issues to the Contractor a tax invoice that complies with the GST Legislation in respect of that taxable supply.





- (f) The parties agree that, unless otherwise agreed in writing, the following will apply to all taxable supplies made by the Contractor to the Principal under or in connection with this Contract:
 - the Principal will issue to the Contractor a recipient created tax invoice ("RCTi") for each taxable supply made by the Contractor to the Principal under this Contract;
 - the Principal will issue to the Contractor an adjustment note for any adjustment event;
 - the Contractor will not issue a tax invoice in respect of any taxable supply it makes to the Principal; and
 - (iv) the Principal may notify the Contractor that it will no longer issue a RCTI for each taxable supply made by the Contractor under this Contract, in which case, from that point in time, the Principal will not be required to issue RCTIs in respect of such supplies and the Contractor will be required to issue tax invoices to the Principal (including under clause 11.3) as a condition precedent to the Principal being obliged to pay any amount in respect of GST to the Contractor in respect any such taxable supply.
- (g) Each party acknowledges and warrants that at the time of entering into this Contract it is registered for GST and will notify the other party if it ceases to be registered for GST or ceases to comply with any of the requirements of any taxation ruling issued by a taxation authority relating to the creation of RCTIs.
- (h) If the GST payable in relation to a supply made by the Supplier under this Contract varies from the additional amount paid by the other party under this clause 18 in respect of that supply, then the Supplier will provide a corresponding refund or credit to or will be entitled to receive the amount of that variation from the other party (as appropriate).
- (i) In clause 11.3 and this clause 18:
 - "GST" or "Goods and Services Tax" means the tax payable on taxable supplies under the GST Legislation;
 - (ii) "GST Legislation" means A New Tax System (Goods and Services Tax) Act 1999 and any related Act imposing such tax or legislation that is acted to validate, recapture or recoup such tax;
 - (iii) terms defined in GST Legislation have the meaning given to them in GST Legislation; and
 - (iv) any part or progressive or periodic component of a supply that is treated as a separate supply for GST purposes (including attributing GST to tax periods) will be treated as a separate supply.

19. TfNSW's Statement of Business Ethics

(a) The Contractor must at all times comply with TfNSW's Statement of Business Ethics, a copy of which is available at www.transport.nsw.gov.au. (b)

Prior to the engagement of any Subcontractor by the Contractor, the Contractor must obtain a written acknowledgement from such Subcontractor that it has received, read, understood and will comply with TfNSW's Statement of Business Ethics.

20. NSW Code of Practice

20.1 NSW Code and NSW Guidelines

In addition to terms defined in this document, terms used in this clause 20 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 Procurement: Building and Construction ("NSW Guidelines") (as published by the NSW Treasury July 2013). The NSW Code and NSW Guidelines are available at www.industrialrelations.nsw.gov.au.

20.2 Primary Obligation

- (a) The Contractor must at all times comply with, and meet any obligations imposed by, the NSW Government's Code of Practice for Procurement ("NSW Code") and NSW Guidelines.
- (b) The Contractor must notify the CCU and the Principal of any possible noncompliance with the NSW Code and NSW Guidelines and of remedial action taken, within 24 hours of becoming aware of the possible non-compliance.
- (c) Where the Contractor engages a Subcontractor, the Contractor must ensure that the contract imposes on the Subcontractor equivalent obligations to those in this clause 20, including that the Subcontractor must at all times comply with, and meet any obligations imposed by, the NSW Code and the NSW Guidelines.
- (d) The Contractor must not appoint or engage another party in relation to the Works where that appointment or engagement would breach a sanction imposed on the other party in relation to the NSW Code or NSW Guidelines.

20.3 Access and information

- (a) The Contractor must maintain adequate records of compliance with the NSW Code and NSW Guidelines by it, its Subcontractors and related entities.
- (b) The Contractor must allow, and take reasonable steps to facilitate, authorised personnel (including personnel of the CCU) to:
 - enter and have access to sites and premises controlled by the Contractor, including but not limited to the Site;
 - (ii) inspect any work, material, machinery, appliance, article or facility;
 - (iii) access information and documents;
 - (iv) inspect and copy any record relevant to the Works;
 - (v) have access to personnel; and
 - (vi) 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 and related entities.
- (c) 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.

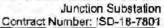
20.4 Sanctions

- (a) 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.
- (b) If the Contractor does not comply with, or falls 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.
- (c) Where a sanction is imposed:
 - it is without prejudice to any rights that would otherwise accrue to the parties; and
 - (ii) the State of NSW (through its agencies, Ministers and the CCU) is entitled to:
 - record and disclose details of non-compliance with the NSW Code or NSW Guidelines and the sanction; and
 - B. 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.

20.5 Compliance

- (a) 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 from the Principal or the State of NSW for such costs.
- (b) 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.
- (c) Where a change in the Contract or the 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:

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/e





- (i) the circumstances of the proposed change;
- (ii) the extent to which compliance with the NSW Code and NSW Guidelines will be, or is likely to be, affected by the change; and
- (111) 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 Project Work Health and Safety Management Plan),

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



Schedule 1 - Contract Particulars

Conditions Precedent to

Completion: (Clause 1.1) Nil in addition to those expressed elsewhere in the Contract.

Contract Documents

(Clause 1.1)

General Conditions of Contract

Schedules 1 to 27

Exhibits A to E and Exhibits G to I

Contractor:

(Clause 1.1)

Abergeldie Contractors Pty Ltd ABN 47 004 533 519

Date for Completion:

(Clause 1.1)

Portion 1

26 April 2019

Portion 2

26 April 2019

Portion 3

28 April 2019

Defects Rectification Period:

(Clause 1.1)

The Defects Rectification Period for each Portion is the period commencing on the Date of Completion of the Portion and expiring 12 months after the Date of Completion of the last

Portion to achieve Completion.

Environmental Representative:

(Clause 1.1)

Adrian WhiteTransport for NSW

Level 5 Tower A Zenith Centre

821 Pacific Highway Chatswood, NSW 2067

Other Excepted Risk:

(Clause 1.1)

A negligent act or omission of the Principal, the Principal's Representative, other agents of the Principal or an Other

Contractor (other than an Interface Contractor).

Interface Contractors:

(Clause 1.1)

Sydney Trains

As detailed in the Works Brief



Portions: (Clause 1.1) Portion 1 – All Works and Contractor's Activities in relation to the Chalmers Street Substation including the Commissioning of all traction supplies other than those parts of the Works and Contractor's Activities described in Portion 2.

Portion 2—The following parts of the Works and Contractor's Activities in relation to the Chalmers Street Substation:

- Commissioning of all remaining AC systems;
- All works associated with the decomissioning of the Prince Alfred Substation;
- completion and submission of the CAD files of the as-built drawings;
- satisfaction of any CCB Gate conditions which remain outstanding as at the Date of Completion of Portion 2;
- demobilisation of the Site;
- a post construction condition survey as set out in section 2.7 of the Contract Specific Requirements;
- final cleaning of the Site as set out section 2.14 of the Contract Specific Requirements; and
- final cleaning of the landscaping work as required by section 2.4.5 of the Works Brief.

Portion 3 – All Works and Contractor's Activities in relation to the Granville Junction Substation including the Commissioning of all traction supplies.

Principal's Representative: (Clause 1.1)

James Griffin

Program Director, Power Supply Upgrade Program

Transport for NSW

Level 5 Tower A Zenith Centre

821 Pacific Highway Chatswood NSW 2067

Reports: (Clause 1.1) Refer to Exhibit F

The Site: (Clause 1.1)

As described in Exhibit E

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023ve



Third Party Agreements: (Clauses 1.1 and 2.12(b)) Power Supply Upgrade – (Draft) Program Safety Interface Agreement

Working days: (Clause 1.2(m)) Monday to Saturday excluding public holidays in Sydney and rostered days off, plus any day included in a Track Possession.

Order of Precedence: (Clause 1.4)

The Contract excluding the Schedules and the Exhibits; then

- (a) the Schedules; then
- (b) Exhibit A TfNSW Standard Requirements; then
- (c) Exhibit B Works Brief (excluding any Preliminary Design); then
- (d) Exhibit H Preliminary Design; then
- (e) Exhibit E Contract Specific Requirements; then
- (f) Exhibit G the List of Warranties Required; then
- (g) Exhibit I Third Party Agreements; then
- (h) Exhibit D Planning Approval; then
- (i) Exhibit C Principal's Insurance Policies.

Are Deed Polls in Schedule 16 and Schedule 24 required (Clause 1.5)

Yes

Names of persons in whose favour the Deed Poll in Schedule 16 and Schedule 24 are required (Clause 1.5)

In relation to Portion 1, Portion 2 and Portion 3:

Schedule 16

Rail Corporation New South Wales (ABN 59 325 778 353)

Sydney Trains (ABN 38 284 779 682)

Schedule 24

Sydney Trains (ABN 38 284 779 682)

In relation to Portion 3 only:

Schedule 24

NSW Trains (ABN 50 325 560 455)

Contract Number: ISD-18-7801

Amount for approval of Subcontracts: (Clause 2.2(b)) Subcontracts with an initial price of \$250,000 or greater

Subcontractors required to effect professional indemnity insurance:

All subcontractors carrying out design

(Clause 2.2(c))

Minimum amount of professional indemnity insurance required:

(Clause 2.2(c))

All Subcontractors carrying out civil, structural, HV, LV, geotechnical, earthing, communication and mechanical

design

All other Subcontractors carrying out design \$20,000,000 per claim and in the aggregate in any one period of insurance

\$10,000,000 per claim and \$20,000,000 in the aggregate in any one period of insurance

Subcontract prices for which security of payment provisions are required:

(Clause 2.2(e)(i))

Subcontracts with an initial price of \$25,000 or greater.

Subcontractors required to execute deed in form of Schedule 14:

(Clause 2.2(e)(iv)A)

(Clause 2.2(e)(iv)B)

Subcontracts with an initial price of \$50,000 or greater.

The following categories:

 all Subcontracts and consultant engagements which include any element of design.

Warranties required from Subcontractors:

(Clause 2.2(f))

Refer to Exhibit G

Subcontractors to be novated to Nil Contractor:

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023A9



(Clause 2.2(g))

Parent Company Guarantor:

(Clause 2.7(f))

None stated as no Parent Company Guarantee is required.

The party responsible for payment of the Long Service Leave Levy Is (Clause 2.8)

Contractor

Number and form of copies of the work method statements:

(Clause 2.9(a)(ii)G)

One plus one copy in electronic format

The principal contractor under the WHS legislation is:

(Clause 2.11)

Person

Contractor

Period after notice for inspection 2 days of Contemporaneous Work: (Clause 2.14(a))

Site access dates: (Clause 3.1(b)(i))

On Contract execution date subject to meeting the requirements for access under this Contract

Site access preconditions: (Clause 3.1(c)(ii)E)

Nil in addition to those expressed elsewhere in this Contract

Condition Surveys exist for the

following properties:

(Clause 3.12)

Nil

Consultants to be novated:

(Clause 5.2(b))

Nil

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx @ TfNSW 2014 Doc ID 607060023A9

Contract Number: ISD 18-7801

Number of copies of Design Documentation and survey information: (Clause 5.5) 4 (3 bound and 1 unbound) plus one copy in electronic format

Provisional Sum Work: (Clauses 1.1)

None stated.

Percentages to be applied to Provisional Sum Work;

None stated.

(Clause 1.1)

Parts of the Site within which the Works must be located: (Clauses 3.11 and 7.6(b)(i)) Refer to Exhibit E and Exhibit H

New Defects Rectification Period:

12 months

(Clause 8.6)

Contractor's Personnel (Clauses 9.4(a) and 9.4(b)(i)) Contractor's Representative -

Project Manager -

Is the Contractor required to submit a Project Training Management Plan: (Clause 9.14)

Yes

Insurance of the Works

(Clause 13.4)

(a) Alternative applying

Alternative 1

Public liability insurance (Clause 13.5)

EXECUTION VERSION Design and Construction of
Chairners Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2C14
Doc ID 607060023/9



(a) Alternative applying Alternative 1

Amount of Contractor's insurance:

(Clauses 13.6(a) and 13.6(f)(iii))

- Workers compensation insurance or similar insurance as required under clause 13.6(f) for an amount as required by Law
- Construction Plant Insurance Current market value of the Construction Plant
- Professional Indemnity Insurance \$20,000,000 per claim and in the aggregate in any one period of insurance
- Motor Vehicle Insurance \$20,000,000 third party property damage
- Asbestos Liability Insurance \$20,000,000 for any one claim and in the aggregate
- Marine transit insurance Replacement value
- Insurance required by Law or Change in Law As required by Law
- Insurance of materials fabricated overseas Replacement value

Period for Professional Indemnity Insurance: (Clause 13.8(d))

7 years

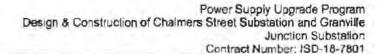
Person in Insolvency Event:

(Clause 14.4(a)(iii))

Abergeldie Consolidated Pty Ltd ABN: 21 143 512 350 5 George Young Street Regents Park NSW 2143

Clauses in respect of which disputes concerning directions of a Principal's Representative must be submitted within 14 days of date of direction: (Clauses 9.1(b) and 15.2)

2.3(d)(ii), 3.1(e)(ii), 3.8 (final paragraph), 6.7, 7.3, 8.6, 9.14(c)(ii), 10.10, 10.11, 10.14(b), 11.3, 12.3(b), 12.3(d), 14.5 (first paragraph), 14.9(a) and 14.12(b).





The persons for Executive

Negotiation: (Clause 15.5) Principal: Murray Mcardle - Director Commercial

Contractor:

Director

Addresses:

(Clause 16.1(a))

Principal: Level 5, Tower A, Zenith Centre, 821 Pacific

Highway, Chatswood NSW 2067

Principal's Representative: Level 5, Tower A, Zenith Centre,

821 Pacific Highway, Chatswood NSW 2067

Contractor: Level 39, 50 Bridge Street, Sydney NSW 2000

Applicability of Building Code:

(Clause 16.28(a))

Clause 16.28 does apply.

Time for giving notices:

(Clauses 17.1(a) and 17.3(a))

14 days

Time for written Claims:

(Clauses 17.1(b), 17.3(b) and

17.3(c))

28 days

Contract Number: ISD-18-7801

Schedule 2 -

(Clause 1.1)

1. Un-site overneads

On-site overheads are those overhead costs and expenses which are specific to the Siteincluding:

- on-site personnel with project management, site supervision, administration and support (a) functions:
- (b) site accommodation including amenities and parking facilities;
- (c) phones lease and installation, rental and charges including mobiles;
- not used: (d)
- office supplies and consumables; (e)
- site services; (1)
- furniture and office fittings; (g)
- (h) site-based computers;
- printing, photocopying and stationery; (i)
- reproduction of drawings; (1)
- project specific insurances only (and not corporate held insurances); (k)
- (1) project specific software, data processing and network systems;
- not used: (m)
- cleaning; (n)
- (0) postage;
- (p) site communications;
- first aid and personnel protective equipment for the personnel referred to in paragraph (a); (q)

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx



(r) small tools;

 (s) waste disposal associated with site accommodation, including amenities and parking facilities (excluding waste disposal associated with construction activities); and



Power Supply Upgrade Program Design & Construction of Chalmers Street Substation and Granville Junction Substation

Contract Number: ISD-18-7801

Without	limiting the fixed nature of the
the	is provided below:

or the matters set out above, to assist the parties in the administration of this Contract, a high level breakdown of

Portion 1 and Portion 2:

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023/v9

2317785 "0

Power Supply Upgrade Program Design & Construction of Chalmers Street Substation and Granville Junction Substation

Contract Number: ISD-18-7801

	Gente	Role	EnU	ON	Rate	Total		Comments	
			D			5	La Superior		
1	Project Management Team								
1.1		Sen at Project Manager (Contractors Rep.)	hrs						
7.2		Safety)(schaper	pta						
1.3		Senior Project Engineer (Elatrical)	hra						
1.4		aupeninger den/	hrs	l.					
1.5		She Foreits 1 Stylenis St (E edition (Civil)	lus						
1.5		Commissioning Engineer	hrs						
17		Planner	hrs						
1.8		Environmental/Community Warnager	1748						
. 9		Project Engineer (Civil/ Dusiny Engineer)	hrs						
1.5		Corfrag Admir	hira						
	(Newly Rae to: Project Har agen	mem Team							
	le no guarantee on the ability to t	ensure the names submitted are mose who				1			
	eventually fill the role.		-		-	-			_
2	oventually fill the role. She Facilities								
2.1		Lunch Room	day		-114				
21	She Facilities	Lunch Room Tolet	day						
21 22 23	She Facilities	Total Fall Tank							
21 22 23 24	She Facilities	Tolet	day			<u> </u>			110
21 22 23	She Facilities	Total Fall Tank	da/ ∂≥;						
21 22 23 24 26	She Facilities	Tolet Flat Tank Steps	day day day						
21 22 23 24 26 26 27	She Facilities	Tobel Fig*Tank Steps Emgre Fig** ank	day day day week			<u> </u>			
21 22 23 24 26 26 27 28	She Facilities Sills Amendos	Tobel Fig*Tank Steps Emgre Fig** ank	day day day day						
21 22 23 24 25 26 27 28	Site Facilities Site Amenidos Communications Printing Colorosavi	Tobel Fig*Tank Steps Emgre Fig** ank	day day day day cay						
21 22 23 24 26 27 28 22 28 22	She Facilities Site Amendos Cermunications Printer ColloidSan/ Paper	Tobel Fig*Tank Steps Emgre Fig** ank	day day weak day day day cay						
21 22 23 24 25 26 27 28 27 28 21	She Facilities Sile Amendios Communications Printer Collections Papel Printer is	Tobel Fig*Tank Steps Emgre Fig** ank	day day we sk day day day cay day						***
21 22 23 24 25 26 27 28 29 21 21	She Facilities She Amendos Communications Prints Color/Sse// Papar Prints to Staffonary	Tobel Fig*Tank Steps Emgre Fig** ank	day day day day day day day day day day						- 0
21 22 23 24 25 26 27 28 27 28 27 28 27 21 21 21 21 21 21	She Facilities Sile Amendos Communications Printer Collections Paper Printer Stationary Water	Tobel Fig*Tank Steps Emgre Fig** ank	day day day day day day day day day day						
21 22 23 24 2.5 2.6 2.7 2.8 2.7 2.8 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1	She Facilities Site Amendos Communications Printer Colonosavi Paper Printer to Stationary Water Coloning	Tobel Fig*Tank Steps Emgre Fig** ank	day day day day day day day day day day						
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.1 2.11 2.12 2.12 2.13 2.14 2.15	She Facilities Site Amendos Ceremonications Printer Colorofication Paper Printer to Stationary Water Cleaning Cleaning cleaning	Tobel Fig*Tank Steps Emgre Fig** ank	day						
2.1 2.2 2.3 2.4 2.6 2.6 2.7 2.9 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1	She Facilities Sile Amenities Sile Amenities Cemmunications Prints Celent/Sase/ Paper Prints to Stationary Water Cleaning Cleaning materials etc Was office expense	Tobel Fig*Tank Steps Emgre Fig** ank	day						
2.1 2.2 2.3 2.4 2.5 2.6 2.7 2.8 2.1 2.1 2.12 2.12 2.13 2.14 2.15 2.15 2.15 2.15 2.15 2.15 2.15 2.15	She Facilities Site Amendos Cermunications Frinter ColloidSay/ Paper Priner ru Staffenary Water Cleaning Cleaning materials etc Miso office expense Pegasus	Tobel Fig*Tank Steps Emgre Fig** ank	day						
2.1 2.2 2.3 2.4 2.6 2.6 2.7 2.9 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1 2.1	She Facilities Sile Amenities Sile Amenities Cemmunications Prints Celent/Sase/ Paper Prints to Stationary Water Cleaning Cleaning materials etc Was office expense	Tobel Fig*Tank Steps Emgre Fig** ank	day						

Portion 3:

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023A9

2317765_10



Power Supply Upgrade Program Design & Construction of Chalmers Street Substation and Granville Junction Substation

Contract Number: ISD-18-7801

tem	Marie	Role	Unit	Dig	Rate	Total	Comments
			1		Mr.	5 .	
1	Project Menagement Taca-						
1.1		Betrier Project Correger (Commactors Rep)	hre .				
1.2		Barery Manager	hrs				
13		Barriot Project Engineer (Electrica)	his				
1,4		Superinter deni	tirs				
15		Bite Foremani Supervisios (Eleginical Killyll)	Firs				
15		Commissioning Engineer	fits				
17		237781	tres				
1.8		Engirenmental/Controlling Vallager	JAR.				
1.9		Project Enginesy (C.Wif Costic) Enginesy)	102				
11	A TANKS OF THE PARTY OF THE PAR	Contract 4 dry in	Ins				
	Weekly Rate for Project Manage	ment Team					
	agreement with RCR to title ele	e industrie of RCRI personne. Voy have on filtr cost of the raise described but note that thy to ensure the harnes submitted are those					
ž	She facilities						
21	Sie emerites	Цога Явая	day			- term	
22	Diff. Box 20 men.	70/61	587				CONTRACTOR OF THE PARTY OF THE
22		Mat Tisrik	GBr				
20		\$1606	Bay				
2.1	10	Emph FlatTank	day				
2.0		Sentainers	day				
27	Communications		day				
28	Profes	-	day				
29	ColourSaw	-	d2/				
21	Page		de				
211	Driefer (1)	- T	1837				
112	Stanorom		day				
2 12	Wa's!		d2+				
14	Cleaning		day				
2 15	Cleaming materials aid	0.00	day				
2.16	false office anderse		Wash.				
217	Pegge.a		Watk				
215	Premits your Calletation		while				
	Materia Rate for Bile Facilities						
	The state of the s						

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/v9



Contract Number: ISD-18-7801

Schedule 3 - Form of Confidentiality Undertaking

(Principal) in respect of work performed by the Principal.

(Clauses 2.2(e)(iii) and 16.11(c)(i))

To:		1	
We			the
	ed Consultant/Sunation received/ge	pplier/Contractor/Subcontractor body. nerated from the	, undertake to treat as confidential al

The Consultant/Supplier/Contractor/Subcontractor hereby undertakes:

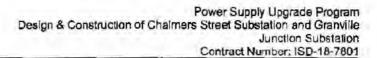
- (a) To disclose information to its employees only on a need-to-know basis;
- (b) Not to disclose information to any other person without first obtaining the written consent of the Principal;
- (c) To ensure that its employees to whom information is disclosed will comply with (a) and (b) above.

This undertaking will not apply to information about the Principal which is in the public domain (except where the availability of the information in the public domain is due to any unauthorised disclosure by the Consultant/Supplier/Contractor/Subcontractor, its employees or agents) or which was already known to the Consultant/Supplier/Contractor/Subcontractor.

Any breach of this undertaking by the Consultant/Supplier/Contractor/Subcontractor's employee or agent will constitute a breach of this undertaking by the Consultant/Supplier/Contractor/Subcontractor and at the direction of the Principal the Consultant/Supplier/Contractor/Subcontractor must institute proceedings or do whatever the Principal regards as reasonable to prevent or contain the breach.

The Consultant/Supplier/Contractor/Subcontractor undertakes that on request from the Principal it will forthwith return to the Principal all originals and copies of the confidential information, however embodied, supplied by the Principal and destroy all documents containing or prepared using any confidential information however embodied.

The Consultant/Supplier/Contractor/Subcontractor also undertakes to declare to the Principal any conflict of interests that exists or arises during the course of its engagement which may impinge on the objectivity or probity of the work performed. Such declarations are to be made as soon as the conflict of interests issues arises.





Dated:		
SIGNED	for and on behalf of:	
	npany Name)	
Ву:	(Print Name)	(Signature)
in the pres		
4,	(Print Name)	(Signature)

This undertaking will remain in force until each part of the confidential information is released by the Principal into the public domain.



Centract Number: |SD-18-7801

Schedule 4 - Action in Complying with Planning Approval and Third Party Agreements

(Clause 2.3(b))

Part A Planning Approval

The Contractor must fulfil all the conditions and requirements of the Planning Approval, except to the extent that the following tables allocate responsibilities to the Principal. Nothing specified in this table as being a responsibility of the Principal will relieve the Contractor from complying with any obligation set out elsewhere in the Contract. The Contractor may apply to have any part of any of the Approvals listed below modified. The Contractor acknowledges and agrees that it is solely responsible for any such modification.

Conditions of Approval

Planning Approval Condition Number	Extent of Principal's responsibility for the Planning Approval condition specified
6	The Principal will fulfil the requirements of Condition 6 except that the Contractor must provide any information or documentation relating to the Contractor's Activities that it has in its possession which is required under this Condition to be made publicly available on the website.
7	The Contractor shall set up a 24 hour construction response line number.

Mitigation Measures

Mitigation Measure Number	Extent of Principal's responsibility for the Mitigation Measure specified in Section 5 of the Submissions Report
	Not applicable

Additional Environmental Requirements

In relation to Portion 1 and Portion 2, the Contractor must in addition to fulfilling the requirements of the Planning Approval, carry out the following in relation to the Planning Approval:

Planning Approval Condition Number	Further obligations of Contractor
27	The Excavation Director nominated in the Section 60 approval, or a Heritage Branch approved equivalent, under the Heritage Act 1977 must be engaged by the Contractor who must provide the Excavation Director with sufficient advance notice of excavation activities, access to the Site and other requirements to enable the Excavation Director to fulfil their obligations under the conditions of approval.



Part C Third Party Agreements

The Contrator is responsible for complying with all of the Principal's obligations under the Program Safety Interface Agreement, as may be amended from time to time.



Schedule 5 - Subcontractors - Security of Payment

(Clause 2.2(e)(i))

The following terms must be included in each Subcontract, and the Subcontracts let by those Subcontractors, as referred to in clause 2.2(e) of the General Conditions of this Contract.

Options as to Form of Security

A clause which allows the Subcontractor to lodge an approved unconditional undertaking from a bank or financial institution instead of a cash security or retention moneys as its security for performance of the Subcontract.

A clause which provides that if the Subcontractor does lodge an unconditional undertaking for the required amount, the Contractor must not deduct further retention moneys and any retention moneys or other cash security then held will be promptly released to the Subcontractor.

2. Trust for Cash Security and Retention Moneys

A clause which has the effect that:

- (a) cash securities and retentions under the Subcontract and the cash proceeds of any security converted to cash (other than in exercise of a contractual right of enforcement) is trust money and must be deposited into and held in a trust account with a bank within 24 hours of receipt or conversion;
- (b) the trust money is beneficially owned by the party which provided the security at all times unless the other party becomes entitled to receive them under the Subcontract;
- the security holder must hold proper records and account to the security provider for the trust moneys; and
- (d) any interest earned by the trust account will not be held in trust, and will be owned by the security holder.

3. Payment Provisions

A clause which:

- (a) has the effect of requiring the Contractor to pay the Subcontractor (and Subcontractors their subcontractors) regular progress payments for 100% of the value of work (less only retention moneys, if any, paid into the trust account) for which payment is claimed by the Subcontractor and for which the Contractor has claimed payment from the Principal, no later than:
 - (i) in the case of the Contractor's Subcontractors, 7 days; and
 - (ii) in the case of the Subcontractor's subcontractors, 14 days,

after the last day for payment by the Principal to the Contractor for such work;

Contract Number: ISD-18-7801

- (b) states nothing in the clause referred to in paragraph (a) is to be read so as to prevent the Contractor from paying the Subcontractor an amount in excess of that claimed from the Principal, or before the time stipulated in that clause; and
- (c) states if anything in the clause referred to in paragraph (a) is inconsistent with any other provision in the Subcontract, the provisions of that clause will prevail to the extent of the inconsistency.

A clause that prescribes an interest rate for overdue payments that is not less than the interest rate specified in clause 11.13 of the General Conditions of this Contract.

4. Alternative Dispute Resolution

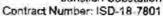
A clause that requires alternative dispute resolution procedures of the type required in this Contract.

A clause making it optional for the Subcontractor to comply with the alternative dispute resolution process if the only remedy it seeks is an order for payment of money which is not disputed to be due and payable under the Subcontract.

5. Documents to be Provided to Subcontractors

A clause that requires the Contractor to provide the Subcontractor with a copy of extracts from this Contract before the Subcontractor starts work under the Subcontract. The extracts to be provided are:

- (a) clause 2.2(e)(i):
- (b) this Schedule 5;
- (c) clause 11; and
- (d) clause 15.





Schedule 6 - Consultant Deed of Covenant

(Clause 2.2(e)(ii))

This deed poll is made the

day of

20

To:

By:

Transport for NSW (ABN 18 804 239 602) of Level 5, Tower A, Zenith Centre, 821 Pacific Highway, CHATSWOOD NSW 2067 (the "Principal")

[] ("Consultant")

Recitals

- A. The Principal has engaged [] ("Contractor") to carry out certain works for the Principal by a contract dated [] ("Contract").
- B. The Contractor has engaged the Consultant by agreement dated ["Subcontract") to carry out the professional services to be performed under the Subcontract ("Professional Services") for the purposes of the performance of the Contractor's obligations under the Contract as they relate those design services.
- C. Under the Contract, the Contractor is required to procure the Consultant to execute this deed poll in favour of the Principal.

Operative

Duty of Care

- (a) The Consultant:
 - (i) warrants to the Principal that;
 - A. in performing the Professional Services, it will exercise the standard of skill, care and diligence that would be expected of a consultant experienced in and expert in the provision of the type of professional services required by the Principal;
 - the Professional Services will be fit for the intended purposes disclosed in or reasonably able to be inferred from the Works Brief, which is an annexure to the Contract; and
 - the Professional Services do not and will not infringe any patent, registered design, trademark or name, copyright or other protected right;
 - (ii) acknowledges that:
 - in performing the Professional Services it will owe a duty of care to the Principal; and
 - B. It is aware that the Principal will be relying upon the skill and judgment of the Consultant in performing the Professional Services and the warranties given by the Consultant in this deed poll; and



- (iii) must act in good faith and in the best interests of the Principal and promptly advise the Principal about any matter in which the Consultant has been instructed by the Contractor to provide the Professional Services in a manner which is, or may result in an outcome which is, not in accordance with the requirements of the Contract, including without limitation:
 - A. where the Contractor's instructions in relation to design are not consistent with the Contract or may result in the Works not being fit for their intended purpose; or
 - В. where the Contractor's instructions require the Consultant to issue a certificate where the conditions for the issue of that certificate under the Contract have not been satisfied.

(b) The Consultant must:

- (i) fully cooperate with each other consultant and contractor engaged by the Principal ("Other Contractor");
- (ii) carefully coordinate and integrate the Professional Services with the services and work carried out by each Other Contractor;
- (iii) carry out the Professional Services so as to minimise any interfering with, disrupting or delaying, the services and work carried out by each Other Contractor;
- (iv) without limitation, provide whatever advice, support and cooperation is reasonable to facilitate the due carrying out of the services and work being provided by each Other Contractor;
- (v) ensure title to and intellectual property (including any patent, registered design, trademark or name, copyright or other protected right) in or in relation to the Professional Services will vest upon its creation for the purposes of the Contract in the Principal;
- (vi) obtain an assignment to the Principal from any third party who owns any intellectual property right in the Professional Services;
- (vii) if any intellectual property rights in or in relation to documents, designs and computer programs created for the purposes of the Contract is not capable of being vested in the Principal because the Consultant itself does not own, and is unable at a reasonable cost to obtain ownership of. those rights, provide to the Principal an irrevocable licence to use that Intellectual Property, by sub-licence from the Consultant or direct licence from a third party; and
- (viii) ensure that the intellectual property created for the purposes of the Contract is not used, adapted or reproduced other than for the purposes of the Contract without the prior written approval of the Principal (which will not be unreasonably withheld, but may be given subject to terms and conditions).
- The Consultant must indemnify the Principal from and against: (c)



- (i) any liability to or claim by any other person; and
- (ii) all claims against, and costs, expenses, losses and damages,

suffered or incurred by the Principal arising out of, or in any way in connection with:

- (iii) the Consultant's breach of a term of, or warranty under, this deed poll; or
- (iv) any actual or alleged infringement of any patent, registered design, trademark or name, copyright or other protected right.

2. Notices

- (a) Any notices contemplated by, or arising out of or in any way in connection with, this deed poll must be in writing and delivered to the relevant address or sent to the facsimile number shown below (or to a party's new address or facsimile number which that party notifies to the others):
 - (i) to the Principal:

c/o Level 5, Tower A

Zenith Centre

821 Pacific Highway

CHATSWOOD NSW 2067

Fax: (02) 9200 0290

- (ii) to the Consultant: [Insert details]
- (b) A notice sent by post will be taken to have been received at the time when, in due course of the post, it would have been delivered at the address to which it is sent.
- (c) A notice sent by facsimile will be taken to have been received on the next day after the day shown on the transmission slip showing the facsimile number of the party to whom it is addressed in accordance with clause 2.1, which is not a Saturday, Sunday or public holiday in New South Wales.
- (d) If the Consultant is a foreign company (as defined in the Corporations Act), the Consultant must within 14 days of the date of this deed poll:
 - appoint a local process agent acceptable to the Principal as its agent to accept service of process under or in any way in connection with this deed poll; and
 - (ii) obtain the process agent's consent to the appointment.

The appointment must be in a form acceptable to the Principal and may not be revoked without the Principal's consent.

Miscellaneous

(a) This deed poll will be construed in accordance with the law of the State of New South Wales and the Consultant irrevocably submits to the jurisdiction of the Courts of that State.



Contract Number: ISD-18-7801

(b) This deed poll may not be revoked or otherwise modified without the prior written consent of the Principal.



(Name of Witness in Full)

Schedule

[INSERT Subcontre		L SER	VICES] as more particularly described in the
Executed	as a deed poll.		
Signed S	ealed and Delivered)	
by the Co	nsultant)	and an area or a continuous account
ľ.) by or in the presence of:)	(Signature)
(Signature	e of Witness)		



Schedule 7 - Approvals to be obtained by the Principal

(Clause 2.3(c)(i))

- The Planning Approval; and
- In relation to Portion 1 and Portion 2, S60 Approval under the Heritage Act 1977 (No. 2015/S60/69).



Schedule 8 - Form of Unconditional Undertaking

(Clause 2.	7)
------------	----

This deed poll ("Undertaking") made the day of 20

In favour of: Transport for NSW (ABN 18 804 239 602) of Level 5, Tower A, Zenith Centre,

821 Pacific Highway, CHATSWOOD NSW 2067 ("Principal")

] ("Institution") Given by:

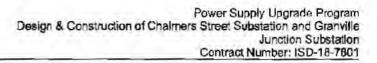
Recitals:

By a contract dated [("Contract") between [("Contractor") and the Principal the Contractor agreed to carry out the Contractor's Activities (as defined in the Contract).

В. Under the provisions of the Contract, the Contractor is required to provide this Undertaking to the Principal.

Operative:

- 1. The Institution unconditionally undertakes and covenants to pay to the Principal on demand without reference to the Contractor and notwithstanding any notice given by the Contractor to the Institution not to do so, any sum or sums which may from time to time be demanded in writing by the Principal to a maximum aggregate sum of # (\$
- 2 The Institution's liability under this Undertaking will be a continuing liability and will continue until payment is made under this Undertaking of the maximum aggregate sum or until the Principal notifies the Institution that this Undertaking is no longer required.
- The liability of the Institution under this Undertaking must not be discharged or impaired 3. by reason of any variation or variations (with or without the knowledge or consent of the Institution) in any of the stipulations or provisions of the Contract or the Contractor's Activities or acts or things to be executed, performed and done under the Contract or by reason of any breach or breaches of the Contract by the Contractor or the Principal.
- 4. The Institution may at any time without being required so to do pay to the Principal the maximum aggregate sum less any amount or amounts it may previously have paid under this Undertaking and thereupon the liability of the Institution hereunder will immediately cease.
- 5. This Undertaking will be governed by and construed in accordance with the laws for the time being of the State of New South Wales.





Executed as a deed poll.

Signed Sealed and Delivered)	
by [] being signed)	
sealed and delivered	by its duly constituted)	(Signature)
Attorney[] under)	
Power of Attorney N	o. In the)	
presence of:)	
(Signature of Witnes	s)		
(Name of Witness in	Full)		



Schedule 9 - Information Documents and Materials

(Clause 3.6)

List of Information Documents and Materials (Included on the attached CD)

In relation to Portion 1 and Portion 2:

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. DWG NO.
1.0	Chalmers Street Substation Concept Design Report		T	1	Folder
1.0.1	Chalmers Streat Substation - Reference Design Report - Revision 3	Report	GHD	23 Sep 2015	PDF
1.1	Appendix A: Comments Register				Folder
1.1.1	Chalmers St Substation - Reference Design Report - Appendix A1 - Comments Register - Version 13		GHD	31 Jul 2015	PDF
1.1.2	Chalmers St Substation - Reference Design Report - Appendix A2 - ESR Shaft Fire Risk Assessment Report - Comments Sheet - Issue 6		GHD	21 Aug 2015	PDF
.1.3	Chalmors St Substation - Tunnel Fire Engineering Report - Comments Register - Version 8		GHD	21 Aug 2015	PDF
1.2	Not Used	-			Folder
1.3	Appendix C: System Requirements Specification (SRS) and Requirements Analysis and Traceability Matrix (RAATM)				Folder
.3.1	Chalmers Street Substation: Combined System Requirements Specification (SRS) & Requirements Analysis and Traceability Matrix (RAATM)	Spreadsheet	GHD	21 Mar 2014	PDF
.3.2	Chalmers Street Substation - System Requirements Specification - Draft	Report	GHD	03 Aug 2015	PDF
.3.3	Chairners Street Substation - Requirements Analysis and Traceability Matrix - DRAFT	Report	GHD		PDF
1.4	Appendix D: Safety Assurance			7"	Folder
.4.1	Chalmers Street Substation Project - Safety Assurance Plan (SAP) - Version 1.2	Report	GHD	23 Sep 2015	PDF
.4.2	Chalmers Street Substation Project - Concept Design Stage - Goal Structuring Notice - Revision 1.0	Visio Flowchart	GHD	01 May 2014	PDF
.4.3	Chalmers Street Substation Project - Concept Design Stage - Safety Assurance Statement (SAS) - Version 1.1	Report	GHD	24 Jul 2015	PDF
.4.4	Chalmers Street Substation Project - Concept Design Stage - Project Specific Risk Register - Version 2.0		GHD	20 Jul 2015	PDF
.4.5	Chalmers Street Substation Project - 33kV Workshop - Risk Register - Revision 5		GHD	12 Jun 2014	PDF

EXECUTION VERSION -Design and Construction of

Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx

© TfNSW 2014

Doc ID 607060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO.
1.4.6	Chalmers Street Substation Project - 1500V Feeder Cables - Project Specific Risk Register - Revision 1		GHD	25 Nov 2014	PDF
1.5	Appendix E: Interface Schedule and Information	-			Folder
1.5.1	Central District CCB Meeting Minutes: CD-1402 - 14 February 2014	Minutes	TRNSW	14 Feb 2014	PDF
1.5.2	Chalmers Street Substation: Design - External Interface Register - Revision 1.1	Register	GHD	10 Feb 2015	PDF
1.5.3	Chalmers Street Substation & PA Super Depot Interface Meeting Minutes - 29 January 2014	Minutes	TfNSW	29 Jan 2014	PDF
1.5.4	Chalmers Street Substation - Security Consultant Advice - Email dated 2 June 2014	Email	GHD	02 Jun 2014	PDF
1.6	Appendix F: Design Input Information			22 941/2011	Folder
1.6.1	Chalmers Street Substation - Reference Design Report - Appendix F1_1 Approved Operating and Sectioning Diagrams	***		3 Drawings	One PDF File
1.6.1.1	Central to Redfern Illawarra Line 0+000 km to AL 0+943 km Traction Supply Upgrade Proposed 1500V Sectioning Diagram	Single Line Schematic	TfNSW	D	EL0518112
1.6.1.2	Erskineville to Bondi Junction Illawarra Line 2.726km (IR) to 7.257km (ES) Traction Supply Upgrade Proposed 1500V Sectioning Diagram	Single Line Schematic	TfNSW	E	EL0282814
1.6.1.3	Chalmers Street Illawarra Line AL 0+352 Substations - Traction Supply Upgrade Proposed 1500V DC Operating Diagram	Single Line Schematic	TfNSW	c	EL0518081
1.6.2	Chalmers Street Site Options Addendum Memorandum	Memorandum	GHD	09 Dec 2014	21/22993/205339
1.6.3	Chalmers Street Substation - TfNSW Pre-Concept Sketches	Sketches	TfNSW		PDF
1.6.4	Chalmers Street Substation - TfNSW Information on Equipment Selection - Email dated 12 November 2013	Email	GHD	12 Nov 2013	PDF
1.6.5	Chalmers Street Substation - TfNSW Scope Directions - CBD Light Rail - Email dated 12 November 2013	Email	GHD	12 Nov 2013	PDF
1.6.6	Chalmers Street Substation - TfNSW Scope Directions - 1500V DC Standard - Letter dated 19 December 2014	Letter	TINSW	19 Dec 2014	PDF
1.6.7	Chalmers Street Substation - TfNSW Scope Directions - Additional ACCB for future Mascot Feeder - Letter dated 30 January 2015	Letter	TfNSW	30 Jan 2015	PDF
1.6.8	Chalmers Street Substation - Minutes of Key Meetings - Pilot Protection for Lee and Chalmers Street Traction Substations	Minutes	TRNSW	04 Dec 2013	PDF
1.6.9	Chalmers Street Substation - Minutes of Key Meetings - Diverse Fibre Pilot Requirements	Minutes	TINSW	03 Dec 2014	PDF
1.6.10	Chalmers Street Substation - Dial Before You Dig Summary	-	TfNSW		PDF
1.6.11	Chalmers Street Substation - Key DSS & Services Review	DSS	TfNSW		PDF
1.6.12	Chalmers Street Substation Area - Optical Fibre Arrangements	Concept Design	TINSW	В	PAS-B2-CD-0170

EXECUTION VERSION –
Design and Construction of
Chaimers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023A9

T2317785_10

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE REVISION	REFERENCE NO. / DWG NO.
1.6.13	Chalmers Street Substation - Project RFI Register - 17 Feb 2015		GHD	17 Feb 2015	PDF
1.6.14	Chalmers Street Substation - RFI008 Existing HV Feeder Ratings		GHD		PDF
1.6.15	Chairmers Street Substation - Concept Protection Design for Chairmers Street Substation 33kV Switchgear - Draft	Report	ST	6-Oct-15	PDF
1.6.16	2kV Signalling and Lighting Feeders - Central Macdonaldtown Erskineville Reticulation Diagram		RailCorp	5	EL 0044777
1.6.17	Appendix G2_15: Negative Cable System Standard Drawings (incl 5 x crawings)			5 Drawings	One PDF File
.6.17.1	Prince Alfred Substation - Negative Cable System Upgrade - Sydney Yard Electrical Diagram	Schematic Diagram	RIC	Α	EL 0137532
,6.17.2	Prince Afred Substation - Negative Cable System Upgrade - Sydney Yard Pit Busbars	Arrangement	RIC	Α	EL 0047980
1.6.17.3	Prince Alfred Substation - Negative Cable System Upgrade - Sydney Yard Busbars - Busbar and Support Details	Fitting Detail	RIC	A	EL 0075854
1.6.17.4	Prince Alfred Substation - Negative Cable System Upgrade - Central Electric Trackeide Bars	Cross Sections	RIC	A	EL 0126208
1.6.17.5	Prince Alfred Substation - Negative Cable System Upgrade - Central Electric Busbars - Busbar and Support Details		RIC	А	EL 0137328
1.6.18	Proposed Supply Arrangement for SY4 and SY5 - Option 1 (based on Railways Overhead Wiring Transmission Lines and Cables Sydney Yards)	Handwritten Notes		j = -j - i	
1.6.19	Prince Alfred Substation - Hezardous Materials Survey Report	Report	RaflCorp	27 Jun 2011	PDF
1.6.20	Construction of Chalmers Street Substation - Hazardous Building Material Inspection	Report	GHD	04 Feb 2014	PDF
1.6.21	Prince Alfred Substation - Geotech Report		GHD	01 Apr 2011	PDF
1.6.22	2kV Signalling and Lighting Feeders - Central Macdonaldtown Erskineville Reticulation Diagram		RailCorp	S	EL 0044777
1.6.23	Lee Street Bankstown Line 0.350km Substations - Power Supply Upgrade Negative Pit to Trackside Busbar	General Arrangement	GHD	D	2662-2650-LSSS-TR-0314
1.6.24	Chalmers Street Substation - Concept Protection Design for Chalmers Street Substation 11kV Switchboard - Draft	Report	ST	15 Oct 2015	PDF
1.6.25	Metropolitan Area Prince Alfred Substation to Lewisham Substation 11kV System Diagram		ST	J1	EL 0027675
1.6.26	Proposed Staged Decommissioning of 2kV Signalling - reticulation Diagram	Schematic Diagram	RCNSW	A	EL0497329
1.6.27	PA Sub Nogative Cable System Upgrade Sydney Yard Electrical Diagram - Mark Up drawing	Schematic Diagram	THISW	Α	EL0542567
1.6.28	SY1 & SY2 Drawings	pdf file	RailCorp		
1.6.29	PA Sub rectifier & AC Switch House HV cable Arrangement				
1.6.30	PA Sub Existing General Drawings	pdf file			

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607050023A9



Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. /
1.6.31	Prince Alfred SS - 'A' 1500V DC Operating Diagram	pdf file	RailCorp	N1	241A-1
1.8.32	Prince Alfred SS - 'B' 1500V DC Operating Diagram	pdf file	RailCorp	К	241A-2
1.6.33	Metropolitan Area Prince Alfred Substation HV Operating Diagram	pdf file	RailCorp	U1	241
1.6.34	Metropolitan Area Prince Alfred Substation LV Operating Diagram	pdf file	RailCorp	к	241B
1.7	Appendix G: Standard Drawing and Data				Folder
1.7.1	Appendix G1: Sydney Trains - Standard System Substation designs, Distribution network designs and related equipment detail		RailCorp	23 May 2013	PDF
1.7.2	Appendix G2: Substation Standard Equipment Drawings (incl 14 PDFs below)		*****	14 Files	Sub-Folder
1.7.2.1	Appendix G2_1: 1500V DCCB Standard Drawlings (incl 22 x drawlings)			22 Drawings	
1.7.2.1.1	General - Substations - 1500V DCCB Control Trunk (Local Frame)	Wiring Details	RailCorp	В	EL 0065671
1.7.2.1.2	General - Substations - 1500V DCCB Extended Palm	Drilling Details	RailCorp	A	EL 0065675
1.7.2.1.3	General - Substations - 1500V DCCB Cubicle (Non-Imported Frame)	Arrangement	RailCorp	C	EL 0215513
1.7.2.1.4	General - Substations - DCCB Frame Leakage Protection	Arrangement	RailCorp	Α	EL 0234196
1.7.2.1.5	General - Substations - Rectifier DCCB Termination Copper Bars	Drilling Details	RailCorp	В	EL 0237910
1.7.2.1.6	General - Substations - Rectifier DCCB Cubicle Cable Termination	Bottom Cable Entry Arrangement	RailCorp	В	EL 0237911
1.7.2.1.7	General - Substations - Rectifier DCCB LV Junction Box - Details for non imported DCCB Truck and Frame		RailCorp	Α	EL 0372312
1.7.2.1.8	General - Substations - Feeder DCCB LV Junction Box - Details for non imported DCCB Truck and Frame		RailCorp	A	EL 0372314
1.7.2.1.9	General - Substations - Mitsubishi 1500V DCCB Rectifier BHR50B	Schematic Diagram	RailCorp	A	EL 0480482
7.2.1.10	General - Substations - Mitsubishi 1500V DCCB Rectifier BHR50B	Wiring Diagram	RailCorp	A	EL 0480483
7.2.1.11	General - Substations - Mitsubishi 1500V DCCB Rectifier BHR50B	Material List	RailCorp	A	EL 0480484
.7.2.1.12	General - Substations - Mitsubishi 1500V DCCB Rectifier BHR50B	Arrangement	RailCorp	В	EL 0480485
.7.2.1.13	General - Substations - Mitsubishi 1500V DCCB Rectifier BHR50B External Connections	Wiring Diagram	RailCorp	A	EL 0480486
7.2.1.14	General - Substations - Mitsubishi 1500V DCCB Feeder BHF30B Connections	Schematic Diagram .	RailCorp	A	EL 0480488
.7.2.1.15	General - Substations - Mitsubishi 1500V DCCB Feeder BHF30B Connections	Wiring Diagram	RailCorp	A	EL 0480489
.7.2.1.16	General - Substations - Mitsubishi 1500V DCCB Feeder BHF30B	Material List	RailCorp	A -	EL 0480490
.7.2.1.17	General - Substations - Mitsubishi 1500V DCCB Feeder BHF30B	Arrangement	RailCorp	В	EL 0480491

EXECUTION VERSION -Design and Construction of Chalmers Street Substation

and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR /	DATE / REVISION	REFERENCE NO.
1.7.2.1.18	General - Substations - Traction Supply Upgrade - 1500V DC Surge Arrestor Truck - Sheet 1 of 3	General Arrangement	RailCorp	A	EL 0482447
.7.2.1.19	General - Substations - Traction Supply Upgrade - 1500V DC Surge Arrestor Truck - Sheet 2 of 3	General Arrangement	RailCorp	В	EL 0482448
.7.2.1.20	General - Substations - Traction Supply Upgrade - 1500V DC Surge Arrestor Truck - Sheet 3 of 3	Wiring Table	RailCorp	A	EL 0482449
.7.2.1.21	General - Substations - Mitsubishi 1500V DCCB Transitional Earth for Truck - Sheet 1 of 2	Arrangement	RailCorp	В	EL 0551490
1.7.2.1.22	General - Substations - Mitsubishi 1500V DCCB Transitional Earth for Base Frame - Sheet 2 of 2	Arrangement	RailCorp	Α	EL 0551491
1.7.2.2	Appendix G2_2: 1500V IRCS Standard Drawings (incl 5 x drawings)	Page 1		5 Drawings	One PDF File
1,7.2.2.1	General - Substations and Section Huts - Voltmeter Test Rail & General Steelwork	Fabrication Details	RailCorp	В	EL 0015119
1.7.2.2.2	General - Substations and Section Huts - 1500V Voltmeter Test Rail Mounting Details	General Arrangement	RailCorp	Α	EL 0282769
1.7.2.2.3	General - Substations - 1500V Isolating/Rail Connecting Switch - Sheet 1 of 1	General Arrangement	RailCorp	С	EL 0383824
1.7.2.2.4	General - Substations - 1500V Isolating/Rail Connecting Switch - Sheet 2 of 2	General Arrangement	RailCorp	Α	EL 0383825
1.7.2.2.5	Substation - I & RCS Cable Isolation Bonding Hook	Detail	RailCorp	Α	EL 0521637
1.7.2.3	Appendix G2_3: 1500V 6400A Reactor Standard Drawlings (incl 3 x drawlings)			3 Drawings	One PDF File
1.7.2.3.1	General - Substations - Traction Supply Upgrade - 0.5 mH 6400A DC ONAN Smoothing Reactor	General Arrangement	RailCorp	6	EL 0278196
1.7.2.3.2	General - Substations - Traction Supply Upgrade - 0.5 mH 6400A DC ONAN Smoothing Reactor	Name Plate	RailCorp	4	EL 0278197
1.7.2.3.3	General - Substations - Traction Supply Upgrade - 0.5 mH 6400A DC ONAN Smoothing Reactor	Wiring Diagram	RailCorp	7	EL 0278198
1.7.2.4	Appendix G2_4: 5MW 1500V DC Rectifier Standard Drawings (incl 15 x drawings)			15 Drawings	One PDF File
1.7.2.4.1	General - Substations - Rectifier Power Cubicle 12 Pulse Series Bridge	General Outline	RailCorp	С	EL 0214515
1.7.2.4.2	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle	Drawing Index	RaliCorp	A	EL 0283600
1.7.2.4.3	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle	Revision Record	RailCorp	A	EL 0283601
1.7.2.4.4	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle - Sheet 1 of 2	Graphical Symbols	RailCorp	A	EL 0283602
1.7.2.4.5	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle - Sheet 2 of 2	Graphical Symbols	RailCorp	Α	EL 0283603
1.7,2.4.6	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle - Sheet 1 of 2	Internal Arrangement	RailCorp	Α	EL 0283604

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/49



Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
1.7.2.4.7	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle - Sheet 2 of 2	Internal Arrangement	RailCorp	Α	EL 0283605
1.7.2.4.8	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle Component Bill of Materials		RailCorp	A	EL 0283606
1.7.2.4.9	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle Main Power Circuit		RailCorp	A	EL 0283607
1.7.2.4.10	General - Substations - United Group - 5MW 1500V DC Rectifier 125V DC and 240V AC Power Supplies		RailCorp	A	EL 0283608
1.7.2.4.11	General - Substations - United Group - 5MW 1500V DC Rectifier Monitoring Circuit	Circuit Diagram	RailCorp	A	EL 0283609
1.7.2.4.12	General - Substations - United Group - 5MW 1500V DC Rectifier Cubicle	Outline	RailCorp	В	EL 0283610
1.7.2.4.13	General - Substations - United Group - 5MW 1500V DC Rectifier Marshalling Cubicle	Termination Diagram	RailCorp	Α	EL 0283611
1.7.2.4.14	General - Substations - United Group - 5MW 1500V DC Rectifier Power & Negative	Isolator Cubicles Terminations	RailCorp	Α	EL 0283612
1.7.2.4.15	General - Substations - United Group - 5MW 1500V DC Rectifier Frame Leakage	Circuit Diagram	RailCorp	Α	EL 0283613
1.7.2.5	Appendix G2_5: General - Substations - 33/11kV Power Transformer Basic Configuration Requirements	Arrangement	RailCorp	Α	EL 0416250
1.7.2.6	Appendix G2_6: 33kV Switchboard Standard Drawings (incl 3 x drawings)		-	3 Drawings	One PDF File
1.7.2.6.1	General - Single Core HV Cable - DTS Fibre Termination	Arrangement	RailCorp	Α	EL 0254004
1.7.2.6.2	General - Substation - Traction Supply Upgrade - 33kV Areva Indoor Switchgear WS Base Mount Frame - 4 Units	General Assembly	RailCorp	Α	EL 0366789
1.7.2.6.3	General - Single Core HV Cable - DTS Fibre Termination - Indoors	Arrangement	RailCorp	Α	EL 0463981
1.7.2.7	Appendix G2_7: Miscellaneous Standard Drawings (incl 5 x drawings)			5 Drawings	One PDF File
1.7.2.7.1	General - Substations - Staff Access, Backup Lighting, A/C & HWU	Control Schematic Diagram	ST	F	EL 0204559
1.7.2.7.2	General - Substation - Traction Supply Upgrade - Bonding Tail For Steel Reinforcement - Type A	Detail	RailCorp	Α	EL 0241274
1.7.2.7.3	General - Substation - Traction Supply Upgrade - Bonding Tail For Steel Reinforcement - Type B	Detail	RailCorp	А	EL 0241275
1.7.2.7.4	General - Substation - Traction Supply Upgrade - Equipment Plinth Foundation	Details	RailCorp	A	EL 0269337
1.7.2.7.5	General - Substations - 1500V DCCB Busbar Joints and Terminations	Technical Instructions	RailCorp	В	EL 0446427
1,7,2,8	Appendix G2_8: Miscellaneous Transformer Standard Drawings (incl 2 x drawings)			2 Drawings	One PDF File
1.7.28.1	General - Substations - Transformer Frame Leakage Insulated Wheel Pad	Details	RailCorp	A	EL 0283031

EXECUTION VERSION -

Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR I SOURCE	DATE / REVISION	REFERENCE NO. /
1.7.2.8.2	General - Substations - 33kV Transformers & Switchboards HV Cable Screen Earthing Requirements	Arrangement	RailCorp	A	EL 0494459
1.7.2.9	Appendix G2 9: Rail Earth Contactor Standard Drawings (incl 8 x drawings)	14 1/2		8 Drawings	One PDF File
1.7.2.9.1	General - Substations - Rail Earth Contactor - Ver. 1 (United Group) - Sheel 1 of 8	Schematic Diagram & Details	RailCorp	В	EL 0491274
1.7.2.9.2	General - Substations - Rail Earth Contactor - Ver. 1 (United Group) - Sheet 2 of 8	Schematic Diagram & Details	RailCorp	В	EL 0491275
1.7.2.9.3	General - Substations - Rail Earth Contactor - Ver. 1 (United Group) - Sheet 3 of 8	Schematic Diagram & Details	RailCorp	В	EL 0491276
1.7.2.9.4	General - Substations - Rail Earth Contactor - Ver. 1 (United Group) - Sheet 4 of 8	Schematic Diagram & Details	RailCorp	В	EL 0491277
1.7.2.9.5	General - Substations - Rail Earth Contactor - Ver. 1 (United Group) - Sheet 5 of 8	Schematic Diagram & Details	RailCorp	В	EL 0491278
1.7.2.9.6	General - Substations - Rail Earth Contactor - Ver. 1 (United Group) - Sheet 6 of 8	Schematic Diagram & Details	RailCorp	С	EL 0491279
1.7.2.9.7	General - Substations - Rail Earth Contactor - Ver. 1 (United Group) - Sheet 7 of 8	Schematic Diagram & Details	RailCorp	С	EL 0491280
1.7.2.9.8	General - Substations - Rail Earth Contactor - Ver. 1 (United Group) - Sheet 8 of 8	Schematic Diagram & Details	RailCorp	В	EL 0491281
1.7.2.10	Appendix G2_10: Rectifier Transformer Standard Drawings (incl 7 x drawings)			7 Drawings	One PDF File
1.7.2.10.1	Marshalling Cubicle	General Arrangement	RailCorp	Α	EL 0205605
1.7.2.10.2	5350kVA 33000/600-600V Transformer	Diagram/Rating Plate	RailCorp	Α	EL 0232165
1.7.2,10.3	5.35MVA Rectifier Transformer - Marshalling Cubicle	Terminal Bar Layout	RailCorp	6	EL 0232166
1.7.2.10.4	5.35MVA Rectifier Transformer - Marshalling Cubicle	Schematic/Wiring Diagram	RailCorp	В	EL 0232167
1.7.2.10.5	5350kVA 33000/600-600V Transformer	General Arrangement	RailCorp	Α	EL 0232168
1.7.2.10.6	General - Substations - 3kV Transformer Frame Leakage	Arrangement	RailCorp	Α	EL 0283030
1.7.2.10.7	General - Substation - Traction Supply Upgrade - Rectifier Transformer Low Voltage Cable Transit Frame and Fire Sealing Panel Assembly		RailCorp	H	EL 0461957
1.7.2,11	Appendix G2_11: Auxiliary Supply Standard Drawings (incl 4 x drawings)			4 Drawings	One PDF File
1.7.2.11.1	General - Substations/Section Huts - 120V Battery Isolator Panel	Drilling Details	RailCorp	D	EL 0009087

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

© TfNSW 2014 Doc ID 607060023A9 T23 7/65_10

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. DWG NO.
1,7.2.11.2	General - Substations - 415V Emergency Generator Fuse Box.	Assembly Details	RailCorp	A	EL 0015238
1.7.2.11.3	General - Substations - 415V Auxiliary Supply - Sheet 1 of 2	Schematic Diagram	RailCorp	I E FACT	EL 0290965
1.7.2.11.4	General - Substations - 415V Auxillary Supply - Sheet 2 of 2	Schematic Diagram	RailCorp	В	EL 0290966
1.7.2.12	Appendix G2_12: Signage Standard Drawings (incl 16 x drawings)			16 Drawings	One PDF File
1.7.2.12.1	General - Substations - Confined Space - Danger Sign	Details	RailCorp	В	EL 0283014
1.7.2.12.2	General - Substations - First Aid & Battery - Safety Signs	Details	RailCorp	A	EL 0283015
1.7.2.12.3	General - Substations - HV Authorised Personnel Only - Danger Sign	Details	RailCorp	В	EL 0283016
1.7.2.12.4	General - Substations - Personal Protective Equipment - Safety Sign	Details	RailCorp	В	EL 0283017
1.7.2.12.5	General - Substations - Capacitor HV Discharge - Warning Sign	Details	RailCorp	В	EL 0283018
1.7.2.12.6	General - Substations - 1500 Voit Negatives - Danger Sign (Large)	Details	RailCorp	C	EL 0283019
1.7.2.12.7	General - Substations - 415 Volts - Danger Sign	Details	RailCorp	В	EL 0283020
1.7.2.12.8	General - Substations - High Voltage Overhead - Danger Sign	Details	RailCorp	A	EL 0283021
1.7.2.12.9	General - Substations - 11kV/415-240V Transformer - Warning Sign	Details	RailCorp	В	EL 0283022
1.7.2.12,1	General - Substations - Voltmeter Test Rail - Warning Sign	Details	RailCorp	A	EL 0283023
1.7.2.12.1	General - Substations - Confined Space - Danger Sign - With Arrow	Details	RailCorp	A	EL 0284401
1.7.2.12.1 2	General - Substations - High Voltage - Danger Sign (Melal)	Details	RailCorp	В	EL 0474383
1.7.2.12.1 3	General - Substations - Electrical Emergency - Sign	Details	RailCorp	Α.	EL 0474385
1.7.2.12.1	General - Substations - Danger High Voltage - Fence Sign	Details	RailCorp	A	EL 0474387
1.7.2.12.1 5	General - Substations - 1500 Volt Negatives - Danger Sign (Small)	Details	RailCorp	В	EL 0474502
1.7.2.12.1 6	General - Substations - Electrical Permit - Warning Sign	Details	RailCorp	Α	EL 0483952
1.7.2.13	Appendix G2_13 - Fencing Standard Drawings (incl 7 x drawings)			7 Drawings	One PDF File
1.7.2.13.1	General - Substations - Fencing - Typical Construction - Sheet 1 of 6	Arrangement	RailCorp	D	EL 0450708
1.7.2.13.2	General - Substations - Fencing - Typical Construction - Sheet 2 of 6	Arrangement	RailCorp	D	EL 0450709
1.7.2.13.3	General - Substations - Fencing - Typical Construction - Sheet 3 of 6	Arrangement	RailCorp	D	EL 0450710

EXECUTION VERSION –
Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014

Doc ID 607060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR I	DATE / REVISION	REFERENCE NO. / DWG NO.
1.7.2.13.4	General - Substations - Fencing - Typical Construction - Sheet 4 of 8	Details	RailCorp	D	EL 0450711
1.7.2.13.5	General - Substations - Fencing - Clearances to Climbing Aids - Sheet 5 of 6	Details	RailCorp	D	EL 0450712
1.7.2.13.6	General - Substations - Fencing - Non Penetrable Panel - Sheet 6 of 6	Arrangement	RailCorp	D	EL 0450713
1.7.2.13.7	General - Substations - Fencing - Typical Construction - Emergency Egress Gate		RailCorp	D	EL 0455333
1.7.2.14	Appendix G2_14: Negative Busbar Standard Drawings (incl 3 x drawings)			3 Drawings	One PDF File
.7.2.14.1	Substations - Negative Bus Rail Termination Arrangement No. 3		RailCorp	В	EL 0023896
1.7.2.14.2	General - Negative Bus Rail Termination - Type 4 (A, B, C) - Sheet 1 of 2	Assembly and Drilling Details	RailCorp	C	EL 0099579
.7.2.14.3	General - Negative Bus Rail Termination - Type 4 (A, B, C) - Sheet 2 of 2	Assembly and Drilling Details	RailCorp	D	EL 0099580
1.7.3	Appendix G3: SPEL Puraceptor Information	7	GHD	25 Mar 2014	PDF
17.4	Appendix G4: 33/11kV 5/62.5 MVA Power Transformer - Query on rating and other data	Email	GHD	24 Mar 2014	PDF
1.8	Appendix H: Reference Design Assessments		GHD		Folder
1.8.1	Chalmers Street Substation - Appendix H1 - Fire Risk Evaluation Matrix		GHD	15 Dec 2013	PDF
1.8.2	Chalmers Street Substation - Appendix H2 - BCA Assessment 6	Report	GHD	28 Apr 2015	PDF
1.8.3	Chalmers Street Substation - Appendix H3 - Mine Subsidence Board Confirmation	Letter	MSB	26 Nov 2013	PDF
1.8.4	Chalmers Street Substation - Appendix H4 - Sydney Water Subdivider/Developer Compliance Certificate (Section 73)	Certificate	SW	08 May 2014	PDF
1 8.5	Chalmers Street Substation - Appendix H5 - Geotechnical Investigation - Revision 1	Report	GHD	12 Feb 2014	PDF
1.8.6	Chalmers Street Substation - Appendix H6 - Lee and Chalmers Street Substations ESR Shaft - Fire Risk Assessment - Revision E	Report	GHD	07 Aug 2015	PDF
1.8.7	Chalmers Street Substation - Appendix H7 - Sustainable Design Guidelines Checklist - Version 3		GHD	11 Nov 2014	PDF
18.8	Chalmers Street Substation - Appendix H8 - Chalmers Street Substation and PA Substation/Switch House HV Feeder Information		GHD	01 Feb 2015	PDF
1.8.9	Chalmers Street Substation - Appendix H9 - Preliminary Construction Program	Program	GHD	19 Feb 2015	PDF
1.8.10	Chalmers Street Substation - Appendix H10 - Construction and Commissioning Staging - Preliminary Plan		GHD	18 Feb 2015	PDF
1,8,11	Chalmers Street Substation - Appendix H11 - Chalmers Street Cable Tunnel Fire Engineering Report - Revision D	Report	GHD	28 Jul 2015	PDF
1.9	Appendix I: Preliminary Design Calculations				Folder

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.doex
© TfNSW 2014
Doc ID 607060023A4

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. /
1.9.1	Chalmers Street Substation - Appendix I1 - Preliminary 1500V DC Feeder Calculations	Calculations	GHD	25 Mar 2015	PDF
1.9.2	Chalmers Street Substation - Appendix I2 - Preliminary Negative Bar Sizing Calculations	Memorandum	GHD	17 Mar 2014	PDF
1.9.3	Chalmers Street Substation - Appendix I3-1 - Preliminary Maximum Demand	Calculations	GHD	10 Feb 2015	PDF
1.9.4	Chalmers Street Substation - Appendix 13-2 - PA Sidings - LV Maximum Demand Summary Calculations - Revision 1	Calculations	GHD	05 Aug 2014	PDF
1.9.5	Chalmers Street Substation - Appendix I4 - Preliminary 125V DC Battery Calculations	Calculations	GHD	11 Dec 2014	PDF
1.9.6	Chalmers Street Substation - Appendix I5 - Preliminary Ventilation Calculations	Calculations	GHD	18 Feb 2015	PDF
1.9.7	Chalmers Street Substation - Appendix 16 - Preliminary Hydraulic Calculations	Calculations	GHD	30 Jan 2015	PDF
1.9.8	Chalmers Street Substation - Appendix I7 - Preliminary Structural Calculations	Calculations	GHD	19 Feb 2015	PDF
1.10	Appendix J: Earthing and Bonding			1 - 1 - 1	Folder
1.10.1	Chalmers Street Substation - Appendix J - Reference Earthing Design Report - Includes Soil Resistivity Test Report	Report	TE	13 Mar 2015	PDF
1.11	Appendix K: Inspection and Testing		7		Folder
1.11,1	Chalmers Street Substation - Appendix K - Inspection and Testing Strategy		GHD	19 Feb 2015	PDF & Excel
1.12	Appendix L: Competent Persons				Folder
1.12.1	Chalmers Street Substation - Appendix L1 - Competent Persons - Pre-AEO	Report	GHD		PDF
1.12.2	Chalmers Street Substation - Appendix L2 - AEO Authorisation	Email	GHD	13 Feb 2014	PDF
2.0	Principal Supplied Equipment Information				Folder
2.1	Rectifier Power Control Unit (incl 4 x Folders)	minute -/9			Sub-Folder
2.1.1	5MW Rectifiers for Prince Alfred Substation - Operation and Maintenance Manual (incl 10 x PDFs)		UGL	24 Jan 2011	Sub-Folder
2.1.2	Component Data Sheet (incl 10 x Folders + 1 x PDF)		UGL	24 Jan 2011	Sub-Folder
2.1.3	Drawings (incl 3 x PDF)		UGL	24 Jan 2011	Sub-Folder
2.1.4	Test Results (incl 3 x PDFs)		UGL	24 Jan 2011	Sub-Folder
2.2	Transformer Reactor (incl 3 x Folders)				Sub-Folder
2.2.1	Manuals (ind 2 x PDFs)		TMC	31 May 2010	Sub-Folder
2.2.2	Drawings (incl 7 x PDFs)		TMC	31 May 2010	Sub-Folder
2.2.3	Test Results (incl 5 x PDFs)		TMC	31 May 2010	Sub-Folder
3.0	Geotech Information around Sydney Yard				Folder

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/v9



Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO.
3.1	Central - Eddy Avenue 0.000km - 0.120km City Outer, Up City Inner, Down City Outer - Ballast Depth Investigation prior to Track Upgrading		SRA	01 Mar 1995	PDF
3.2	Central - Goulburn Street. 0.000km - 0.560km City Inner - Ballast Depth Investigation prior to Track Upgrading		SRA	01 Mar 1995	PDF
3.3	Central - Goulburn Street. 0.000km - 0.560km Down Shore - Ballast Depth Investigation prior to Track Upgrading		SRA	01 Mar 1995	PDF
3.4	Central - Goulburn Street. 0.000km - 0.560km Up Shore - Ballast Depth Investigation prior to Track Upgrading		SRA	01 Mar 1995	PDF
3.5	Geotechnical Investigation for Turnout Renewal: Central - P1A/P2A - Platform Road No. 1&2 to 1/2 Engine Road 0.085km - 0.125km	Memorandum	RailCorp	18 Jun 2007	PDF
3.6	Geotechnical Investigation - Sydney Yard - Ballast Depths and Subgrade Investigation for Point Renewals - Points 151A and B, 154B	Memorandum	RailCorp	01 May 2009	PDF
3.7	Geotechnical Investigation - 250A&C Turnout and 250B Catchpoints (0.560km - 0.610km)	Memorandum	RailCorp	02 Jun 2009	PDF
4.0	33 kV Switchboard Information				Folder
4.1	PA Substation 33 kV Switchboard Information			59 Drawings	One PDF File
4.1.1	Prince Alfred Substation 33kV Fluair F400 Switchgear Device Codes and Symbols		SRA	A	EL 0001411
4.1.2	Prince Alfred Substation 33kV Fluair F400 Switchgear General Arrangement - Sheet 3 of 5		SRA	С	EL 0001408
4.1.3	Prince Alfred Substation 33kV Fluair F400 Switchgear General Arrangement - Sheet 4 of 5	1011	SRA	С	EL 0001409
4.1.4	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 7 & 17 CCT Diagram - Sheet 7 of 7	1,-50,-50	SRA	D	EL 0001470
4.1.5	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 7 & 17 CCT Diagram - Sheet 2 of 7		SRA	מ	FL 0001471
4.1.6	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 7 & 17 CCT Diagram - Sheet 3 of 7		SRA	D	EL 0001472
4.1.7	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 7 & 17 CCT Diagram - Sheet 4 of 7		SRA	D	EL 0001473
4.1.8	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 7 & 17 CCT Diagram - Sheet 5 of 7		SRA	D	EL 0001474
4.1.9	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 7 & 17 CCT Diagram - Sheet 6 of 7		SRA	D	EL 0001475
.1.10	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 7 & 17 CCT Diagram - Sheet 7 of 7		SRA	D	EL 0001476
.1.11	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 11, 13 & 19 CCT Diagram - Sheet 1 of 7		SRA	D	EL 0001465

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9),pdf.docx
© TfNSW 2014
Doc ID 607060023/49

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR SOURCE	DATE / REVISION	REFERENCE NO.
4.1.12	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 11, 13 & 19 CCT Diagram - Sheet 2 of 7		SRA	D	EL 0001460
4.1.13	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 11, 13 & 19 CCT Diagram - Sheet 3 of 7		SRA	D	EL 0001461
4.1.14	Prince Aifred Substation 33kV Fluair F400 Switchgear Panels 11, 13 & 19 CCT Diagram - Sheet 4 of 7		SRA	D	EL 0001462
4.1.15	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 11, 13 & 19 CCT Diagram - Sheet 5 of 7		SRA	D	EL 0001463
4.1.16	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 11, 13 & 19 CCT Diagram - Sheet 6 of 7		SRA	D	EL 0001464
4.1.17	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 11, 13 & 19 CCT Diagram - Sheet 7 of 7		SRA	D	EL 0001466
4.1.18	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 1 Circuit Diagram - Sheet 1 of 6		SRA	D	EL0001412
4.1.19	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 1 Circuit Diagram - Sheet 2 of 6		SRA	D	EL0001413
4.1.20	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 1 Circuit Diagram - Sheet 3 of 6		SRA	D	EL0001414
4.1.21	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 1 Circuit Diagram - Sheet 4 of 6		SRA	D	EL0001415
4.1.22	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 1 Circuit Diagram - Sheet 5 of 6		SRA	D	EL0001416
4.1.23	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 1 Circuit Diagram - Sheet 6 of 6	** 11	SRA	D	EL0001417
4.1.24	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 2 Circuit Diagram - Sheet 1 of 7		SRA	D	EL0001418
4.1.25	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 2 Circuit Diagram - Sheet 2 of 7		SRA	0	EL0001419
4.1.26	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 2 Circuit Diagram - Sneet 3 of 7		SRA	D	EL0001420
4.1.27	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 2 Circuit Diagram - Sheet 4 of 7		SRA	D	EL0001421
4.1.28	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 2 Circuit Diagram - Sheet 5 of 7		SRA	D	EL0001422
4.1.29	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 2 Circuit Diagram - Sheet 6 of 7		SRA	D	EL0001423
4.1.30	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 2 Circuit Diagram - Sheet 7 of 7		SRA	D	EL0001424
4.1.31	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 3,8,12 & 18 CCT Diagram - Sheet 1 of 7		SRA	D	EL0001425
4.1.32	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 3,8,12 & 18 CCT Diagram - Sheet 2 of 7		SRA	D	EL0001426
4.1.33	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 3,8,12 & 18 CCT Diagram - Sheet 3 of 7		SRA	D	EL0001427
4.1.34	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 3,8,12 & 18 CCT Diagram -	-	SRA	D	EL0001428

EXECUTION VERSION -

Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
	Sheet 4 of 7				
4.1.35	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 3,8,12 & 18 CCT Diagram - Sheet 5 of 7		SRA	D	EL0001429
4.1.36	Prince Afred Substation 33kV Fluair F400 Switchgear Panels 3,8,12 & 18 CCT Diagram - Sheet 6 of 7		SRA	D	EL0001430
4.1,37	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 3,8,12 & 18 CCT Diagram - Sheet 7 of 7		SRA	D	EL0001431
4.1.38	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 4 & 14 CCT Diagram - Sheel 1 of 7		SRA	D	EL0001432
4.1.39	Prince Alfred Substation 33kV Flusir F400 Switchgear Panels 4 & 14 CCT Diagram - Sheet 2 of 7		SRA	D	EL0001433
4.1.40	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 4 & 14 CCT Diagram - Sheet 3 of 7		SRA	D	EL0001434
4.1.41	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 4 & 14 CCT Diagram - Sheet 4 of 7		SRA	D	EL0001435
4.1.42	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 4 & 14 CCT Diagram - Sheet 5 of 7		SRA	D	EL0001436
4.1.43	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 4 & 14 CCT Diagram - Sheet 6 of 7		SRA	D	EL0001437
4.1.44	Prince Alfred Substation 33kV Fluair F400 Switchgear Panels 4 & 14 CCT Diagram - Sheet 7 of 7		SRA	D	EL0001438
4.1.45	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 5 Circuit Diagram - Sheet 1 of 7		SRA	D	EL0001439
4.1.46	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 5 Circuit Diagram - Sheet 2 of 7		SRA	D	EL0001440
4.1.47	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 5 Circuit Diagram - Sheet 3 of 7		SRA	D	EL0001441
4.1.48	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 5 Circuit Diagram - Sheet 4 of 7		SRA	D	EL0001442
4.1.49	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 5 Circuit Diagram - Sheet 5 of 7		SRA	D	EL0001443
4.1.50	Prince Alfred Substation 33kV Fluair F400 Switchgoar Panel 5 Circuit Diagram - Sheet 6 of 7		SRA	D	EL0001444
4.1.51	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 5 Circuit Diagram - Sheet 7 of 7		SRA	D	EL0001445
4.1.52	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 1 of 8		SRA	В	EL0001132
4.1,53	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 2 of 8		SRA	В	EL0001133
4.1.54	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 3 of 8		SRA	В	EL0001134
4.1.55	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 4 of 8		SRA	В	EL0001135

EXECUTION VERSION -

Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023M9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
4.1.56	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 5 of 8		SRA	В	EL0001136
4.1.57	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 6 of 8		SRA	В	EL0001137
4.1.58	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 7 of 8		SRA	В	EL0001138
4.1.59	Prince Alfred Substation 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 8 of 8		SRA	В	EL0001139
5.0	PA Substation - 33kV Remote End drawings				Folder
5.1	Argyle Substation Drawings			24 Drawings	One PDF File
5.1.1	Prince Alfred Substation Supervisory Controls Cable Terminations - Argylo Control Station 3 - TSA - 22		DoR NSW	Α	EL0019700
5.1.2	Prince Alfred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 22A		DoR NSW	A	EL0019701
5.1.3	Prince Alfred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 23		DoR NSW	Α	EL0019702
5.1.4	Prince Alfred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 24		DoR NSW	Α	EL0019703
5.1.5	Prince Alfred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 24A		DoR NSW	Α	EL0019704
5.1.6	Prince Aifred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 25		DoR NSW	Α	EL0019705
5.1.7	Prince Alfred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 25A		DoR NSW	Α	EL0019706
5.1.8	Prince Alfred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 26		DoR NSW	Α	EL0019707
5.1.9	Prince Alfred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 27		DoR NSW	Α	EL0019708
5.1.10	Prince Alfred Substation Supervisory Controls Cable Terminations - Argyle Control Station 3 - TSA - 28		DoR NSW	A	EL0019709
5.1.11	Argyle Substation Allocation of Cable Numbers Cable Schedule - As Built 1 of 4		RIC	Α	EL0023985
5.1.12	Argyle Substation Allocation of Cable Numbers Cable Schedulo - As Built 2 of 4		RIC	Α	EL0023986
5.1.13	Argyle Substation Allocation of Cable Numbers Cable Schedule - As Built 3 of 4		RIC	Α	EL0023987
5.1.14	Argyle Substation Allocation of Cable Numbers Cable Schedule - As Built 4 of 4		RIC	Α	EL0023988
5.1.15	33 KV Underground Traction Feeders Pyrmont P.S Prince Alfred & Argyle Substation Pilot Wire Cable Route Schematic Diagram		DoR NSW	н	EL0025087
5.1.16	Argyle Substation Cable Chamber Tunnel & Ducts Allocation of Cables		DoR	J	EL0037403

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR I SCURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
			NSW		
5.1.17	Argyle Substation - Traction Supply Upgrade 33kV Switchroom Layout - Electrical requirements (Civil works)		RailCorp	В	EL0039646
5.1.18	Argyle Substation - Traction Supply Upgrade Cabling - Equipment Interconnection Block Diagram	1,	RailCorp	В	EL0285949
5.1.19	Argyle Temporary 33kV Tie - Pilot Wire Protection and Inter-Tripping	Schematic Dragram	RailCorp	С	EL0285951
5.1.20	Argyle - Prince Alfred 33kV Feeder 746 Protection and Inter-Tripping	Schematic Diagram	RailCorp	Α	EL0285953
5.1.21	Argyle Substation - Traction Supply Upgrade 33kV Switchroom	Indoor Arrangement	RallCorp	В	EL0290969
5.1.22	RailCorp Argyle Substation 33kV WSA GIS Switchgear - Section 1,2,3 PLC Ladder Logic for rectification and Protection		RailCorp	Q	EL0400003
5.1.23	RailCorp Argyle Substation 33kV WSA GIS Switchgear - Section 3 746 Feeder Schematic Diagram		RailCorp	О	EL0400020
5.1.24	RailCorp Argyle Substation 33kV WSA GIS Switchgear - Section 1-3 Rectification Controls & Protection SCADA Interface - Schematic		RailCorp	E	EL0400032
5.2	Edgecliff Substation Drawings			16 Drawings	One PDF File
5.2.1	RailCorp Edgecliff Substation 33kV WSA GIS Switchboard Section 1	General Arrangement	RallCorp	С	EL0283970
5.2.2	ReilCorp Edgecliff Substation 33kV WSA GIS Switchboard Section 2	General Arrangement	RailCorp	С	EL0283971
5.2.3	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 1 756 Feeder	Schematic Diagram	RailCorp	C	EL0283972
5.2.4	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 1 No. 1 Rectifier	Schematic Diagram	RailCorp	С	EL0283973
5.2.5	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 1 7U3 Feeder	Schematic Diagram	RailCorp	C	EL0283974
5.2.6	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 1 Bus Tie 1-2	Schematic Diagram	RailCorp	С	EL0283975
5.2.7	RallCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 1 Bus Tie 2-1	Schematic Diagram	RailCorp	С	EL0283976
5.2.8	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 2 33/11 kV Transformer	Schematic Diagram	RailCorp	C	EL0283977
5.2.9	RailCorp Edgediff Substation 33kV WSA GIS Switchgoar - Section 2 755 Feeder	Schematic Diagram	RallCorp	С	EL0283978
5.2.10	RailCorp Edgediff Substation 33kV WSA GIS Switchgear - Section 2 No. 2 Rectifier	Schematic Diagram	RailCorp	C	EL0283979
5.2.11	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 2 754 Feeder	Schematic Diagram	RailCorp	C	EL0283980
5.2.12	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Interpanel Connections - Section 1		RaflCorp	A	EL0283981
5.2.13	RailCorp Edgeoliff Substation 33kV WSA GIS Switchgear - Interpanel Connections - Section 2		RailCorp	A	EL0283982

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014

Dec ID 607060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
5.2.14	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 1 & 2	Legend	RailCorp	C	EL0263963
5.2.15	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear Symbol Legend		RailCorp	В	EL0283984
5.2.16	RailCorp Edgecliff Substation 33kV WSA GIS Switchgear - Section 1 & 2 PLC Ladder Logic for Rectification and Protection		RailCorp	С	EL0283985
5.3	Rozelle Substation Drawings			14 Drawings	One PDF File
5.3.1	Rozelle Substation 33kV Switchgear Schematic diagram		SRA	C	EL0000872
5.3.2	Rozelle Substation Site Plan		SRA	Α	EL0000873
5.3.3	Rozelle 33kV Substation Equipment Layout		SRA	В	EL0000875
5.3.4	Rozelle Substation General Arrangement		SRA	В	CV0051178
5.3.5	Rozelle Substation - Prince Alfred 797 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 1 of 8		SRA	В	EL0001132
5.3.6	Rozelle Substation - Prince Alfred 797 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 2 of 8		SRA	В	EL0001133
5.3.7	Rozelle Substation - Prince Alfred 797 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 3 of 8		SRA	В	EL0001134
5.3.8	Rozelle Substation - Prince Alfred 797 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 4 of 8		SRA	В	EL0001135
5.3.9	Rozelle Substation - Prince Alfred 797 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 5 of 8		SRA	В	EL0001136
5.3.10	Rozelle Substation - Prince Alfred 797 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 6 of 8		SRA	В	EL0001137
5.3.11	Rozelle Substation - Prince Alfred 797 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 7 of 8		SRA	В	EL0001138
5.3.12	Rozelle Substation - Prince Alfred 797 33kV Fluair F400 Switchgear Panel 3 Circuit Diagram - Sheet 8 of 8		SRA	В	EL0001139
5.3.13	Rozelle Substation D.C.B Operation Alarm	Schematic Diagram	DoR NSW	E	EL0024418
5.3.14	Rozelle Substation Switchboard Arrangement		NSWGR&T		EL0216593
5.4	Pyrmont (EA) 747 Pilot Wire Scheme Drawings				One PDF File
5.4.1	33kV Underground Feeders No 748 Pyrmont PS to Prince Alfred Substation Pilot Wire Protection	Schematic Diagram	DoR NSW	A	EL0024116
5.4.2	Prince Alfred Substation 33kV Feeder 747 Pilot Wire	Block Diagram	RailCorp	A	EL054B352
5.4.3	Prince Alfred Substation 33kV Feeder 747 Pilot Wire	Cable Schedule	RailCorp	A	EL0551414

EXECUTION VERSION -

Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9),pdf.docx © TfNSW 2014

Doc ID 807060023A9



Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
5.4.4	Prince Alfred to Pyrmont (Ausgrid) Substation 33kV Feeder 747 Pilot Wire	Schematic Diagram	RailCorp	С	EL0524907
5.4.5	33kV Underground Feeders No 747 Pyrmont PS to Prince Alfred Substation Pilot Wire Protection	Schematic Diagram	DoR. NSW	D	EL0017346
5.5	Erskineville 33kV 798				Sub-Folder
5.5.1	Erskineville - Prince Affred - 33kV Feeder 798 Pilot Wire Protection & Inter-Tripping	Schematic Diagram	RailCorp	A	EL0322601
5.5.2	RailCorp Erskineville Substation 33kV WSA GIS Switchgear - Section 1 798 Feeder	Schematic Diagram	RailCorp	М	EL0455591
5.5.3	Prince Alfred Substation - Traction Supply Upgrade - 33kV Feeders 746 & 798	Cable Route	RailCorp	A	EL0455551
5.5.4	Rozelle Substation - Pyrmont (SE) 798 Panel 4 Circuit Diagrams		RailCorp	6 drawings	One PDF File
5.5.4.1	Rozelle Substation - Pyrmont (SE) 798 33kV Fluair F400 Switchgear Panel 4 - Sheet 1 of 6	Circuit Diagram	SRA	В	EL0001140
5.5.4.2	Rozelle Substation - Pyrmont (SE) 798 33kV Fluair F400 Switchgear Panel 4 - Sheet 2 of 6	Circuit Diagram	SRA	В	EL0001141
5.5.4.3	Rozelle Substation - Pyrmont (SE) 798 33kV Fluair F400 Switchgear Panel 4 - Sheet 3 of 6	Circuit Diagram	SRA	В	EL0001142
5.5.4.4	Rozelle Substation - Pyrmont (SE) 798 33kV Fluair F400 Switchgear Panel 4 - Shoot 4 of 6	Circuit Diagram	SRA	В	EL0001143
5.5.4.5	Rozelle Substation - Pyrmont (SE) 798 33kV Fluair F400 Switchgear Panel 4 - Sheet 5 of 6	Circuit Diagram	SRA	В	EL0001144
5.5.4.6	Rozelle Substation - Pyrmont (SE) 798 33kV Fluair F400 Switchgear Panel 4 - Sheet 6of 6	Circuit Diagram	SRA	В	EL0001145
5.5.5	PA Substation Feeder 798 Schematic Diagram	HILL THE SECTION OF THE		7 Drawings	One PDF File
5.5.5.1	Prince Alfred 33kV Feeder 798 Fluair F400 Switchgear - Sheet 1 of 7	Schematic Diagram	RailCorp	В	EL0362932
5.5.5.2	Prince Alfred 33kV Feeder 798 Fluair F400 Switchgear - Sheet 2 of 7	Schematic Diagram	RailCorp	В	EL0362933
5.5.5.3	Prince Alfred 33kV Feeder 798 Fluair F400 Switchgear - Sheet 3 of 7	Schematic Diagram	RailCorp	В	EL0362934
5.5.5.4	Prince Alfred 33kV Feeder 798 Fluair F400 Switchgear - Sheet 4 of 7	Schematic Diagram	RailCorp	В	EL0362935
5,5.5.5	Prince Alfred 33kV Feeder 798 Fluair F400 Switchgear - Sheet 5 of 7	Schematic Diagram	RallCorp	В	EL0362936
5.5.5.6	Prince Alfred 33kV Feeder 798 Fluair F400 Switchgear - Sheet 6 of 7	Schematic Diagram	RailCorp	В	EL0362937
5.5,5.7	Prince Alfred 33kV Feeder 798 Fluair F400 Switchgear - Sheet 7 of 7	Schematic Diagram	RailCorp	В.	EL0362938
5.5.6	PA Substation - Erskineville Feeder 798 Cable Support			2 Drawings	One PDF File
5.5.6.1	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route Erskineville Tunnel Portal Cable Support - Sheet 1 of 2	Arrangement	RailCorp	E	EL0254226
5.5.6.2	PA Sub to Erskinoville Sub 33kV Feeder 798 Cable Route - Proposed Core Hole Into Up Illawarra Relief Track from Erskinoville Substation - Sheet 2 of 2	Layout	RailCorp	E	E0254227
5.5.7	PA Sub - Erskineville Sub Feeder 798 Cable Route details			14 Drawings	One PDF File
5.5.7.1	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 1 of 20	Leyout	RailCorp	D	EL0265232

EXECUTION VERSION -

Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014
Doc ID 607060023/v9



Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE I REVISION	REFERENCE NO.
5.5.7.2	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 2 of 20	Layout	RailCorp	D	EL0265203
5.5.7.3	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 3 of 20	Layout	RailCorp	D	EL0265234
5.5.7.4	PA Sub to Erskineville Sub 33kV Feeder 798 Ceble Route - Route Delails - Sheet 4 of 20	Layout	RailCorp	D	EL0265235
5.5.7.5	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 5 of 20	Layout	RailCorp	D	EL0265236
5.5.7.6	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Delails - Sheet 6 of 20	Layout	RailCorp	E	EL0265237
5.5.7.7	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 7 of 20	Layout	RailCorp	E	EL0265238
5.5.7.8	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 8 of 20	Layout	RailCorp	E E	EL0265239
5.5.7.9	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 9 of 20	Layout	RailCorp	D	EL0265240
5.5.7.10	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 10 of 20	Layout	RailCorp	D	EL0265241
5.5.7.11	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 11 of 20	Layout	RailCorp	D	EL0265242
5.5.7.12	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 12 of 20	Layout	RailCorp	D	EL0265243
5.5.7.13	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 13 of 20	Layout	RailCorp	D	EL0265244
5.5.7.14	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 14 of 20	Layout	RailCorp	D	EL0265245
5.5.7.15	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Detalls - Sheet 15 of 20	Layout	RailCorp	D	EL0265246
5.5.7.16	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 16 of 20	Layout	RailCorp	D	EL0265247
5.5.7.17	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 17 of 20	Layout	RailCorp	D	EL0265248
5.5.7.18	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 18 of 20	Layout	RailCorp	D	EL0265249
5.5.7.19	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Sheet 19 of 20	Layout	RailCorp	D	EL0265250
5.5.7.20	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Proposed Core Hole into Up Illawarra - Relief Track from PA Substation Cable Riser - Sheet 20 of 20	Layout	RailCorp	D	EL0265251
5.5.8	PA Sub - Erskineville Sub Feeder 798 Cable Redfern Station			2 Drawings	One PDF File
5.5.8.1	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route Redfern Station Northern Tunnel - Sheet 1 of 2	Arrangement and Sections	RailCorp	(F.	EL0254224
5.5.8.2	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route Redfern Station Cable Ladder Supports - Sheet 2 of 2	Details	RailCorp	I E	EL0254225
5.5.9	PA Sub - Erskineville Sub Feeder 798 Cable Route Reflected Ceiling Plan			3 Drawings	One PDF File
5.5.9.1	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Reflected Ceiling Plan Redfern station - Sheet 1 of 1	Layout and Sections	RailCorp	C	EL0265252
5.5.9,2	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route details - Prince Alfred Substation Cable Route - Sheet † of 1	Cable Route	RailCorp	С	EL0265253

EXECUTION VERSION -

Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TINSW 2014

Doc ID 607060023/v9

T23 7765_10

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR /	DATE / REVISION	REFERENCE NO. DWG NO.
5.5.9.3	PA sub to Erskineville Sub 33kV Feeder 798 Cable Route - Route Details - Prince Alfred Sub Shaft - Sheet 1 of 1	Arrangement and Sections	RallCorp	C	EL0265254
5.5.10	PA Sub - Erskineville Sub Feeder 798 Cable Route Supports		1-10-	7 Drawings	One PDF File
5.5.10.1	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Standard Support Bracket & Clamp - Sheet 1 of 7	General Notes	RailCorp	E	FL0254217
5.5.10.2	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Standard Support Bracket & Clamp - Horizontal for concrete or solid clay brick - Sheet 2 of 7	Arrangement	RailCorp	D	EL0254218
5.5.10.3	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Standard Support Bracket & Clamp - Horizontal for single cable concrete mounting - Sheet 3 of 7	Arrangement	RailCorp	G	EL0254219
5,5,10,4	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Standard Support Bracket & Clamp - Vertical and diagonal for concrete mounting - Sheet 4 of 7	Arrangement	RailCorp	D	EL0254220
5.5.10.5	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Standard Support Bracket & Clamp - Horizontal for roof beam mounting - Sheet 5 of 7	Arrangement	RailCorp	D	EL0254221
5.5.10.6	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Standard Support Bracket & Clamp - Horizontal external in ducting - Sheet 6 of 7	Arrangement	RailCorp	D	EL0254222
5.5.10.7	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Standard Support Bracket & Clamp - Vertical external in ducting - Sheet 7 of 7	Arrangement	RailCorp	C	EL0254223
5.5.11	PA Sub - Erskineville Feeder 798 Cable Route Joint Support	D. 100 (100 (100 (100 (100 (100 (100 (100	1 1	2 Drawings	One PDF File
5.5.11.1	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Feeder Joint Supports - Sheet 1 of 2	Arrangement and Sections	RailCorp	С	EL0446602
5.5.11.2	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Redfern Station Feeder Joint Supports - Sheet 2 of 2	Arrangement and Sections	RailCorp	С	EL0446603
5.5.12	PA Sub - Erskineville Feeder 798 Cable Redfern Station Northern Tunnel	1	1-2-2	2 Drawings	One PDF File
5.5.12.1	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Redfern Station Northern Tunnel - Sheet 1 of 2	Arrangement and Sections	RailCorp	С	EL0427423
5.5.12.2	PA Sub to Erskineville Sub 33kV Feeder 798 Cable Route - Redfern Station Northern Tunnel - Sheet 2 of 2	Support Details	RailCorp	С	EL0427424
6.0	PA Substation - 11kV Remote End drawings				Folder
6.1	640 Signal Box No.1 Substation		1		Sub-Folder
6.1.1	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control Schematic Diagram		11	15 Drawings	One PDF File
6.1.1.1	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 1 of 10	Schematic Diagram	RailCorp	А	EL0015400
6.1.1.2	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 2 of 10		RailCorp	Α	EL0015401

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. DWG NO.
6.1.1.3	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 3 of 10		RailCorp	٨	EL0015402
6.1.1.4	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 4 of 10		RailCorp	A	EL0015403
6.1.1.5	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 5 of 10		RailCorp	Α	EL0015404
6.1.1.6	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 6 of 10		RailCorp	A	EL0015405
6.1.1.7	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 7 of 10		RailCorp	A	EL0015406
6.1.1.8	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 8 of 10		RallCorp	A	EL0015407
6.1.1.9	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 9 of 10		RailCorp	A	EL0015408
6.1.1.10	Sydney Signal Box Substation No.1 11kV Feeder 640 Protection & Control - Sheet 10 of 10		RailCorp	A	EL0015409
6.1.2	Sydney Signal Box Substation No.1 11kV Switchgear Arrangement		RailCorp	A	EL0015356
6,1.3	Prince Alfred - Sydney Signal Box 11kV Feeder 640 Pilot Wire Protection and Inter-Tripping Schematic Diagram		RailCorp	С	EL0227/14
6.1.4	Sydney Signal Box HV Switchboard SCADA Sydney Signal Box Upgrade Termination Schedule - Sheet 4 of 6		RailCorp	В	EL0172646
6.1.5	Sydney Signal Box Substation Supply Arrangement Schematic Diagram		SRA	Α	EL0005521
6.2	637 Transport House			5 Drawings	Sub-Folder
6.2.1	Transport Hse - Prince Alfred Substations - 11kV Feeder 637 Pilot Wire	Schematic Diagram	ST	B	EL0537623
6.2.2	City Area Substations - PA, Macquarie St & Transport House Proposed 11kV & 415V Connection Diagram		PTC NSW	В	EL0012634
6.2.3	Circuit Diagram of 11kV LMVP Switchgear for Sate Rail Authority of NSW Argyle Substation Feeder Panel 2		SRA	A	EL0147677
6.2.4	Transport House Substations 11kV Feeder 637 ACCB	Schematic Diagram	ST	В	EL0537619
6.2.5	Prince Alfred Substations 11kV Feeder 637 ACCB	Schematic Diagram	ST	В	EL0537638
6.3	11kV Pilot Wire Scheme			7 Drawings	Sub-Folder
6.3.1	11kV Pilot Wire Protection Schematic Diagram (Send End)	-	RSA	C	EL0042647
6.3.2	11kV Pilot Wire Protection Schematic Diagram (Receive End)		RSA	В	EL0042648
6.3.3	11kV Pilot Wire Protection Schematic Diagram (Send End)		RSA	c	EL0042649
6.3.4	11kV Pilot Wire Protection Schematic Diagram (Receive End)		RSA	В	EL0042648
6.3.5	City Underground 11kV Pilot Wire Protection Schematic Diagram - Sheet 1 of 2		RSA	A	EL0046414
6.3.6	City Underground 11kV Pilot Wire Protection Schematic Diagram - Sheet 2 of 2	-	RSA	A	EL0046415

EXECUTION VERSION –
Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014

Doc ID 607060023A9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
6.3.7	City Underground 11kV Pilot Wire Protection Schematic Diagram		SRA	A	EL0002569
6.4	Wynyard Station No 2 Substation			2 Drawings	Sub-Folder
6.4.1	Prince Alfred Substation Feeder 834 11kV ACB Protection & Control	Schematic Diagram	PTC NSW	С	EL0016136
6.4.2	Metropolitan Area Wynyard Station No 1 and No 2 Substation		RailCorp	C1	EL0143923
6.5	Argyle			2 Drawings	Sub-Folder
6.5.1	Schematic Wiring Diagram Panels 3, 4, 9 and 11 (No1 11kV/415 Tx - Feeder No 614 - No 2 11kV/415V Tx - Feeder 633)		PTC NSW	В	EL0024033
6.5.2	Circuit Diagram of 11kV LMVP Switchgear for State Rail Authority of NSW Argyle Substation Feeder Panels 2, 3, 8, 9 & 10		SRA	2	EL0001514
6.6	632 Sydney Transformer Room No 1		T. T. T.	1 Drawing	Sub-Folder
6.6.1	Sydney Transformer Room No 1 11kV Switchgear Construction Details Front View		SRA	В	EL002086
6.7	631 ORS Feeder 631 Schematic Diagram				Sub-Folder
6.7.1	631 ORS Feeder 631 Schematic Diagram			9 Drawings	One PDF File
6.7.1.1	Sydney Transformer Room No 1 & 2 - 11kV Switchgear Control Schematic for 11kV/433V 750KVA Transformers & BusTie - Sheet 1 of 2		SRA	F	EL0002476
6.7.1.2	Sydney Transformer Room No 1 & 2 - 11kV Switchgear Protection Schematic - 11kV/433V 750KVA Transformers & BusTie - Sheet 2 of 2		SRA	D	EL0002477
6.7.1.3	Sydney Transformer Room - 11kV Switchgear Control Schematic - 631, 632, 649, 600 Incomers - Sheet 1 of 2		SRA	D	EL0002478
6.7.1.4	Sydney Transformer Room - 11kV Switchgear Protection Schematic for 631, 632, 648, 600 Incomers - Sheet 2 of 2		SRA	D	EL0002479
6.7.1.5	Sydney Transformer Room No 1 - Indicating Lights, Internal Lights & Heaters Schematic Diagram		SRA	D	EL0002480
6.7.1.6	Sydney Transformer Room No 2 - Indicating Lights, Internal Lights & Heaters Schematic Diagram		SRA	D	EL0002481
6.7.1.7	Sydney Transformer Room No 1 & 2 - 11kV Switchgear Schernatic Diagram		SRA	C	EL0002482
6.7.1.8	Sydney Transformer Room No 1 - 11kV Switchgear Equipment Schedule	1 10	SRA	В	EL0002483
6.7.1.9	Sydney Transformer Room No 2 - 11kV Switchgear Equipment Schedule		SRA	D	EL0002484
6.8	Redfern No 2 Substation 620				Sub-Folder
6.8.1	Sydney Signal Box No 2 Feeder 620 Protection & Control	47.6.50		10 Drawings	One PDF File
6.8.1.1	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 1 of 10	Schematic Diagram	RailCorp	A	EL0015380

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Dec ID 607060023/v9

Contract Number ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
6.8.1.2	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 2 of 10	Schematic Diagram	RailCorp	A	EL0015381
6.8.1.3	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 3 of 10	Schematic Diagram	RailCorp	Α	EL0015382
6.8.1.4	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 4 of 10	Schematic Diagram	RailCorp	Α	EL0015383
6.8.1.5	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 5 of 10	Schematic Diagram	RallCorp	А	EL0015384
6.8.1.6	Sydney Signal Box Substation No 2 - 11kV Feedor 620/2 Protection & Control - Sheet 6 of 10	Schematic Diagram	RailCorp	Α	EL0015385
6.8.1.7	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 7 of 10	Schematic Diagram	RailCorp	Α	EL0015386
6.8.1.8	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 8 of 10	Schematic Diagram	RallCorp	Α	EL0015387
6.8.1.9	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 9 of 10	Schematic Diagram	RailCorp	Α	EL0015388
6.8.1.10	Sydney Signal Box Substation No 2 - 11kV Feeder 620/2 Protection & Control - Sheet 10 of 10	Schematic Diagram	RailCorp	Α	EL0015389
6.8.2	Sydney Signal Box Substation No 2 - 11kV Switchgear Arrangement		RailCorp	A	EL0015354
6.8.3	Redfern No 1 & 2 Substation Arrangement		PTC NSW	A	EL0016547
6.9	619 Redfern No 1 Substation			4 Drawings	Sub-Folder
6.9.1	Schematic Diagram for Panels 2 & 4 (Part 1) Redfern No 1 Substation		HSS	В	EL0002105
6.9.2	Schematic Diagram for Panels 2 (Part 2) Redfern No 1 Substation		HSS	В	EL0002106
6.9.3	Schematic Diagram For Panels 3 (Part 1) Redfern No 1 Substation		HSS	В	EL0002107
6.9.4	Schematic Diagram For Panels 3 & 4 (Part 2) Redfern No 1 Substation		HSS	В	EL0002108
6.1	Feeder 618 Central				Sub-Folder
6.10.1	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic			11 Drawings	One PDF File
6.10.1,1	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 1 of 11		RailCorp	Α	EL0439329
6.10.1.2	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 2 of 11		RailCorp	Α	EL0439330
6.10.1.3	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 3 of 11		RailCorp	В	EL0439331
6.10.1.4	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 4 of 11		RailCorp	Α	EL0439332
6.10.1.5	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 5 of 11		RailCorp	Α	ELD439333
6,10.1.6	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 6 of 11		RailCorp	A	EL0439334
6.10.1.7	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 7 of 11		RailCorp	A	EL0439335
6.10.1.8	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 8 of 11		RailCorp	Α	EL0439336
6.10.1.9	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 9 of 11		RailCorp	A	EL0439337

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023N9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR	DATE / REVISION	REFERENCE NO. /
6.10.1.10	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 10 of 11		RailCorp	A	EL0439338
6,10.1.11	Edgecliff Substation - 11kV Feeder 618 Protection & Control Schematic - Sheet 11 of 11		RailCorp	Α	EL0439339
6.10.2	Martin Place No 2 Substation - 11kV Feeder 618 Schematic Diagram			9 Drawings	One PDF File
6.10.2.1	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 1 of 9	Schematic Diagram	RailCorp	A	EL0542952
6.10.2.2	Martin Place No 2 Substation - 11kV Fooder 618 Schneider SM6 - Sheet 2 of 9	Schematic Diagram	RailCorp	Α	EL0542953
6 10.2.3	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 3 of 9	Schematic Diagram	RailCorp	Α	EL0542954
6.10.2.4	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 4 of 9	Schematic Diagram	RailCorp	A	EL0542955
10.2.5	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 5 of 9	Schematic Diagram	RailCorp	Α	EL0542956
6.10.2.6	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 6 of 9	Schematic Diagram	RailCorp	Α	EL0542957
6.10.2.7	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 7 of 9	Schematic Diagram	RailCorp	Α	EL0542958
6,10.2.8	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 8 of 9	Schernatic Diagram	RailCorp	Α	EL0542959
6.10.2.9	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 9 of 9	Schematic Diagram	RailCorp	Α	EL0542960
6.10.3	Edgecliff - Prince Alfred Substations - Traction Supply Upgrade 11kV Feeder 618 Pilot Wire	Schematic Diagram	RailCorp	В	EL0498121
6.10.4	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6	Termination Diagram		3 Drawings	One PDF File
6.10.4.1	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 1 of 3	Termination Diagram	RailCorp	Α	EL0542969
6.10.4.2	Martin Place No 2 Substation - 11kV Feeder 618 Schneider SM6 - Sheet 2 of 3	Termination Diagram	RailCorp	Α	EL0542970
6.10.4.3	Martin Place No 2 Substation - 11kV Feeder 616 Schneider SM6 - Sheet 3 of 3	Termination Diagram	RailCorp	A	EL0542971
6.10.5	No 618 11kV Feeder ACB Protection & Control	Schematic Diagram	DoR NSW	С	CV0016126
6.10.6	Substations Feeder 618 Edgecliff - Prince Alfred Pilot Wire Protection	Schematic Diagram	PTC NSW	А	EL0013200
6.11	Feeder 617 Central				Sub-Folder
6.11.1	Edgecliff Substation - 11kV Feeder 617 Protection & Control Schematic			6 Drawings	One PDF File
6.11.1.1	Edgediff Substation - 11kV Feeder 617 Protection & Control Schematic - Sheet 1 of 8		RailCorp	Α	EL0439243
6.11.1.2	Edgecliff Substation - 11kV Feeder 617 Protection & Control Schematic - Sheet 2 of 8		RailCorp	A	EL0439244
6.11.1.3	Edgediff Substation - 11kV Feeder 617 Protection & Control Schematic - Sheet 3 of 8		RailCorp	A	EL0439245

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014 Doc ID 607060023/ve T2317765 "C

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
6.11.1.4	Edgecliff Substation - 11kV Feeder 617 Protection & Control Schematic - Sheet 4 of 8	I L	RallCorp	Α	EL0439246
6.11.1.5	Edgecliff Substation - 11kV Feeder 617 Protection & Control Schematic - Sheet 5 of 8		RailCorp	Α	EL0439247
6.11.1.6	Edgecliff Substation - 11kV Feeder 617 Protection & Control Schematic - Sheet 6 of 8		RailCorp	Α	EL0439248
6.11.1.7	Edgecliff Substation - 11kV Feeder 617 Protection & Control Schematic - Sheet 7 of 8		RailCorp	Α	EL0439249
6.11,1.8	Edgecliff Substation - 11kV Feeder 617 Protection & Control Schematic - Sheet 8 of 8		RailCorp	A	EL0439250
6.11.2	Substations Feeder 617 Edgecliff - Prince Alfred Pilot Wire Protection	Schematic Diagram	PTC NSW	В	EL0013194
6.11.3	Edgediff - Prince Alfred Substations - Traction Supply Upgrade 11kV Feeder 617 Pilot Wire	Schematic Diagram	RaliCorp	В	EL0498120
6.11.4	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6	Termination Diagram		3 Drawings	One PDF File
6.11,4,1	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 1 of 3	Termination Diagram	RailCorp	Α	EL0542924
6.11.4.2	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 2 of 3	Termination Diagram	RailCorp	Α	EL0542925
6.11.4.3	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 3 of 3	Termination Diagram	RailCorp	Α	EL0542926
6.11.5	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6	Schematic Diagram		10 Drawings	One PDF File
6.11.5.1	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 1 of 10	Schematic Diagram	RailCorp	Α	EL0542907
6.11.5.2	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 2 of 10	Schematic Diagram	RailCorp	Α	EL0542908
6.11.5.3	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 3 of 10	Schematic Diagram	RailCorp	A	EL0542909
6.11.5.4	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 4 of 10	Schematic Diagram	RailCorp	Α	EL0542910
6.11 5.5	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 5 of 10	Schematic Diagram	RailCorp	Α	EL0542911
6.11.5.6	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 6 of 10	Schematic Diagram	RallCorp	A	EL0542912
6.11,5.7	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 7 of 10	Schematic Diagram	RailCorp	Α	EL0542913
6.11.5.8	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 8 of 10	Schematic Diagram	RailCorp	A	EL0542914
6.11.5.9	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 9 of 10	Schematic Diagram	RailCorp	Α	EL0542915
5.11,5.10	Martin Place No 1 Substation - 11kV Feeder 617 Schneider SM6 - Sheet 10 of 10	Schematic Diagram	RailCorp	Α	EL0542916
6.11.6	Prince Alfred Substation-Traction Supply Upgrade - 11kV Feeder 617 ACCB	Schematic Diagram	RailCorp	Α	EL0498138
6.12	Feeder 616 Wynyard Station Substation No 1		7	2 Drawings	Sub-Folder
6.12.1	Schematic Wiring Diagram Panels 616-642-634-647 (Part 1 of 2)		HSS	В	EL0020362

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 807060023/v9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO./
6.12.2	Schematic Wiring Diagram Panels 616-642-634-647 (Part 2 of 2)		HSS	В	EL0020364
6.13	Sydney Transformer Room No 2			1 Drawing	Sub-Folder
6.13.1	Sydney Transformer Room No 2 - 11kV Switchgear Construction Details Front View		RailCorp	Α	EL002093
7.0	Remote Sites Information & Photos				Folder
7.1	Prince Alfred Substation Information (3 pages)		TINSW	Jul-14	PDF
7.2	Argyle Substation Information (7 pages)		TfNSW	Jul-14	PDF
7.3	Rozelle Switching Station Information (9 pages)		TfNSW	Jul-14	PDF
7.4	Prince Alfred Substation Electrical and Civil Drawings			20 Drawings	One PDF File
7.4.1	Prince Alfred Substation Rectifier Floor Arrangement		SRA	C	EL0002615
7.4.2	Prince Alfred Substation Earthing Layout		PTC NSW	В	EL0017583
7.4.3	Eastern Suburbs Railway 11 kV & 1500V Feeders Shaft & Cable Ducts at PA Sub Layout		DoR NSW	С	EL0021938
7.4.4	Prince Alfred Substation No.3 4000kW, 1500V Rectifier Unit Plinth, Floor & Wall Opening		DoR NSW	В	EL0024427
7.4.5	Substation Earth Pipes Location		DoR NSW	A	EL0026034
7.4.6	Prince Alfred Substation Site Plan & General Layout		RSA	С	EL0178527
7.4.7	Prince Alfred Substation Cables - Diagram		NSWGR&T	N/A	EL0216096
7.4.8	Prince Alfred Substations - Traction Supply Upgrade 33 kV AC Switch House		RailCorp	Α	EL0474447
7.4.9	Prince Alfred Substations - Traction Supply Upgrade Equipment Layout & Cabling (Ground Floor)		RailCorp	Α	EL0476467
7.4.10	Prince Alfred SS to Town Hall HV Ariel Lines & cables 33 kV Feeder 747 Replacement		RailCorp	A	EL0496875
7.4.11	Prince Alfred Substation 33 kV AC Switch House City Circle Line Plans Elevations and Section		RSA	Α	CV0066390
7.4.12	Prince Alfred Substation 33 kV AC Switch House Southern End Steel Work		RSA	Α	CV0066392
7.4.13	Feeders 33 kV Underground Cables White Bay PS to Prince Alfred SS Layout		DoR NSW	В	CV0365886
7.4.14	The Sydney County Council		SCC		CV0411015
7.4.15	Prince Alfred Sidings Prince Alfred Substation AC Switch House General Arrangement		RSA	A	CV0009135
7.4.16	Prince Alfred Sidings Prince Alfred Substation AC Switch House Steelwork		RSA	Α	CV0009136

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023, 9) off door

(607060023_9).pdf.docx © TfNSW 2014

Doc ID 807060023M9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. /
7.4.17	High and Low Tension Cables Prince Alfred Substation to Central Substation via Chalmers Street & Eddy Avenue		NSWGR&T	N/A	CV0064544
7.4.18	Prince Alfred Substation Floor Re-Inforcement Plan		NSWR	N/A	CV0064614
7.4.19	Prince Alfred Substation AC Switch House		NSWR	N/A	CV0064619
7.4.20	Prince Alfred Park Substation	Elevations & Sections	NSWR	N/A	
8.0	Electrical Authorisations				Folder
8.1	Engineering Instruction - Certification Required for Work on the Electrical Network		TfNSW	23-Feb-15	PDF
8.2	Personnel Certifications - Electrical Authorisations		TINSW	5-Sep-14	PDF
9.0	Chalmers Street Tender Template Program				Folder
9.1	Chalmers Street Tender Template Program – Status October 15		TfNSW	1-Oct-15	PDF
10.0	Operational Readiness and Commissioning				Folder
10.1	PSU Operational Readiness Plan (ORP)		TfNSW	30-Jul-14	PDF
10.2	Commissioning Event Plan Template		TfNSW	Draft	PDF
10.3	Checklist for review of Commissioning Event Plan		TfNSW	Draft	PDF
10.4	Commissioning and Operational Readiness Timeframe Requirements		TfNSW		PDF
10.5	Inspection and Test Plan - Minimum Requirements		TfNSW	26-Sep-13	PDF
10.6	Inspection and Test Plans - Rail Track Minimum Requirements		TfNSW	26-Sep-13	PDF
10.7	Commissioning and Operational Readiness (COR) Procedure		TfNSW	17-Jul-13	PDF
10.8	Commissioning Management Plan Template		TfNSW	25-Jul-13	PDF
10.9	Management of Engineering During Commissioning Phase		TfNSW	26-Sep-13	PDF
11.0	Configuration Change Request				Folder
11.1	Configuration Change Request 4TP-FT-256/6.0		TfNSW	6.0	PDF
11.2	Configuration Management Plan for TP 4TP PR 186 3.0		TfNSW	3.0	PDF
11.3	Sydney Trains Configuration Management Plan Version 2		ST	2.0	PDF
11.4	Sydney Trains Configuration Management Plan - Power Point Presentation		ST	3-Sep-15	PDF
12.0	Safety Assurance Plan (Minor)				Folder
12.1	Safety Assurance Plan (Minor) 4TP-FT-314/1.0		TINSW	1.0	PDF

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © T/NSW 2014

Doc ID 607060023M9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
13.0	Sample - Local Instruction				Folder
13.1	Sample - Local Instructions (Edgecliff Substation January 2013 ER0301)		TfNSW	15-Jan-13	PDF
14.0	Relevant Sectioning Diagrams				Folder
14.1	Redfern to St. Peters - 1500 Volt Sectioning Diagram		RailCorp	N4	EL0358428
14.2	Central to Redfern - 1500 Volt Sectioning Diagram		ST	P3	EL0358427
14.3	Lee Street Substations - Power Supply Upgrade - Proposed Sectioning Diagram	Single Line Schematic	GHD	J2	EL0542607
14.4	Sydney Yard - 1500 Volt Sectioning Diagram		RailCorp	J2	EL0358425
15.0	Technical Note - Change Authorisation Process for Proposed Operating Diagram				Folder
15.1	Technical Note - TN 003:2013V2 - Change Authorisation Process for Proposed Operating Diagram	Technical Note	TfNSW	21-Aug-14	PDF
15.2	Technical Note - TN 049:2015 - Update to TMD 001 CAD and Drafting Manual - Drawing title block update	Technical Note	TINSW	21-Aug-15	PDF
16.0	Addendum				Folder
16.1	Track Insulation Plans	Folder	TfNSW		
16,1.1	Sydney Yard track insulation Plan	jpg	PTC NSW	1-Aug-02	\$G0044607
16.1.2	ESR - Central Domain Portal Track Insulation Plans - 0041881_091978C	jpg	PTC NSW	1-Sep-78	SG0041881
16.1.3	ESR - Edgecliff Bondi Junction Track Insulation Plans- 0407974_082001C	jpg	RailCorp	1-Dec-10	SG0041695
16.1.4	ESR - Martin Place-Edgecliff Track Insulation Plans- 0041944_091978C	ipg	PTC	1-Sep-78	SG0041944
16.1.5	Evaleigh Track Insulation Plans - 0041685_092002C	lpg	RIC	1-Sep-02	SG0041685
16.1.6	New Southern Railway - Central - Turella Track Insulation Plans - 0219776_112003C	jpg	RIC	1-Dec-99	SG0219776
16.1.7	Redfern-Macdonaldtown & Erskinville Track Insulation Plans - 9026947_121998C	jpg	PTC NSW	1-Sep-31	SG0026947
16.1.8	Sydney Area (Part 1) Goulburn Street-Redfern Track Insulation Plans - 0407962_122009C	jpg	RailCorp	1-Apr-10	SG0407962
16.1.9	Sydney Area (Part 2) Redfern-Erskinville Track Insulation Plans - 0407956_122009C	īpg	RailCorp	1-Dec-09	SG0407956
16.1.10	Sydney Yard 0.000 to 0.830km Track Insulation Plans - 0046105_062010C	jpg	RailCorp	1-Jun-10	SG0046105
18.2	DSMSB No 1 & 2 415 V Switchboards Drawings	pdf binder (Combined)			

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation

Doc ID 607060023A9

(607060023_9).pdf.docx © TfNSW 2014

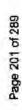
Page 199 of 289



Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
15.2,1	Distribution Supply Main Switchboard2 Front View (with Doors)	pdf	EA Pty	1-Jun-08	B0270012-GA-021 C
16.2.2	Distribution Supply Main Switchboard2 Front View without Outer Doors	pdf	EA Pty	1-Jun-08	B0270012-GA-022 C
16.2.3	Distribution Supply Main Switchboard2 Front View (without Doors)	pdf	EA Pty	1-Jun-08	B0270012-GA-023 C
16.2.4	Distribution Supply Main Switchboard2 Side View	pdf	EA Pty	1-Jun-08	B0270012-GA-024 C
16.2.5	Distribution Supply Main Switchboard2 Bottom & Horizontal View	pdf	EA Pty	1-Jun-08	80270012-GA-025 C
16.2.6	Distribution Supply Main Switchboard2 Rear View (With Covers)	pdf	EA Pty	1-Jun-08	B0270012-GA-026 C
16.2.7	Distribution Supply Main Switchboard2 Construction Details	pdf	EA Pty	1-Jun-08	B0270012-GA-029 C
16.2.8	Distribution Supply Main Switchboard2 Single Line Diagram	pdf	EA Pty	1-Jun-08	B0270012-GA-030 C
16.3	Possession Calenders				
16.3.1	Possession Calender - Configuration - 2015-2016	pdf	ST	NA	NA
16.3.2	Possession Calender - Configuration - 2016-2017 Draft 4	pdf	ST	NA	NA
16.3.3	Possession Calender - Configuration - 2017-2018 Draft 4	pdf	ST	NA	NA
16.3.4	Possession Calendar -Configuration - 2018-2019 - Draft 2	pdf	ST	NA	NA.
16.3.5	Possession Calendar -Configuration- 2015-2016 - Version 5	pdf	ST	NA	NA
164	Overhead Wiring Drawings Sydney yard				
16.4.1	Railway Overhead Wiring Transmission Line and Cables Sydney Yard	pdf	SRA	1-Aug-89	EL0004348 D
16.4.2	Railway Overhead Wiring Transmission Line and Cables Sydney Yard	pdf	SRA	1-Aug-89	EL0004351 F
16.4.3	Railway Overhead Wiring Transmission Line and Cables Sydney Yard	pdf	SRA	1-Aug-89	EL0004353 E
16.4.4	Railway Overhead Wiring Transmission Line and Cables Sydney Yard	pdf	SRA	1-Aug-89	EL0004354 D
16.4.5	Railway Overhead Wiring Transmission Line and Cables Sydney Yard	pdf	SRA	1-Aug-89	EL0004944 F
18.4.6	Rallway Overhead Wiring Transmission Line and Cables Sydney Yard	pdf	SRA	1-Aug-89	EL0004945 F
16.5	Cable Schedules		NI COLL		
16.5.1	Chalmers St Substation - Preliminary SCADA I/O Schedule	Excel	Trinsw		
16.5.2	Chalmers St Substation - Preliminary Cable Schedule	Excel	TfNSW		
166	Power Study	CT I LC LC T			
16.6.1	Power Study 6 Scope of Works Report version 1 4	Revision 1.4	ST	1-Feb-08	ER0134
18.6.2	PA Concept DC Power Study Scope report	Revision 1	ST	1-Oct-12	ER0391

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TINSW 2014
Doc ID 607060023/v9



12317765_10

Power Supply Upgrade Program Design & Construction of Chalmers Street Substation and Granville Junction Substation Contract Number, ISD-18-7801

NSW for NSW

TTEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
16.6.3	2013 Timetable Assurance Scoping report		ST	1-May-13	ER0487
16.8.4	2013 Timetable Assurance Scoping report - Appendices		ST	1-May-13	ER0487
16.6.5	Airport Line capacity Improvement Project - DC Study Scope Report		ST	1-Jun-14	ER0662
16.6.6	2018 Timetable Integrated Rail Delivery Program - Scenario 1 - DC Power Study Report (1 of 4)		ST	1-Sep-15	ER0806
16.6.7	2018 Timetable Integrated Rail Delivery Program - Scenario 1 - DC Power Study Report (2 of 4)		TS.	1-Sep-15	ER0806
16.6.8	2018 Timetable Integrated Rail Delivery Program - Scenario 1 - DC Power Study Report (3 of 4)		ST	1-Sep-15	ER0806
16.6.9	2018 Timetable Integrated Rail Delivery Program - Scenario 1 - DC Power Study Report (4 of 4)		ST	1-Sep-15	ER0806
16.7	Additional Drawings				
16.7.1	High Voltage Site Communications Cabinet Arangement		Syd		MET-RL-0363 L
16.7.2	Prince Alfred Substation rectifier & A.C. Switch House High Voltage Cables Arrangement		DoR		
16.7.3	Erskinville To Bondi Juncilon 1500V Sectioning Diagram		Syd		EL0081059 B2
16.7.4	Chalmers St Substation Area Optical Fibre Arrangements Cable Schematic		Syd Trains	1-Dec-14	PAS B2 CD 0170 C
16.7.5	Sketch 3 - Contractor office space.		TRNSW	¥	NA
16.7,6	Sketch RD151006-1	Folder	WSNIT	NA	NA
16.7.7	Sketch RD151006-2		TINSW	NA	NA
16.7.8	Sketch RD151006-3		TRNSW	NA	NA
16.8	Chalmers St Substation - Native CAD Drawings				
16.9	New and revised documentation				
16.9.1	Additional 1500V DC feeders Scope of Works	Jpd			
16.9.2	Chalmers St Substation Determination Report)pd	TRNSW	1-Nov-15	Final
16.9.3	List of the equipment Decommissioning from PA	Excel	TRNSW		NA
16.9.4	Chalmers St Substation Cable Stock - List	Excel	THNSW	NA	NA
16.9.5	Revised equipment issue list	word	TRNSW	NA	NA
16.9.6	Revised Work Interface Schedule	word	TRNSW	NA	ΝΑ

Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014 EXECUTION VERSION -Doc ID 607060023A9

Contract Number: ISD-18-7801

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
16.9.7	Chalmers Street Substation - Appendix H7 - Sustainable Design Guidelines Checklist - Version 3	Excel	TINSW		
16.98	7tp-st-114 - NSW Sustainable Design Guidelines	pdf	TfNSW		
14.2	Central to Redforn - 1500 Volt Sectioning Diagram		ST	P3	EL0358427
14.3	Lee Street Substations - Power Supply Upgrade - Proposed Sectioning Diagram	Single Line Schematic	GHD	J2	EL0542607
14.4	Sydney Yard - 1500 Volt Sectioning Diagram		RailCorp	J2	EL0358425
15.0	Technical Note - Change Authorisation Process for Proposed Operating Diagram				Folder
15.1	Technical Note - TN 003 2013V2 - Change Authorisation Process for Proposed Operating Diagram	Technical Note	TfNSW	21-Aug-14	PDF
15.2	Technical Note - TN 049-2015 - Update to TMD 001 CAD and Drafting Manual - Drawing title block update	Technical Note	TfNSW	21-Aug-15	PDF

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/v9



In relation to Portion 3:

Item	Description / Drawing Title	Author / Source	Date / Revision	Reference No / DWG No	Status
Document	Power Supply Upgrades (PSU) Program Operational Readiness Plan (ORP)	Lee Baxter	30/07/2014 0.3	3120584_4	Approved
Document	Granville Substation Soil and Water Testing	Sesl Australia	19/07/2013	26932A	Approved
Document	Storm Water Disposal Policy	Parramatta City Council	N/A	N/A	N/A
Document	Design and Development Guidelines - Stormwater Drainage	Parramatta City Council	N/A	N/A	Draft
Document	Electrical Type Approvals Interim process	ASA/TfNSW	26/06/2014	TN 050: 2014	Approved
Drawing	High Voltage Site Communications Cabinet Arrangement	Sydney Trains	7/08/2014	MET- RL0363L	Fina!
Drawing	Granville Substation - Outdoor Susbstation Extension General Arrangement and Details of Foundations & Steelwork	Department of Railways NSW	27/02/1940	CV 079967	Final
Drawing	Granville Substation - Upgrading and Modernization Roof Steelwork - Sheet 4	State Rail Authority of NSW	12/02/1981	CV 078011	Final
Drawing	Granville Substation - Arrangement	State Rail Authority of NSW	Rev C 21/11/2007	EL 0010738	Final
Drawing	Granville Substation - Cable and Earthing Arrangement	State Rail Authority of NSW	Rev B 18/03/1992	EL 0010810	Final
Drawing	Granville Substation - Arrangement	State Rail Authority of NSW	Rev C 18/03/1992	EL 0010739	Final
Drawing	Granville Substation - Cable Pits & Ducts Details	State Rail Authority of NSW	Rev C 15/07/1982	EL 0016916	Final
Drawing	Granville Substation Area - Cable Ducts & Man Holes Basic Requirements	State Rail Authority of NSW	Rev A 11/03/1981	EL 0010711	Final
Drawing	Granville Substation Area - Positive & Negative Cables Proposed Ducts Under Track	State Rail Authority of NSW	Rev B 29/09/1982	EL 0010731	Final
Drawing	Granville Substation - High & Low Voltage Feeders Layout	State Rail Authority of NSW	Rev G 29/04/2014	EL 0008666	Final
Drawing	AUTOCAD Drawings	Transport Sydney Trains	None	Tender Addendum1&4	Final
Drawing	Granville Junction Fibre Routes	Transport Sydney Trains	09/12/2015	None	Final



Item	Description / Drawing Title	Author / Source	Date / Revision	Reference No / DWG No	Status
Drawing	Granville Junction Track Insulation Part 1,2&3	Rail Infrastructure	01/07/04	E0970110.D GN	Final
Document	Granville Junction Substation Hazmat Report 03.12.2015	GHD	12/2015	21/24678	Final
Document	Westmead to Granville – Feeder 749 Galvanised Steel Troughing (GST) information, consisting of drawings CV0569472 (Rev A1), CV0569473 (Rev A1), CV0569492 (Rev A1) and 4x photos	TfNSW – Novo rail	17/09/15	CV0569472 (Rev A1), CV0569473 (Rev A1), CV0569492 (Rev A1)	Final
Pictures	PSU Granville Junction Substation – Land Ownership, Bold Street.	None	29/07/15	None	None
Document	Request for Permit Isolation (Sydney Trains)	Transport Sydney Trains	None	PR D 78501 FM 01	Final
Drawing	Granville Up Main South Retaining Wall – OHW Drawings	Public Transport Commission of NSW	19/12/75	CV0119692	Final
Drawing	Granville Up Main South Retaining Wall – OHW Drawings	Transport for NSW	20/08/13	EL0284249	Final
Drawing	Granville Up Main South Retaining Wall – OHW Drawings	Transport for NSW	20/08/13	EL0284250	Final
Drawing	Granville Up Main South Retaining Wall - OHW Drawings	Transport for NSW	20/08/13	EL0284251	Final
Drawing	Granville Up Main South Retaining Wall – OHW Drawings	Transport for NSW	20/08/13	EL0284252	Final
Drawing	Granville Up Main South Retaining Wall – OHW Drawings	Transport for NSW	20/08/13	EL0284253	Final
Orawing	Granville-Cabramatta Old Southline Railways OHW Layouts	State Rail Authority of NSW	22/06/94	EL0003777	Final
Orawing	Granville Substation Arrangement	State Rail Authority of NSW	01/6/82	EL0010738	Final
Drawing	Granville Substation Cable & Earthing Arrangement	State Rail Authority of NSW	01/6/82	EL0010810	Final
Orawing	Transmission Lines Strathfield - Granville Layout	Public Transport Commission of NSW	22/12/77	EL0016540	Final

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granvillo Substation (607060023_9).pdf.docx © TfNSW 2014

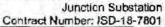
Doc ID 607060023A9



Item	Description / Drawing Title	Author / Source	Date / Revision	Reference No / DWG No	Status
Drawing	Granville Substation Cable Pits & Ducts Details	State Rail Authority of NSW	24/8/81	ELC016916	Final
Drawing	11kV Transmission Line Clyde to Aston St. Layout	Dept Railways, NSW	12/10/69	EL0032996	Final
Drawing	33kV Transmission Line Strathfield to Granvile Profile	State Rail Authority of NSW	None	EL0477676	Final
Drawing	Granville Substation 1500V Isolating & Rail Connect Switch Area	Railcorp	22/07/09	EL0496912	Final
Drawings	Clyde HV Aerial Lines and cables 33kV Feeder 718 & 722 Layout	Transport RailCorp	31/10/2012	EL0518817	Final
Drawing	Granville HV Aerial line and cable 33kv Feeder 718 & 722 Layout	Transport RailCorp	31/10/2012	EL0518818	Final
Drawing	Granville-Cabramatta HV Aerial Lines and Cables 33kV Feeder 719 and 11kV Feeder 641/1 Layout	Transport RailCorp	23/10/2012	EL0518929	Final
Drawing	1500V Feeder Arrangements – Clyde to Merrylands – Harris Park – Carlingford, Granville Junction SS Project – PSU Proposed 1500 Volt Sectioning 2759-GHD-HV-587715	Transport for NSW – GHD	30/09/2015	EL0587715	Final
Drawing	Electrical Operating Diagrams (sourced from Sydney Trains)	Transport Sydney Trains	15/01/15	207 & 207A	Draft
Document and Drawing	Concept Protection Design for 33kV Switchgear	Sydney Trains	1 Feb 2015	ER0866 / GRA33kV00	Draft
Document	BIM Option	Transport for NSW	None	4606920_3 4591036_2 4830594	Draft
Pictures	Information for 376, 749 & 537 Feeder Pits	None	None	None	None
Document	DRAFT HV Harmonic Filter Specification	Transport for NSW	03/2014	3.3	Draft
Orawing	Signals and Distribution	Transport RailCorp	25/06/12	CV0497043	Final
Orawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588864	Final
Drawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588865	Final



Item	Description / Drawing Title	Author / Source	Date / Revision	Reference No / DWG No	Status
Drawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588866	Final
Drawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588867	Final
Drawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588868	Final
Drawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588869	Final
Drawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588870	Final
Drawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588871	Final
Drawing	Signals and Distribution	Transport RailCorp	06/11/15	EL0588872	Final
Drawing	Signals and Distribution	Transport Sydney Trains	28/02/11	EL0507595	Final
Drawing	Signals and Distribution	Transport Sydney Trains	05/11/15	EL0594101	Final
Drawing	Signals and Distribution, SCADA & Signals	Transport Sydney Trains	None	E01	Final
Pictures	Dilapidation Photos	Transport for NSW	None	Feeder 718, 719, 722, 7218623, 7498537, 33kv and 11kv	None
Drawing	OHW - Auburn to Granville MS21 +266 - MS21 +433	Transport RailCorp	5/5/98	CV 0014018	Final
Drawing	OHW - Auburn to Granville MS21 + 721 - MS21 + 962	Rail Services Australia	12/11/98	CV 0014021	Final
Drawing	OHW - Auburn to Granville MS20 + 779 - MS21 + 176	Transport RailCorp	17/6/09	CV 0455707	Final
Drawing	OHW - Granville MS21 + 845 and MS21 + 847 OHWS Conversions to Feeder Structure	Transport Sydney Trains	19/7/13	CV 0535983	Final
Drawing	OHW - Auburn MS21 + 142	Transport RailCorp	15/2/08	EL 0455570	Final





Item	Description / Drawing Title	Author / Source	Date / Revision	Reference No / DWG No	Status
Drawing	OHW – Granville 1600V DC Cables, Positive Feeder Granville to MS21 + 142	Transport RailCorp	20/7/07	EL 0472141	Final
Drawing	OHW - Granville 1500V DC Cables, Positive Feeder Granville to MS21 + 142	Transport RailCorp	20/7/07	EL 0472142	Final
Drawing	OHW - Granville 1500V DC Cables, Positive Feeder Granville to MS21 + 142 opt 1	Transport RailCorp	20/7/07	EL 0472143	Final
Drawing	OHW - Granville 1500V DC Cables, Positive Feeder Granville to MS21 + 142 opt 2	Transport RailCorp	20/7/07	EL 0478347	Final
Drawing	OHW - OHW - Granville 1500V DC Cables, Positive Feeder Granville to MS21 + 142 opt 2	Transport RailCorp	20/7/07	EL 0478348	Final
Drawing	OHW - OHW - Granville 1500V DC Cables, Positive Feeder Granville to MS21 + 142 opt 2	Transport RailCorp	20/7/07	EL 0478349	Final
Drawing	OHW – Granville Railways Location G21 + 700 Fencing Arrangement	Transport for NSW		EL 0568701	Final
Drawing	HV Aerial Lines & Cabes OHEW & UGH Earth Electrodes	Transport RailCorp	29/01/2010	EL0284008	Final
Drawing	Existing Sectioning Diagrams – Auburn to Clyde 1500V	Transport Sydney Trains	13/12/15	EL0493966	Final
Drawing	Existing Sectioning Diagrams - Clyde to Merrylands - Harris Park - Carlingford 1500V	Transport Sydney Trains	13/12/15	EL0286471	Final
Drawing	Existing Sectioning Diagrams	Transport Sydney Trains	13/12/15	EL0493967	Final
Drawing	Existing Sectioning Diagrams	Transport Sydney Trains	24/07/14	EL0358441	Final
Document	Granville Substation AC 33kV Feeder Loadings	Transport Sydney Trains	None	Version 2	Final
Document	Substation Fencing Requirements – ESC 510 Boundary Fences	Transport RailCorp	12/2009	Version 2.1	Final
Document	Substation Fencing Requirements – SPC 511 Boundary Fences	Transport RailCorp	12/2009	Version 1,1	Final
Drawing	OHW Drawing - New 1500V Cable Route	Transport RailCorp	20/08/13	EL0284251	Final
Drawing	OHW Drawing - New 1500V Cable Route	Transport RailCorp	20/08/13	EL0284252	Final



Item	Description / Drawing Title	Author / Source	Date / Revision	Reference No / DWG No	Status
Drawing	OHW Drawing - New 1500V Cable Route	Transport RailCorp	20/08/13	EL0284253	Final
Drawing	OHW Drawing - New 1500V Cable Route	Transport RailCorp	20/08/13	EL0284250	Final
Drawing	OHW Drawing -Feeding at MS21 +845 & MS21 +847	Transport RailCorp	20/08/13	EL0284249	Final



Key.			
DoR NSW	Department of Railways New South Wales	SCC	Sydney County Council
GHD	GHD Pty Ltd	SRA	State Rell Authority
HSS	Hawker Siddeley Switchgear Pty Ltd	ST	Sydney Trains
MSB	Mine Subsidence Board	SW	Sydney Water
NSWGR&T	New South Wales Government Railways and Tramways	TE	Tactical Earthing
PTC NSW	Public Transport Commission of NSW	TINSW	Transport for NSW
RallCorp	Rail Corporation	TMC	Transformers Manufacturing Co Pty Ltd
RIC	Rall Infrastructure Corporation	TZG	Tonkin Zulaikha Greer Architects
RSA	Rail Services Authority	UGL	UGL Infrastructure



Schedule 10 Employed Worker Costs

(Contract Sum and Employed Worker Costs)

The amounts set out in this Schedule 10 are inclusive of the Contractor's margin and all on-costs and all other costs or expenses (such as vehicles, computers, phones and PPE).

(tem	Rate per hour
Supervisor	
Signalling Electrician	
Signalling Installer	
HV Cable Joiner	
1500V DC Cable Joiner	9
Electrician Licensed	
Electrical Labour	
Commissioning Engineer/Manager	
Systems Assurance Engineers	
Systems Assurance Managers	
Project Engineer	
Senior Project Engineer	
Contract Administrator	
Quantity Surveyor	
Commercial Manager	
Environmental Coordinator	
Safety Manager	
Planner	
Project Manager	
Senior Project Manager	

It is acknowledged that:

- the above rates: (a)
 - (i) are base rates for 8 hour working days;
 - will be subject to adjustement for overtime where payable by the (ii) Contractor (including overtime during possessions) for hours worked on working days in excess of 8 hours (on the basis of 1.5x for the excess hours between 8 - 10 and 2x for the excess hours above 10); and
- (b) overtime hours payable by the Contractor for the persons listed in the breakdown in Schedule 2 may be claimed as Employed Worker Costs in respect of their overtime hours worked (including overtime during possessions) for hours worked on working days in excess of 8 hours.

Employed Worker Costs must not be claimed by the Contractor (and will not be paid by the Principal) for correcting:

(a) Major Civil and Building Defects; or



(b) Civil and Building Defects on and from the Date of Completion of a Portion.



Schedule 11 - Form of Warranty

(Clause 2.2(f))

This Deed Poll is made the

day of

20

To:

Transport for NSW (ABN 18 804 239 602) of Level 5, Tower A, Zenith Centre, 821 Pacific Highway, CHATSWOOD NSW 2067 ("Principal")

[Add other beneficiaries as nominated by TfNSW] ("Beneficiary").

By:

That person described in Item 1 of the Schedule ("Warrantor") which expression will include its successors and assigns)

Recitals

- A. The Warrantor has supplied the items described in Item 2 of the Schedule ("Equipment") to the person described in Item 3 of the Schedule ("Contractor") or the person described in Item 4 of the Schedule, a subcontractor of the Contractor ("Subcontractor"), for the works ("Works") being carried out by the Contractor under the contract described in Item 5 of the Schedule ("Contract") with the Principal.
- B. It is a requirement of the Contract that the Contractor procure the Warrantor to give the following warranties in favour of the Principal and the Beneficiary with respect to the Equipment.

Operative

1. Quality

The Warrantor:

- (a) warrants to the Principal and the Beneficiary that the Equipment will be to the quality and standard stipulated by the Contract and will be of merchantable quality and fit for the purpose for which it is required; and
- (b) gives the warranty more particularly set out in Item 6 of the Schedule with respect to the Equipment.

The above warranties are in addition to and do not derogate from any warranty implied by law in respect of the Equipment.

2. Replacement

The Warrantor warrants to the Principal and the Beneficiary that it will replace so much of the Equipment as within the period described in Item 7 of the Schedule:

- (a) is found to be of a lower quality or standard than that referred to in clause 1; or
- (b) shows deterioration of such extent that in the opinion of the Principal or the Beneficiary the Equipment ought to be made good or replaced in order to achieve fitness for the purpose for which it is required, whether on account of utility, performance, appearance or otherwise.



3. Warrantor to bear cost

The Warrantor covenants to the Principal and the Beneficiary that it will bear the cost of any work necessary to any part of the Works to enable the requirements of clause 2 to be carried out or to make good the Works afterwards.

4. Principal not liable

The Warrantor acknowledges to the Principal and the Beneficiary that nothing contained in this deed poll is intended to nor will render either the Principal or the Beneficiary in any way liable to the Warrantor in relation to any matters arising out of the Contract or otherwise.

This deed poll may not be revoked 5.

This deed poll may not be revoked or otherwise modified without the prior written consent of the Principal and the Beneficiary.

6. Governing Law

This deed poll is governed by the laws of the State of New South Wales.

7. Jurisdiction

The Warrantor irrevocably submits to the non-exclusive jurisdiction of the Courts of New South Wales.

8. Enforcement of this deed poll

For the avoidance of doubt this deed poll is enforceable by any of the Principal or the Beneficiary.



Schedule

Item 1: Name and Address of Warrantor

Item 2: Equipment

(Recital A)

Item 3: Contractor

(Recital A)

Item 4: Subcontractor

(Recital A)

Item 5: Contract

(Recital A)

Item 6: Detailed Warranty of Warrantor

(Clause 1(b))

Item 7: Period of Years

(Clause 2)

[insert period] years from the expiry of the last "Defects Rectification Period" as defined in the General Conditions (including any extension under clause 8.6 of the General Conditions).

Executed as a deed poll.

Executed by [insert name of Warrantor]
(ABN [insert ABN]) by or in the presence of:

Signature of Director	Signature of Secretary/other Director
Name of Discoster in full	
Name of Director in full	Name of Secretary/other Director in full



Schedule 12 - Form of Statutory Declaration

(Clause 11.6(c)(i))

SIE	atutory Declaration		Oaths Act (NSW) Ninth Schedule
j			
			The state of the s
do s	olemnly and sincerely declare	thet:	
1.	I am the representative of:		
	("the Contractor")	MANAGO (COLECTION PROGRAMA PARAGAT	
	in the Office Bearer capacit	y of:	
	arrientalisatelle arrientalisatelle arrientalis	acinsarias servició de contratablem	was an also an a superior and a supe
2.	The Contractor has a contra	act with the [J.
	("the Contract")		Marie Commission Commission Conference (Commission Commission Comm
3.	I personally know the facts	which I have set out in this o	eclaration,
4.	All employees who have at a Contract:	any time been engaged by t	he Contractor for work done under the
	have been paid all rer by the Contractor in re	muneralion and benefits to t espect of their employment o	he date of this declaration payabla to them on work under the Contract, and
	Contractor as at the o	ccrued to their account all t date of this declaration in re to any award, enterprise ag	penefits to which they are entitled from the pspect of their employment on work under reement, act or regulation,
	with the exception of the a employee listed below:	employees and respective	amounts unpaid or not accrued for each
	Employee:	Amou	unt unpeid or not accrued:
	**************************************		nikan katan katan kan kan kan kan kan kan kan kan kan k
		***************************************	the contraction of the contracti
			Section of the sectio
5A	complied with all requirement	nts under the Building and I	m a Subcontractor, the Contractor has Construction Industry Security of Payment on 2015 (NSW), with the exception of the
	3 (2333 messandes) cares cores cores (c. f ; \$135 mess	******	***************************************
Š.	Attached to end forming part purposes of section 13(7) of (NSW).	of this declaration, as Anne the Building and Construction	xure A, is a supporting statement for tha on Industry Security of Payment Act 1999
),	metedals in respect of the C or materials which as at the but which the Contractor disp subcontractor or supplier by such dispute relates to part	ontract and has submitted a date of this sistutory decla- butes, the reasons for such a the Contractor prior to the porty of the subcontractor or the Contractor to the subco	Contractor has provided services end/or claim to the Contractor for these services ration would have been due and payable dispute have been notified in writing to the date of this statutory declaration. Where supplier's claim, that part of the claim not outractor or supplier as at the date of this

Doc ID 607060023/v9



7,	The provisions of the Contract relating to the payment of employees, subcontractors and suppliers of the Contractor have been complied with by the Contractor.	
8	The Confractor has been informed by each subcontractor to the Contractor (except for subcontracts not exceeding \$25,000 at their commencement) by statutory declaration in equivalent terms to this declaration (made no earlier than the date 14 days before the date of this declaration):	
	 that their subcontracts with their subcontractors and suppliers comply with the requirements of the Contract relating to payment of employees and subcontractors, and 	
	(b) that all their employees and subcontractors, as at the date of the making of such a declaration;	
	i) have been paid all remuneration and benefits due and payable to them by; or	
	had accrued to their account all benefits to which they are entitled from;	
	the subcontractor of the Contractor or from any other subcontractor (except for subcontracts not exceeding \$25,000 at their commencement) in respect of any work under the Contract, and	
	(c) of details of any amounts due and payable or benefits due to be received or accrued described in 8(b) above which have not been paid, received or accrued,	
	except for the following subcontractors to the Contractor who have failed to provide such a declaration:	insert names and addresses of the Contractor's
	Subconfractor: Due amount unpaid:	subcontractors who have not submitted a declaration.
	turnian and the control of the contr	and unpaid amounts due or otherwise due to each of
		them by the Contractor in respect of this claim
		respect of this claim
9.	Where a subcontractor to the Contractor has provided a declaration as in 8 above, and it includes unpaid amounts or banefits either not received or not accrued, details of the subcontractor, details of the affected employees, suppliers and subcontractors of the subcontractor, and the respective amounts or benefits either unpaid or not accrued are as follows:	insert names of the subcontractors, the name and addresses of the unpaid employees, subcontractors
	Employee, subcontractor or supplier: Amount unpaid or not accrued;	and suppliers and amounts listed as unpeid or not
	······································	accrued to them,

	100) 1100 (110) (1	
10,	In relation to the statutory declaration provided by each subcontractor to the Contractor, I am not aware of anything to the contrary of what is contained therein, and on the basis of the contents of those statutory declarations, I believe that information to be true.	
11.	Attached to end forming part of this declaration, as Annexure B, is a "Subcontractor's Statement" given by the Contractor in its capacity as 'subcontractor' (as that term is defined in the Workers Compensation Act 1987, Pay-Roll Tax Act 1971 and Industrial Relations Act 1996) which is a written statement:	
	 (a) under section 1758 of the Workers Compensation Act 1987 in the form and providing the detail required by that logislation; 	
	(b) under section 18(6) of schedule 2 of part 5 of the Pay-Roll Tax Act 2007 in the form and providing the detail required by that legislation; and	
	(c) under section 127 of the Industrial Relations Act 1996 in the form and providing the detail required by thei legislation.	
12.) personally know the truth of the matters which are contained in this decleration and the attached Subcontractor's Statement.	
13.	All statutory declarations and Subcontractor's Statements received by the Contractor from subcontractors were:	
	(a) given to the Contractor in its capacity as 'principal contractor' as defined in the Workers Compensation Act 1987, the Pay-Roll Tax Act 2007 and the Industrial Relations Act 1996	

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607080023A9

T2317785 10



Power Supply Upgrade Program Design & Construction of Chalmers Street Substation and Granville Junction Substation Contract Number: ISD-18-7801

	("Acts"); and				
	(b) given by the subcontractors in	their cepacity as 'sub-	contractors' as	defined in the Acts.	
14.	I am not eware of anything whic declarations or written statements pi in this declaration.	h would contradict ovided to the Contra	tne statements clor by its subc	made in the statutory ontractors, as referred to	
Act	ke this solemn declaration conscientio 1900 (NSW). I am aware that I may ment in this declaration.	usly belleving the sar be subject to punis	ne to be true a	nd by viriue of the Oaths if I wilfully make a falso	
Deck	ared at or	E-S-water-marks a manager			
	(place)	(day)	(month)	(year)	
(2° T)	nature of Declarani) re me:				
Delo	e me.				
(S	Signature of person before whom the de	eclaration is made)			
(/\	lame of the person before whom the de	eclaration is made)			
				40.4	
	* of the person before whom the declar		_		
	es a witness, I certify the following matt arant):	ers concerning the pe	ers on who made	this declaration	
C.	of manufacture and a second second				
E SUIK	se out the text that does not apply]				
7;	*I saw the face of the declarant. OR.			1	
		Sala as vis assess	The state of the second	823.53.53.53.53.53.53.53.53.53.53.53.53.53	
	*I did not see the face of the declarant am satisfied that the declarant had a s				
2.	*I have known the declarant for at leas				
	OR	i canadiana			
	*I confirmed the declarant's identity us	ing the following iden	lification docum	ent:	
	Identification	n document relied on			
		ridocument relied on ginal or certified copy)	Č1		
		Marian Sandisa Sepy)			
				M	
Signal	lure of person before whom the declara	etion is made			
Before		-ment to the GD			
JU/0/6	7.110				
(Sign=	sture of person before whom the declar	ation is made.			
Signo					
(Name	of the person before whom the declar				
(Title*	of the person before whom the declara	tion is made)			
		to burn of the same			
	declaration must be made before one				
	nere the declaration is sworn within the a justice of the peace of the State of No		Vales:		
	a solicitor of the Supreme Court of Nev		current practisi	ng certificate; or	
	a notary public.		- A CHARLESTON		

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014 Doc ID 607060023/v9

T2307705 10



Power Supply Upgrade Program Design & Construction of Chalmers Street Substation and Granville Junction Substation Contract Number: ISD-18-7801

 where the declaration is swi 	m in a place outside	the State of New South	Wales:
--	----------------------	------------------------	--------

(i) a notary public; or (ii) any person heving authority to administer an oath in that place.

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation [607060023_9).pdf.docx © TfNSW 2014 Doc ID 607060023/v9

T2317765 10



Annexure A

Supporting statement by head contractor regarding payment to subcontractors

This statement must accompany any payment claim served on a principal to a construction contract by a head contractor.

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.

Head contractor: [business name of head contractor] ABN: [[ABN]

* 1. has entered into a contract with:[business name of subcontractor]

ABN: [ABN]

Contract number/identifier: [contract number/identifier]

OR

- * 2, has entered into a contract with the subcontractors listed in the attachment to this statement
- * [Delete whichever of the above does not apply]

This statement applies for work between [start date] and [end date] inclusive (the construction work concerned), subject of the payment claim dated [date].

I,[full name], being the head contractor, a director of the head contractor or a person authorised by the head 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 supporting statement and declare that, to the best of my knowledge and belief, all amounts due and payable to subcontractors have been paid (not including any amount identified in the attachment as an amount in dispute).

Signature:	***************************************	Date:
Full name:		Position/Title:



Attachment

Subcontractor	ABN	Contract number / identifier	Date of works (period)	Date of payment claim (head contractor claim)

ABN	Contract number / identifier	Date of works (period)	Date of payment claim (head contractor claim)
	ABN	ABN number /	ABN number / Date of works



Annexure B

SUBCONTRACTOR'S STATEMENT

REGARDING WORKERS COMPENSATION, PAYROLL TAX AND REMUNERATION (Note 1 - see back of form)

For the purposes of this Statement a "subcontractor" is a person (or other legal entity) that has entered into a contract with a "principal contractor" to carry out work.

This Statement must be signed by a "subcontractor" (or by a person who is authorised, or held out as being authorised, to sign the statement by the subcontractor) referred to in any of s175B *Workers Compensation Act* 1987, Schedule 2 Part 5 Payroll Tax Act 2007, and s127 Industrial Relations Act 1996 where the "subcontractor" has employed or engaged workers or subcontractors during the period of the contract to which the form applies under the relevant Act(s). The signed Statement is to be submitted to the relevant principal contractor.

SUBCONTRACTOR'S STATEMENT (Refer to the back of this form for Notes, period of Statement retention, and Offences under various Acts.

Sub	contractor: ABN: ,
of	
has	entered into a contract with
Con	tract number/identifier (Note 3)
	Statement applies for work between:
subj	ect of the payment claim dated:/ (Note 5)
truth	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 of the matters which are contained in this Subcontractor's Statement and declare the following to the best y knowledge and belief:
(a)	The abovementioned Subcontractor has either employed or engaged workers or subcontractors during the above period of this contract. Tick [] if true and comply with (b) to (g) 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 (f) and (g) below. You must tick one box. (Note 6)
(b)	All workers compensation insurance premiums payable by the Subcontractor in respect of the work done under the contract have been paid. The Certificate of Currency for that insurance is attached and is dated/(Note 7)
(c)	All remuneration payable to relevant employees for work under the contract for the above period has been paid. (Note 8)
(d)	Where the Subcontractor is required to be registered as an employer under the <i>Payroll Tax Act 2007</i> , the Subcontractor has paid all payroll tax due in respect of employees who performed work under the contract, as required at the date of this Subcontractor's Statement. (Note 9)
(e)	Where the Subcontractor is also a principal contractor in connection with the work, the Subcontractor 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, (Note 10)
(f)	Signature Full name
(g)	Position/Title Date/

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023vs

T2317765 10



Power Supply Upgrade Program Design & Construction of Chalmers Street Substation and Granville Junction Substation

Contract Number: JSD-18-7801

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.

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023A6

T2317765 10



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 and section 127 of the Industrial Relation Act 1996. 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.
- 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.
- 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 hehalf of the subcontractor.

In terms of s175B of the Workers Compensation Act 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.

Further Information

For more information, visit the WorkCover website www.workcover.nsw.gov.au. Office of State Revenue website www.os.nsw.gov.au.or
Office of Industrial Relations, Department of Commerce website www.commerce.nsw.gov.au. Copies of the Workers Compensation Act
1987, the Psyroll Tex Act 2007 and the Industrial Relations Act 1998 can be found at www.legislation.nsw.gov.au.

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014

Doc ID 607060023/v9

72317705 10



Schedule 13 - Property Owner's Certificate

(Claus	se 3.4(c)(ii))					
This o	deed poll is made the	day of	20			
То:	Transport for NSW (ABN 18 804 239 602) of Level 5, Tower A, Zenith Centre, 821 Pacific Highway, CHATSWOOD NSW 2067 ("Principal")					
Ву:	1					
Prope	erty Address:					
1.		I/We confirm that the following works has been carried out and completed on my/our property to my/our satisfaction:				
[Inser	t description of works on	property and property	1			
2.	/We confirm that our land has been rehabilitated and all damage and degradation on it repaired.					
3.	I/We release the Principal from all claims and actions which I/we may have arising out of or in connection with the works referred to in paragraph 1.					
4.	This deed poll may not be of the Principal.	e revoked or otherwise	modified without the prior written consent			
Execu	ated as a deed poll.					
Signe by of:	d sealed and delivered in th	e presence	Signature			
Signat	ure of Witness					
Name	of Witness in full					



(Clause 2 2(e)(iv))

Schedule 14 - Form of Subcontractor Deed

	· · · · · ·	
THIS	DEED POLL is made on 20 by	
******	(the "Subcontractor").	
REC	TALS:	
Α.	Transport for NSW (ABN 18 804 239 602) of Level 5, Tower A, Zenith Centre, 821 Pacific Highway, CHATSWOOD NSW 2067 (the "Principal") has entered into a contract with [] ("Contractor") for the construction of [] ("Works").	
В.	The Subcontractor has an agreement (the "Subcontract") with the Contractor for the execution and completion of the [] (the "Subcontract") for the Works.	
C.	It is a condition of the Subcontract that the Subcontractor executes this Deed Poll.	

THIS DEED WITNESSES THAT THE SUBCONTRACTOR HEREBY COVENANTS, WARRANTS AND AGREES with and for the benefit of the persons named in the Schedule as follows:

- It will comply with its obligations under the Subcontract and upon completion of the Works, the Subcontract Works will satisfy the requirements of the Subcontract.
- The persons named in the Schedule may assign or charge the benefits and rights accrued under this Deed Poll.
- The Subcontractor:
 - (a) must if required by a written notice by the Principal to sign a deed in the form of the attached Deed of Novation (Attachment 1) with such substitute contractor as the Principal may nominate; and
 - (b) for this purpose irrevocably appoints the Principal to be its attorney with full power and authority to complete the particulars in and sign the attached Deed of Novation.
- This Deed Poll is governed by the laws of the State of New South Wales.
- This Deed Poll may not be revoked or otherwise modified without the prior written consent of the Principal.
- 6. The Subcontractor's liability in respect of a breach of a particular obligation under this Deed Poll will be reduced to the extent to which the Subcontractor has already paid money to or performed work for the Contractor in respect of that breach.

Dog ID 607060023A9



PERSONS NAMED IN THE SCHEDULE TO THE DEED POLL

Transport for NSW (ABN 18 804 239 602)

[Insert relevant details og Sydney Trains]

FY	FC	DITED	ASI	DE	ED	POLL.
ᄗ		UIEL	MOI	1 U E		POLL.

Executed by [insert name] (ABN [insert ABN]) by or in the presence of:

Signature of Director	Signature of Secretary/other Director
Name of Director in full	Name of Secretary/other Director in full



Attachment 1 (to Schedule 14)

THIS DEED OF NOVATION is made on [] 20[] between the following parties:
1.	ı] ("Substitute Contractor")	
2.	Į.] ("Original Contractor")	
3.	1] ("Subcontractor").	
	2172		

RECITALS:

- 1 (the "Deed") between: By deed dated [A.
 - Transport for NSW (ABN 18 804 239 602) of Level 5, Tower A, Zenith Centre, (i) 821 Pacific Highway, CHATSWOOD NSW 2067 (the "Principal"); and
 - (ii) Original Contractor.

the Principal engaged the Original Contractor to undertake the Works (as defined in the Deed).

- B. The Original Contractor has entered into an agreement ("Subcontract") with the Subcontractor for the execution and completion of the [1 ("Subcontract Works") as part of the Works.
- C. The Principal has terminated the Deed and has engaged Substitute Contractor to complete the Works.
- D. The Principal and Substitute Contractor wish to effect a novation of the Subcontract.

THIS DEED WITNESSES that in consideration, among other things, of the mutual promises contained in this deed, the parties agree:

- Substitute Contractor must perform all of the obligations of the Original Contractor under 1. the Subcontract which are not performed at the date of this deed. Substitute Contractor is bound by the Subcontract as if it had originally been named in the Subcontract in place of Original Contractor.
- 2. The Subcontractor must perform its obligations under, and be bound by, the Subcontract as if Substitute Contractor was originally named in the Subcontract in place of Original Contractor.
- 3 This deed is governed by the laws of New South Wales and the parties agree to submit to the non-exclusive jurisdiction of the courts of that state.

EXECUTED by the parties as a deed:

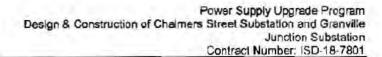
[Insert appropriate execution clauses]

Schedule 15 Not used

BLANK PAGE -

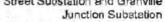
EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/9

72317765, 10





EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/49





Schedule 16 - Form of Contractor Deed Poll

(Clause 1.5)

This deed poll ("Deed Poll") made the

day of

20

By:

Abergeldie Contractors Pty Ltd ABN 47 004 533 519

("Contractor")

in favour of:

Rail Corporation New South Wales (ABN 59 325 778 353) and Sydney Trains

(ABN 38 284 779 682) ("Owner").

RECITALS

- Transport for NSW ("TfNSW") of Level 5. Tower A Zenith Centre, 821 Pacific Highway. A. CHATSWOOD NSW 2067, is responsible for developing the Power Supply Upgrade Program ("Program").
- As part of the Program TfNSW is responsible for procuring the execution and completion B of certain works for the design and construction of the Chaimers Street Substation (the "Works") on behalf of the Owner and the New South Wales Government, and has entered into a contract ("Main Contract") with the Contractor to achieve this.
- C. The Owner is relying on TfNSW to procure the Contractor to execute and complete the Works in accordance with the Main Contract.
- The Owner will suffer loss if TfNSW does not procure the Contractor to execute and D. complete the Works in accordance with the Main Contract.
- E. It is a condition of the Main Contract that the Contractor executes this Deed Poll.

THIS DEED POLL WITNESSES THAT THE CONTRACTOR HEREBY COVENANTS, WARRANTS AND AGREES with and for the benefit of the Owner as follows:

- It will comply with its obligations under the Main Contract, including with respect to 1. achieving Completion of each Portion and the Works by the relevant Date for Completion.
- 2. Upon Completion of the Works, the Works will satisfy the requirements of the Main Contract.
- 3. This clause 3 only applies where the Owner is Sydey Trains or NSW Trains. In consideration of the Owner making available to the Contractor Track Possessions the Contractor agrees that it must indemnify the Owner against all costs, expenses, losses or damages suffered or incurred by the Owner in respect of any delay to rail services or late return of Track Possessions arising out of or in connection with the Contractor's Activities.

The maximum liability which the Contractor will have to the Owner pursuant to this clause for each event resulting in delay to rail services or for late return of a Track Possession will be determined on the basis of the maximum period by which any train was delayed by the event or late return of a Track Possession calculated by applying the following rates:

Period in which delay occurs	Rate per hour or part thereof	
During peak hours	\$	

Power Supply Upgrade Program

Design & Construction of Chalmers Street Substation and Granville

Junction Substation

Contract Number: ISD-18-7801

During all other hours	\$15,000
Darling all office flours	\$13,000

- The aggregate of the Contractor's liability to the Owner under this Deed Poll and the Contractor's liability to TfNSW under the Main Contract;
 - (a) will not exceed the liability which the Contractor would have had under the Main Contract if the Main Contract had named, as Principal, the Owner and TfNSW jointly and severally; and
 - is subject to the same limitations of liability, and qualifications on such limitations of liability, as are specified in the Main Contract.
- Any provision of this Deed Poll which seeks to limit or exclude a liability of the Contractor
 is to be construed as doing so only to the extent permitted by law.
- 6. The Owner may assign or charge the benefits and rights accrued under this Deed Poll.
- This Deed Poll is governed by the laws of the State of New South Wales.
- This Deed Poll may not be revoked or otherwise modified without the prior written consent of the Owner.
- Where terms used in this Deed Poll are defined in the Main Contract, those terms have the meaning given to them in the Main Contract.

Executed as a deed poll.

Signed by Abergeldie Contractors Pty Ltd (ABN 47 004 533 519) in accordance with section 127 of the Corporations Act 2001 (Cth):

Signature of director	Signature of company secretary/director		
Full name of director	Full name of company secretary/director		

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023A9



Schedule 17 - Deed of Guarantee and Indemnity

(Clause 2.7)

Deed of Guarantee and Indemnity made at

on

20

Transport for NSW (ABN 18 804 239 602), a corporation constituted by section 3C of the Transport Administration Act 1988 (NSW), of Level 5, Tower A, Zenith Centre, 821 Pacific Highway, CHATSWOOD NSW 2067 (*Principal*)

Abergeldie Consolidated Pty Ltd (ABN: 21 143 512 350) of 5 George Young Street Regents Park NSW 2143 (Guarantor)

RECITALS

- A. The Principal has agreed to enter into the Contract with the Contractor on the condition that the Guarantor provide this Guarantee.
- B. The Guaranter has agreed on the following terms and conditions to guarantee to the Principal all of the Obligations and to indemnify the Principal against any loss arising from any failure by the Contractor to perform the Obligations.
- C. The Guarantor considers that by providing this guarantee there will be a commercial benefit flowing to it.

THIS DEED PROVIDES

Definitions

1.1 Definitions and Interpretation

In this Deed:

Contract means the Design and Construction of Chalmers Street Substation (TPD-14-4150) Contract dated on or about the date of this Deed between the Principal and the Contractor.

Contractor means Abergeldie Contractors Pty Ltd ABN 47 004 533 519.

Event of Default means any event which constitutes a breach of, or is duly and properly declared to be an event of default (howsoever described) by, the Contract.

Guaranteed Money means all money the payment or repayment of which from time to time forms part of the Obligations.

Insolvency Provision means any Law relating to insolvency, sequestration, liquidation or bankruptcy (including any Law relating to the avoidance of conveyances in fraud of creditors or of preferences, and any Law under which a liquidator or trustee in bankruptcy may set aside or avoid transactions), and any provision of any agreement, arrangement or scheme, formal or informal, relating to the administration of any of the assets of any person.

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023/v9

T2317765 1ft



Obligations means all the liabilities and obligations of the Contractor to the Principal under or arising out of or in any way in connection with the Contract or the work to be carried out or performed by the Contractor under the Contract, and includes any liabilities or obligations which:

- (a) are liquidated or unliquidated:
- (b) are present, prospective or contingent:
- (c) are in existence before or come into existence on or after the date of this Deed;
- (d) relate to the payment of money or the performance or omission of any act:
- (e) sound in damages only; or
- (f) accrue as a result of any Event of Default,

and irrespective of:

- (g) whether the Contractor is liable or obligated solely, or jointly, or jointly and severally with another person;
- the circumstances in which the Principal comes to be owed each liability or obligation and in which each liability or obligation comes to be secured by this Deed, including any assignment of any liability or obligation or of this Deed; or
- the capacity in which the Contractor and the Principal comes to owe or be owed (i) such liability or obligation.

and Obligation means any liability or obligation forming part of the Obligations.

Power means any right, power, authority, discretion, remedy or privilege conferred on the Principal by the Contract, by statute, by law or by equity.

Security means a mortgage, charge, pledge, lien, hypothecation, guarantee (including this Deed), indemnity, letter of credit, letter of comfort, performance bond, contractual right of set-off or combination or other assurance against loss which secures the Guaranteed Money or the performance of any other Obligation, and whether existing at the date of this Deed or at any time in the future.

Specified Rate means the rate which is 2% above the rate expressed as a percentage per annum:

- (a) which is the average of the bid rates shown at approximately 10.15 am on reference rate page "BBSY" on the Reuters Monitor System on the day the relevant amount was due and payable for bank accepted bills having a tenor of 30 days; or
- (b) If for any reason the rate referred to in paragraph (a) is no longer available or if there is no rate displayed for that period at that time, then the average of the buying rates quoted by 3 banks selected by the Principal at or about 10.15 am on the relevant date referred to in paragraph (a) for bills accepted by such banks having a tenor of 30 days.



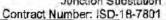
1.2 Defined terms

Terms used in this Deed which are not otherwise defined will have the meaning given to them in the Contract.

1.3 Interpretation

In this Deed unless the context otherwise requires:

- references to a person include an individual, a body politic, the estate of an individual, a firm, a corporation, an authority, an association or joint venture (whether incorporated or unincorporated), or a partnership;
- (b) the words "including", "includes" and "include" will be read as if followed by the words "without limitation":
- a reference to any party to this Deed includes that party's executors, administrators, successors, and permitted substitutes and assigns, including any person taking part by way of novation;
- (d) a reference to any Authority, institute, association or body is:
 - (i) if that Authority, institute, association or body is reconstituted, renamed or replaced or if the powers or functions of that Authority, institute, association or body are transferred to another organisation, deemed to refer to the reconstituted, renamed or replaced organisation or the organisation to which the powers or functions are transferred, as the case may be; and
 - (ii) if that Authority, institute, association or body ceases to exist, deemed to refer to the organisation which serves substantially the same purposes or objects as that Authority, institute, association or body;
- (e) a reference to this Deed or to any other deed, agreement, document or instrument is deemed to include a reference to this Deed or such other deed, agreement, document or instrument as amended, novated, supplemented, varied or replaced from time to time;
- (f) a reference to any legislation or to any section or provision of it includes:
 - any statutory modification or re-enactment of, or any statutory provision substituted for, that legislation, section or provision; and
 - (ii) ordinances, by-laws, regulations of and other statutory instruments issued under that legislation, section or provision:
 - (g) words in the singular include the plural (and vice versa) and words denoting any gender include all genders;
- (h) headings are for convenience only and do not affect the interpretation of this Deed;
- (i) a reference to:





- (i) a party or clause is a reference to a party or clause of or to this Deed;
- (11) a paragraph or a sub-paragraph is a reference to a paragraph or subparagraph in the clause in which the reference appears;
- where any word or phrase is given a defined meaning, any other part of speech (i) or other grammatical form of that word or phrase has a corresponding meaning:
- (k) for all purposes (other than where designated as a Business Day), "day" means calendar day:
- (1) a reference to "\$" is to Australian currency;
- (m) no rule of construction applies to the disadvantage of a party on the basis that the party put forward or drafted this Deed or any part; and
- any reference to "information" will be read as including information, (n) representations, statements, data, samples, calculations, assumptions, deductions, determinations, drawings, design, specifications, models, plans and other documents in all forms including the electronic form in which it was generated.

2. Guarantee

2.1 Guarantee

The Guaranter irrevocably and unconditionally guarantees to the Principal the due and punctual performance by the Contractor of all the Obligations.

2.2 Payment by Guarantor

If the Contractor does not pay the Guaranteed Money when due, the Guarantor must on demand pay to the Principal the Guaranteed Money which is then due and unpaid or which later becomes due, owing or payable.

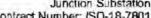
2.3 Perform Obligations

If the Contractor defaults in the performance or observance of any of the Obligations, the Guarantor must, in addition to its obligations under clause 2.2 of this Guarantee, on demand from time to time by the Principal, immediately perform any of the Obligations then required to be performed by the Contractor in the same manner as the Contractor is required to perform the Obligations.

3. Indemnity

As a covenant separate and distinct from that contained in clause 2.1, the Guarantor irrevocably and unconditionally agrees to indemnify the Principal and at all times to keep the Principal indemnified against any loss or damage suffered by the Principal arising out of or in connection with:

- any failure by the Contractor to perform the Obligations duly and punctually; or (a)
- (b) any obligation or liability that would otherwise form part of the Obligations being void, voidable or unenforceable against or irrecoverable from the Contractor for





any reason, and whether or not the Principal knew or ought to have known of that reason.

Liability under this Deed 4.

4.1 Liability as guarantor and indemnier

A reference in this Deed to the obligations or liabilities of the Guarantor is a reference to the Guarantor's obligations or liabilities as either guarantor or indemnifier (or both) under this Deed. The use of the expression "Guarantor" in this Deed in relation to a party must not be construed as diminishing that party's obligations as an indemnifier under this Deed.

4.2 Limitation on Guarantor's liability

The liability of the Guarantor under this Deed will not exceed the liability which the Guarantor would have had to the Principal arising out of or in connection with the Contract, the Works or the Obligations, if the Guarantor had been named in the Contract as being jointly and severally liable with the Contractor to the Principal.

5. Nature and preservation of llability

5.1 Absolute liability

- The liability of the Guarantor under this Deed is absolute and is not subject to the (a) performance of any condition precedent or subsequent by the Contractor or the Guarantor.
- (b) This Deed binds each person who has executed it, notwithstanding that:
 - (i) any person, whether named as a party or not, does not execute this Deed:
 - (ii) the execution of this Deed by any person is invalid, forged or irregular in any way; or
 - (iii) this Deed is or becomes unenforceable, void or voidable against any other person.

Unconditional liability 5.2

The liability of the Guarantor under this Deed will not be affected by any act, omission, matter or thing which, but for this clause 5.2, might operate in law or in equity to release the Guarantor from that liability or to reduce the Guarantor's liability under this Deed. including any of the following:

- the occurrence before, on or at any time after the date of this Deed, of any (a) Insolvency Event in relation to the Contractor or the Guarantor:
- (b) the receipt by the Principal of any payment, dividend or distribution under any Insolvency Provision in relation to the Contractor or the Guarantor;
- the occurrence of any Event of Default; (c)
- (d) the Contract or any payment or other act, the making or doing of which would otherwise form part of the Obligations being or becoming or being conceded to

Doc ID 607050023/v9



be frustrated, illegal, invalid, void, voidable, unenforceable or irrecoverable in whole or in part for any reason whether past, present or future;

- (e) the Principal accepting or declining to accept any Security from any person at any time:
- (f) the Principal granting time, waiver or other indulgence or concession to, or making any composition or compromise with, the Contractor or the Guarantor;
- (g) the Principal not exercising or delaying (whether deliberately, negligently, unreasonably or otherwise) in the exercise of any remedy or right it has for the enforcement of the Contract or any Obligation;
- (h) any laches, acquiescence or other act, neglect, default, omission or mistake by the Principal;
- the determination, rescission, repudiation or termination, or the acceptance of any of the foregoing, by the Principal or the Contractor or the Guarantor of the Contract or any Obligation;
- any variation to the Contract or any Obligation, whether or not that variation is substantial or material, or imposes any additional liability on or disadvantages the Contractor or the Guarantor;
- (k) the full, partial or conditional release or discharge by the Principal or by operation of law, of the Contractor or the Guarantor from the Contract or any Obligation;
- (I) any change in membership (whether by death or retirement of an existing member, admission of a new member, or otherwise) or in the name of any partnership, firm or association in which the Contractor or the Guarantor is a member;
- (m) the transfer, assignment or novation by the Principal or the Contractor or the Guarantor of all or any of its rights or obligations under the Contract or under any other Obligation;
- (n) any failure by the Principal to disclose to the Guarantor any material or unusual fact, circumstance, event or thing known to, or which ought to have been known by, the Principal relating to or affecting the Contractor or the Guarantor at any time before or during the currency of this Deed, whether prejudicial or not to the rights and liabilities of the Guarantor and whether or not the Principal was under a duty to disclose that fact, circumstance, event or thing to the Guarantor or to the Contractor;
- (o) the Principal agreeing with the Contractor or the Guarantor not to sue, issue process, sign or execute judgment, commence proceedings for bankruptcy or liquidation, participate in any administration, scheme or deed of arrangement or reconstruction, prove in any bankruptcy or liquidation, or do anything else in respect of the liability of the Contractor or the Guarantor;
- (p) (where the Guarantor is an individual) the death or mental incapacity of the Guarantor; or



- (q) the provisions of section 440J of the Corporations Act 2001 (Cth) operating to prevent or delay:
 - (i) the enforcement of this Deed against any Guarantor; or
 - (ii) any claim for contribution against any Guarantor.

5.3 No merger

- (a) This Deed is in addition to and does not merge with, postpone, lessen or otherwise prejudicially affect the Contract or any other Power of the Principal.
- (b) The Principal will hold any judgment or order obtained by it against any person in respect of the Guaranteed Money or the Obligations collaterally with this Deed, and this Deed will not merge in that judgment or order.

5.4 No obligation to gain consent

No consent is required from any Guarantor nor is it necessary for the Guarantor to or be made aware of any event referred to in clause 5.2, any transaction between the Principal and the Contractor, or any particulars concerning any Obligation.

5.5 Appropriation

- (a) The Principal is under no obligation to marshal or appropriate in favour of any Guarantor, or to exercise, apply, transfer or recover in favour of any Guarantor, any Security or any funds or assets that the Principal holds, has a claim on, or has received or is entitled to receive, but may do so in the manner and order as the Principal determines in its absolute discretion.
- (b) The Principal may hold in a suspense account (without liability to pay interest) any money which it receives from the Guarantor, or which it receives on account of the Guarantor's liability under this Deed, and which the Principal may, at its discretion, appropriate in reduction of the Guarantor's liability under this Deed.

5.6 Void or voidable transactions

If:

- (a) the Principal has at any time released or discharged:
 - (i) the Guarantor from its obligations under this Deed; or
 - any assets of the Guarantor from a Security.

in either case in reliance on a payment, receipt or other transaction to or in favour of the Principal; or

- (b) any payment or other transaction to or in favour of the Principal has the effect of releasing or discharging:
 - the Guarantor from its obligations under this Deed; or
 - (ii) any assets of the Guarantor from a Security;

and



- (c) that payment, receipt or other transaction is subsequently claimed by any person to be void, voidable or capable of being set aside for any reason, including under an Insolvency Provision or under the general law; and
- (d) that claim is upheld or is conceded or compromised by the Principal.

then:

- the Principal will immediately become entitled against the Guarantor to all rights (including under any Security) as it had immediately before that release or discharge;
- (f) the Guarantor must immediately do all things and execute all documents as the Principal may reasonably require to restore to the Principal all those rights; and
- (g) the Guarantor must indemnify the Principal against costs, losses and expenses suffered or incurred by the Principal in or in connection with any negotiations or proceedings relating to the claim or as a result of the upholding, concession or compromise of the claim.

5.7 No set-off, counterclaim

The liability of the Guarantor under this Deed will not be reduced or avoided by any defence, set-off or counterclaim available to the Contractor against the Principal.

5.8 Claim on the Guarantor

The Principal is not required to make any claim or demand on the Contractor, or to enforce the Contract, or any other right, power or remedy against the Contractor, before making any demand or claim on the Guarantor.

5.9 No representation by Principal etc.

The Guarantor acknowledges that it has not entered into this Deed as a result of any representation, promise, statement or inducement to the Guarantor by or on behalf of the Principal, the Contractor or any other person.

6. Representations and Warranties

6.1 General representations and warranties

The Guarantor or, if there is more than one Guarantor, each Guarantor represents and warrants to the Principal:

- this Deed constitutes a valid and legally binding obligation of the Guarantor in accordance with its terms;
- (b) the execution, delivery and performance of this Deed by the Guarantor does not breach any law, or any document or agreement to which the Guarantor is a party or which is binding on it or any of its assets:
- (c) no litigation, arbitration, mediation, conciliation, criminal or administrative proceedings are current, pending or, to the knowledge of the Guarantor, threatened, which, if adversely determined, may have a material adverse effect on the business assets or financial condition of the Guarantor;

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf,doex
© TfNSW 2014
Doc ID 607660023/v8

12317765_10



- (d) all information relating to the Guaranter provided to the Principal in connection with this Deed is true in all material respects and is not, by omission or otherwise, misleading in any material respect; and
- (e) the Guarantor has not entered into this Deed as the trustee of any trust.

6.2 Corporate representations and warranties

The Guarantor, or if there is more than one Guarantor, each Guarantor, that is or purports to be a body corporate, further represents and warrants to the Principal that:

- it is duly incorporated and has the corporate power to own its property and to carry on its business as is now being conducted;
- (b) the execution, delivery and performance of this Deed does not breach the Constitution of the Guarantor and, if the Guarantor or any of its subsidiaries is listed on the Australian Securities Exchange Limited or on any other stock exchange, those listing requirements or business rules;
- (c) it has the power, and has taken all corporate and other action required, to enter into this Deed and to authorise the execution and delivery of this Deed and the performance of its obligations under this Deed; and
- (d) the Guarantor has filed all corporate notices and effected all registrations with the Australian Securities and Investments Commission and all of those filings and registrations are current, complete and accurate.

6.3 Representations and warranties repeated

Each representation and warranty in this Deed will be repeated on each day whilst any of the Guaranteed Money remains outstanding (whether or not then due for payment) with reference to the facts and circumstances then subsisting, as if made on each such day.

7. Payments

7.1 On demand

All money payable by the Guarantor under this Deed must be paid by the Guarantor on demand by the Principal in immediately available funds to the account and in the manner notified by the Principal to the Guarantor.

7.2 Payment in gross

All money received or recovered by the Principal on account of the Guaranteed Money will be treated as payments in gross without any right on the part of the Guarantor to claim the benefit of any money received or recovered by the Principal or any Security, until the Principal has been paid 100 cents in the dollar in respect of the Guaranteed Money.

7.3 Interest

As a liability separate and distinct from the Guarantor's liability under clauses 2 and 3, the Guarantor must on demand by the Principal pay interest on all amounts due and payable by it and unpaid under or in respect of this Deed. Interest will accrue on those amounts from day to day from the due date up to the date of actual payment, before and (as a separate and independent obligation) after judgment, at the Specified Rate for successive



90 day interest periods commencing on the date of default and, if not paid when due, will itself bear interest in accordance with this clause 7.3.

7.4 Merger

If the liability of the Guarantor to pay to the Principal any money under this Deed becomes merged in any judgment or order, then, as an independent obligation, the Guarantor will pay interest on the amount of that money at the rate which is the higher of that payable under clause 7.3 and that fixed by or payable under the judgment or order.

7.5 No set-off or deduction

All payments by the Guarantor to the Principal under this Deed must be:

- (a) free of any set-off or counterclaim; and
- (b) without deduction or withholding for or on account of any present or future Taxes, unless the Guarantor is compelled by law to make any deduction or withholding.

If the Guarantor is compelled by law to make any deduction or withholding for or on account of any present or future Taxes (not being Taxes on the overall net income of the Principal), then the Guarantor must:

- (c) pay to the Principal any additional amounts necessary to enable the Principal to receive (after all deductions and withholdings for those Taxes) a net amount equal to the full amount which would otherwise be payable to the Principal if no deduction or withholding was required to be made;
- (d) promptly (and within the time prescribed by law) pay to the relevant taxing authority the amount of those Taxes which it is compelled by law to deduct or withhold, and indemnify the Principal for any Taxes and interest or penalties to which the Principal may become liable consequent on the failure of the Guarantor to pay those Taxes; and
- (e) deliver to the Principal, promptly on request from the Principal, a copy of any receipt issued by the relevant taxing authority on payment of those Taxes.

7.6 Currency indemnity

- (a) The Australian Dollar is the currency of payment by the Guarantor under or in connection with this Deed, except that payment by the Guarantor of or in relation to any Obligation which is denominated in a foreign currency must be made in that foreign currency.
- (b) If for any reason any amount payable by the Guarantor under or in connection with this Deed is received by the Principal in a currency (Payment Currency) other than the currency (Agreed Currency) in which that amount is required to be paid under this Deed (whether as a result of any judgment or order, the liquidation of the Guarantor or otherwise), and the amount obtained (net of charges) by the Principal on its conversion of the amount of the Payment Currency received into the Agreed Currency is less than the amount payable under this Deed in the Agreed Currency, then the Guarantor will, as an independent and additional obligation, indemnify the Principal for that deficiency and for any loss sustained as a result of that deficiency.



Expenses and stamp duties

8.1 Expenses

The Guarantor must on demand reimburse the Principal for and keep the Principal indemnified against all expenses, including legal fees, costs and disbursements on a solicitor/own client basis (or on a full indemnity basis, whichever is the higher) assessed without the necessity of taxation, incurred by the Principal in connection with:

- the preparation, negotiation and execution of this Deed and any subsequent consent, agreement, approval, waiver, amendment to or discharge of this Deed; and
- (b) any exercise, enforcement or preservation, or attempted exercise, enforcement or preservation, of any rights under this Deed.

8.2 Stamp duties

- (a) The Guarantor must pay all stamp duties, transaction, registration and similar Taxes, including fines and penalties, financial institutions duty and debits tax which may be payable to or required to be paid by any appropriate authority, or determined to be payable in connection with the execution, delivery, performance or enforcement of this Deed or any payment, receipt or other transaction contemplated by this Deed; and
- (b) the Guarantor must indemnify the Principal against any loss or liability incurred or suffered by it as a result of the delay or failure by the Guarantor to pay Taxes.

8.3 Goods and Services Tax

If the Principal is or becomes liable to pay any GST (including any penalty) in respect of any supply it makes under, or in connection with, this Deed (GST Liability) then:

- (a) to the extent that an amount is payable by the Guarantor to the Principal under this Deed for that supply - the amount will be increased by the full amount of the GST Liability; and
- (b) otherwise the Guarantor will indemnify and keep the Principal indemnified for the full amount of the GST Liability.

Assignment

The Principal may assign, novate or otherwise transfer all or any part of its rights under this Deed and may disclose to a proposed assignee or transferee any information in the possession of the Principal relating to the Guarantor.

Governing law, jurisdiction and arbitration

10.1 Governing law

This Deed and where applicable, the arbitration reference contained in clause 10.3, is governed by and will be construed according to the laws of New South Wales.



10.2 Jurisdiction

- (a) This clause 10.2 only applies where clauses 10.3 to 10.7 do not apply.
- (b) The Guarantor irrevocably submits to the non-exclusive jurisdiction of the courts and appellate courts of New South Wales, and the courts competent to determine appeals from those courts, with respect to any proceedings which may be brought relating in any way to this Deed.
- (c) The Guarantor irrevocably waives any objection it may now or in the future have to the venue of any proceedings, and any claim it may now or in the future have that any proceeding has been brought in an inconvenient forum, where that venue falls within paragraph (b) of this clause.

10.3 Reference to arbitration

- (a) Clauses 10.3 to 10.7 will only apply where the Guarantor is a foreign company (as defined in section 9 of the Corporations Act 2001 (Cth)).
- (b) Any controversy, claim or dispute directly or indirectly based upon, arising out of, relating to or in connection with this Deed (including but not limited to any question relating to the existence, validity or termination of this Deed) shall be referred to and finally resolved by arbitration in accordance with the arbitration rules of the Australian Centre for International Commercial Arbitration (known as the ACICA Arbitration Rules).
- (c) The seat of the arbitration will be Sydney.
- (d) The number of arbitrators will be one.
- (e) The language of the arbitration will be English.

10.4 Powers of the arbitrator

The arbitral tribunal has the power to grant all legal, equitable and statutory remedies, except punitive damages.

10.5 Consolidation

The parties agree that section 24 of the *International Arbitration Act* 1974 (Cth) will apply in respect of consolidations.

10.6 Joinder

The arbitral tribunal has the power, on the application of any party to this arbitration agreement, to allow a third party who the arbitrator considers has a sufficient interest in the outcome of the arbitration to be joined in the arbitration as a party. Each party to this Deed hereby consents to such joinder. In the event of such joinder of parties in the arbitration, the arbitrator has the power to make a single final award, or separate awards, in respect of all parties so joined in the arbitration.

10.7 Award final and binding

Any award will be final and binding upon the parties.



Miscellaneous

11.1 Notices

(a) Any notices contemplated by this Deed must be in writing and delivered to the relevant address or sent to the facsimile number as set out below (or to any new address or facsimile number that a party notifies to the others).

(i) to the Principal:

Level 5, Tower A Zenith Centre

821 Pacific Highway

CHATSWOOD NSW 2067

Fax: (02) 9200 0290

(ii) to the Guarantor:

Abergeldie Consolidated Pty Ltd

ABN: 21 143 512 350 5 George Young Street Regents Park NSW 2143

- (b) A notice sent by post will be taken to have been received at the time when, in due course of the post, it would have been delivered at the address to which it is sent.
- (c) A notice sent by facsimile will be taken to have been received on the next day after the day shown on the transmission record showing the number of the person to whom it is addressed in accordance with paragraph (a), which is a Business Day.

11.2 Continuing obligation

This Deed is a continuing obligation notwithstanding any termination by the Guarantor, settlement of account, intervening payment, express or implied revocation or any other matter or thing, and the Principal will continue to be entitled to the benefit of this Deed as regards the due and punctual performance of all the Obligations until a final discharge has been given to the Guarantor.

11.3 Further assurance

The Guarantor must immediately on the request of the Principal, and at the cost of the Guarantor, do and perform all further acts and things and execute and deliver all further documents as the Principal reasonably requires, or as are required by law, to perfect or to give effect to the rights and powers of the Principal created, or intended to be created, by this Deed.

11.4 Form of demand

A demand on the Guaranter for payment under this Deed may be in the form and contain any information as the Principal determines. It need not specify the amount of the Guaranteed Money, nor the method or basis of calculation of all or any part of the Guaranteed Money, including amounts of, or in the nature of, interest.



Contract Number

11.5 Entire agreement

This Deed constitutes the entire agreement and understanding between the parties and will take effect according to its tenor despite, and supersede:

- (a) any prior agreement (whether in writing or not), negotiations and discussions between the parties in relation to the subject matter of this Deed; or
- (b) any correspondence or other documents relating to the subject matter of this Deed that may have passed between the parties prior to the date of this Deed and that are not expressly included in this Deed.

11.6 Joint and several liability

The obligations of the Guarantor, if more than one person, under this Deed, are joint and several. Each person constituting the Guarantor acknowledges and agrees that it will be causally responsible for the acts and omissions (including breaches of this Deed) of the other as if those acts or omissions were its own and the Principal may proceed against any or all of them. This Deed binds each person who signs as a "Guarantor" even if another person who was intended to become a "Guarantor" does not become a "Guarantor" or is not bound by this Deed.

11.7 Severance

If at any time any provision of this Deed is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, that will not affect or impair:

- the legality, validity or enforceability in that jurisdiction of any other provision of this Deed; or
- (b) the legality, validity or enforceability under the law of any other jurisdiction of that or any other provision of this Deed.

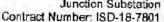
11.8 Remedies cumulative

Each Power is cumulative and in addition to each other Power available to the Principal.

11.9 Waiver

- (a) Failure to exercise or enforce or a delay in exercising or enforcing or the partial exercise or enforcement of any right, power or remedy provided by law or under this Deed by the Principal will not in any way preclude, or operate as a waiver of, any exercise or enforcement, or further exercise or enforcement of that or any other right, power or remedy provided by law or under this Deed.
- (b) Any waiver or consent given by the Principal under this Deed will only be effective and binding on the Principal if it is given or confirmed in writing by the Principal.
- (c) No waiver by the Principal of:
 - (i) a breach of any term of this Deed; or
 - (ii) any other failure by the Guarantor to comply with a requirement of this Deed,

Doc ID 607080023/v9





will operate as a waiver of another breach of that term or failure to comply with that requirement or of a breach of any other term of this Deed or failure to comply with any other requirement of this Deed.

11.10 Consents

Any consent of the Principal referred to in, or required under, this Deed may be given or withheld, or may be given subject to any conditions, as the Principal (in its absolute discretion) thinks fit, unless this Deed expressly provides otherwise.

11.11 Moratorium legislation

To the fullest extent permitted by law, the provisions of all laws operating directly or indirectly to lessen or affect in favour of the Guarantor any obligation under this Deed, or to delay or otherwise prevent or prejudicially affect the exercise of any Power, are expressly waived.

11.12 Set-off

- The Principal may (without prior notice at any time) set off any obligation then (a) due and payable by the Guarantor under this Deed against any obligation (whether or not due and payable) by the Principal to the Guarantor, regardless of the place or currency of payment of either obligation or the office or branch through which either obligation is booked. If the obligations are in different currencies, the Principal may convert either obligation into the currency of the other obligation at a market rate of exchange determined by it for the purpose of the set-off. If either obligation is unliquidated or unascertained, the Principal may effect the set off in an amount estimated by it in good faith to be the amount of that obligation.
- The Principal is not obliged to exercise any right of set off pursuant to clause (b) 11.12(a), which is in addition to its other rights of combination of account, set-off or lien (by contract or operation of law).
- (c) On its exercise of any set off pursuant to clause 11.12(a) against the Guarantor, the Principal will promptly notify the Guarantor of details of that set-off.

11.13 **Variations**

This Deed may only be varied by a document signed by or on behalf of both the Principal and the Guarantor.

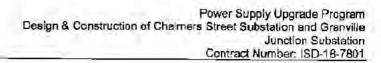
11.14 Provisions limiting or excluding liability

Any provision of this Deed which seeks to limit or exclude a liability of the Principal or the Guarantor is to be construed as doing so only to the extent permitted by law.

11.15 Counterparts

- (a)This Deed need not be executed by the Principal.
- (b) If the Guarantor is more than one person, a Guarantor may execute this Deed in one or more separate counterparts, each of which constitutes the deed of that Guarantor.

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014 Doc ID 607060023/v9





Executed as a deed.	
Executed by in the presence of:	
Signature of Director	Signature of Secretary/other Director
Name of Director in full	Name of Secretary/other Director in full



Schedule 18 - Deed of Novation (Principal, Contractor and Subcontractor)

(Clause 2.2(g))

THIS	DEED OF NOVATION is made on [] between the following parties:
1.	Transport for NSW (ABN 18 804 239 602 Pacific Highway, Chatswood NSW 2067 ("	

2.	t] ABN [] of [] ("Contractor"); and
3.	1	1 ABN [] of [] ("Subcontractor").

Recitals

- A. By agreement dated [] (the "Subcontract"), the Principal engaged the Subcontractor to, and the Subcontractor agreed to, undertake certain works for the Principal (the "Subcontract Works").
- B. By agreement dated [] (the "Contract"), the Principal engaged the Contractor to, and the Contractor agreed to, undertake certain works for the Principal, which includes the Subcontract Works.
- C. Under the Contract and the Subcontract, the Contractor and the Subcontractor must enter into this deed when the Principal requires them to do so.
- D. Subject to this deed, the Subcontractor agrees to accept the Contractor in place of the Principal for the performance of all the obligations of the Principal and to release completely and discharge the Principal from all of its obligations under the Subcontract and from all claims and demands in respect of it.

THIS DEED WITNESSES that in consideration, among other things, of the mutual promises contained in this deed, the parties agree:

- The Subcontractor must perform its obligations under, and be bound by, the Subcontract
 as if the Contractor was originally named in the Subcontract as the Principal.
- 2. The Subcontractor:
 - releases and forever discharges the Principal from its obligations under the Subcontract and from all claims and demands in respect of the Subcontract; and
 - (b) accepts the liability of the Contractor in place of the liability of the Principal in respect of the Subcontract.
- The Contractor must perform all the obligations of the Principal under, and be bound by, the Subcontract as if the Contractor were originally named in the Subcontract as the Principal.

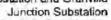


4.	Upon	the	execution	and	exchange	of	this	deed:
----	------	-----	-----------	-----	----------	----	------	-------

- the Principal must release any securities given to it by the Subcontractor in accordance with the Subcontract;
- (b) the Subcontractor must give the Contractor security in the same form and for the same amounts as any security required by the Subcontract; and
- (c) the Subcontractor must ensure that the Contractor is appropriately noted on all relevant insurance policies as required by the Subcontract.
- This deed is governed by the laws of New South Wales and the parties agree to submit to the non exclusive jurisdiction of the courts of that state.

EXECUTED by the partie Executed by [by or in the presence of:	s as a deed: [ABN [1	
Signature of Director			Signature of Secretary/other Director
Name of Director in full	_	-	Name of Secretary/other Director in full
Executed by [by or in the presence of:] ABN [1	
Signature of Director	-	_	Signature of Secretary/other Director
Name of Director in full			Name of Secretary/other Director in full
Executed by [or in the presence of:] ABN [] by	
Signature of Director	100	_	Signature of Secretary/other Director
Name of Director in full			Name of Secretary/other Director in full

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023A8





Schedule 19 - Contractor's Certificate of Design Compliance

(Clauses 5.3(b)(i) and 11.6(c)(ii))

CONTRACTOR'S CERTIFICATE OF DESIGN COMPLIANCE	
CONTRACTOR:	
DESIGN PACKAGE	DESCRIPTION
(Attech sched	lule of work packages if insufficient space)
I certify that the design for the packages or packages or pabove in accordance with the requirements of	art thereof described above has been completed to the extent indicated
I further certify that the attached compliance packages.	records as required by the Contract reflect the true status of the design
SIGNATURE:(Contractor's Representative)	SIGNATURE: (Contractor's Subcontractor/Designer)
DATE:	DATE:

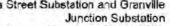


Schedule 20 - Contractor's Certificate of Construction Compliance

(Clauses 7.1(c) and 11.6(c)(ii))

ONTRACTOR: /ORK PACKAGE	
ORK PACKAGE	70.0000.0000
	DESCRIPTION
certify that the procurement/construction of the work	ork packages if insufficient space) c packages or part thereof described above have been be with the requirements of the Contract between the Principal
gister of outstanding minor construction non confor	
further certify that the attached compliance records ackages.	as required by the Contract reflect the true status of the work
AME:SIGNATURE: (Contractor's Representative)	DATE: / /
HIS SECTION MUST BE COMPLETED BY THE RE	ELEVANT CONTRACTOR'S SUBCONTRACTOR/DESIGNER
escribed above have been completed to the extent i	packages (one certificate per work package) or part thereof indicated above in accordance with the requirements of the, and comply with the, and comply with the, fourstanding minor construction non-conf
urther certify that the attached compliance records ackages.	as required by the Contract reflect the true status of the work
GNATURE:	
(Contractor's Subcontractor/Designer) ATE:	

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/v9

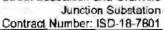




Schedule 21 - Contractor's Certificate of Completion

(Definition of "Completion" in Clause 1.1 and Clause 12.3(c))

	CONTI	RACTOR'S C COMPLE	ERTIFICATE OF ETION
CON	TRACTOR:		
Desc	cription of Portion or Works:		
_			
			has/have been achieved in accordance with the
	irements of the Contract between the F		, compiles with the requirements of the Contract,
	ect to the register of unresolved issues	attached.	
I furt	her certify that:		
(a)	All Variation Orders (including conce	essions) are lister	d in the attached compliance register.
(b)	All identified Defects (including any Principal) have been satisfactorily re	non-conformities actified and their	but excluding Defects accepted as minor by the documentation closed out.
(c)	All required documentation has been	n submitted.	
(d)	All notices regarding system deficier	ncies have been	satisfactorily closed out.
I furt	her certify that the attached compliance on/the Works.	e records as requ	aired by the Contract reflect the true status of the
Porti			
	NATURE:	SIGNATURE	
	NATURE; (Contractor's Representative)		: (Contractor's Subcontractor/Designer)





Schedule 22 - Contractor's Certificate of Final Completion

(Clause 12.8(d))

CONTRACTOR'S CERTIFICATE OF FINAL COMPLETION

CONTRACTOR:

I hereby certify that Final Completion has been achieved by the Contractor in accordance with the requirements of the Deed (including all Variation orders detailed in (a) below) between the Principal and the Contractor.

I further certify that:

- All Variation Orders (including concessions) are listed in the attached compliance register. (a)
- (b) All identified Defects (including any non-conformities) have been satisfactorily rectified and their documentation closed out.
- (c) All required documentation has been submitted.
- (d) All notices regarding system deficiencies have been satisfactorily closed out.

I further certify that the attached compliance records as required by the Deed reflect the true status of the Portion/the Works

SIGNATURE:	
(Contractor's Representative)

DATE: /



Contract Number: ISD-18-7801

Schedule 23 - Form of Other Contractor Deed Poll

(Clause 7.4)

This Deed Poll made the

day of

20

in favour of:

[insert details]

(ABN [insert details]) of [insert details]

("Contractor") and

Transport for NSW (ABN 18 804 239 602) of Level 5, Tower A, Zenith Centre, 821 Pacific Highway, Chatswood, NSW, 2067

("Principal")

Given by:

[insert details] (ABN [insert details]) of [insert details]

("Other Contractor")

Recitals

- A. By a contract dated [insert date] ("Contract") between the Principal and the Contractor, the Contractor agreed to design and construct certain works ("Works"), on the land more particularly described in the Contract (the "Site").
- B. The Other Contractor has been appointed under a Contract ("Other Contract") to undertake certain works on the Site ("Other Contractor Works").
- C. For the purposes of the Work Health and Safety Act 2011 (NSW) and the Work Health and Safety Regulation 2011 (NSW) (together, the "WHS Legislation"), the Works and the Other Contractor Works are a 'construction project' within the meaning of the WHS Legislation.
- D. Under the Contract, the Principal engaged the Contractor as principal contractor and authorised the Contractor to have management and control of the workplace for the purpose of discharging the duties imposed on a principal contractor for the construction project.
- E. Under the provisions of the Contract, the Principal is required to procure the provision of this Deed Poll from each Other Contractor that undertakes Other Contractor Works (as that term is defined in the Contract).

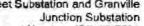
This Deed Poll Provides

- In consideration of the Contractor accepting this Deed Poll, the Other Contractor agrees that
 - (a) the Other Contractor, its subcontractors and their respective personnel while they are on the Site, will comply with Site safety regulations, any Site rules or regulations and with all directions of the Contractor with respect to work health and safety;





- the Other Contractor, its subcontractors and their respective personnel will comply in a timely manner with directions of the Contractor so that the Contractor discharges its obligations as principal contractor;
- (c) the Other Contractor, its subcontractors and their respective personnel will consult, cooperate and coordinate activities with the Contractor, the Principal and all other persons who have a work health and safety duty in relation to the same matter;
- (d) the Other Contractor, its subcontractors and their respective personnel will comply with the work health and safety plan(s) prepared by the Contractor while on Site;
- (e) the Contractor may exclude the Other Contractor, any of its subcontractors and their respective personnel from the Site for work health and safety reasons;
- the Contractor may direct the Other Contractor, any of its subcontractors and their respective personnel to perform or not perform certain acts for work health and safety reasons;
- (g) where high risk construction work is to be carried out in the performance of the Other Contractor Works, the Other Contractor must:
 - prepare a safe work method statement that complies with all requirements of the WHS Legislation;
 - (ii) provide a copy of the safe work method statement to the Principal and the Contractor prior to the commencement of high risk construction work;
 - (iii) review and revise the safe work method statement in accordance with the WHS Legislation;
 - (iv) ensure that the high risk construction work is carried out in compliance with the safe work method statement; and
 - (v) where so directed by the Contractor, suspend the performance of any high risk construction work;
- the Other Contractor shall in carrying out the work under the Other Contract, comply
 with, and ensure that all subcontractors and personnel comply with the WHS
 Legislation; and
- in its contracts with subcontractors, the Other Contractor will ensure that the subcontractor is obliged to give the same obligations and rights as required of the Other Contractor under this Deed Poll.
- The Other Contractor indemnifies the Contractor against any delay, damage, expense, loss, penalty or liability suffered or incurred by the Contractor as a result of:
 - (a) any failure by the Other Contractor to comply with any direction given by the Contractor in accordance with this Deed Poll; or
 - (b) any breach by the Other Contractor, any of its subcontractors or their respective personnel of:
 - their respective contractual or legislative work health and safety obligations;
 or





- the provisions of this Deed Poll.
- 3. This Deed Poll will be governed by and construed in accordance with the law for the time being of New South Wales.

Executed as a Deed Poll.	
Executed by [Other Contractor] by or in the presence of:	
Signature of Director	Signature of Secretary/other Director
Name of Director in full	Name of Secretary/other Director in full



Schedule 24 - Form of Interface Agreement Deed Poll in favour of Rail Transport Agency and Transport for NSW

(Clause 1.5(b) and (c))

This deed poll ("Deed Poll") made the

day of

20

By:

Abergeldie Contractors Pty Ltd ABN 47 004 533 519

("Contractor"),

in favour of:

Sydney Trains (ABN 38 284 779 682) ("Rail Transport Agency") and

Transport for NSW (ABN 18 804 239 602) a corporation constituted by section 3C of the *Transport Administration Act* 1988 (NSW), of Level 5, Tower A Zenith Centre, 821 Pacific Highway, CHATSWOOD NSW 2067 ("TfNSW")

Recitals

- A. Rail Transport Agency operates the commuter rail system in Sydney, including Chlamers Street Substation and surrounds where the Works (the "Project") is to be undertaken by the Contractor and others.
- TfNSW is responsible for developing certain major railway systems and other major transport projects.
- C. TfNSW is responsible for procuring the execution and completion of the Project, and has entered into a safety interface agreement dated 2013 for Power Supply Upgrade (Draft) Program Safety Interface Agreement ("Interface Agreement") with Rail Transport Agency to cover the Project.
- D. Rail Transport Agency is relying on TfNSW to procure the Contractor (with others) to execute and complete the Project in accordance with the Contract to ensure that Rail Transport Agency will satisfy, among other things, its obligation to provide an operating commuter rail system.
- E. Rail Transport Agency will suffer loss if TfNSW does not procure the Contractor to execute and complete the Works in accordance with the Contract and the Interface Agreement.

This deed witnesses that the Contractor hereby covenants, warrants and agrees with and for the benefit of Rail Transport Agency and TfNSW as follows:

- It will comply with its obligations under the Interface Agreement.
- During and upon Completion of the Project, the Contractor's Activities will satisfy the requirements of the Interface Agreement.
- Rail Transport Agency and TfNSW may assign or charge the benefits and rights accrued under this Deed Poll.
- This Deed Poll is governed by the laws of the State of New South Wales.



- This Deed Poll may not be revoked or otherwise modified without the prior written consent of Rail Transport Agency and TfNSW.
- Where terms used in this Deed Poll are defined in the Contract or the Interface
 Agreement, those terms have the meaning given to them in the Contract or the Interface
 Agreement.

Executed as a deed poll.

Signed by Abergeldie Contractors Pty Ltd (ABN 47 004 533 519) in accordance with section 127 of the	
Corporations Act 2001 (Cth): Signature of director	Signature of company secretary/director
Full name of director	Full name of company secretary/director

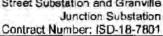


Schedule 25 - Deed of Novation (Principal, Contractor and Consultant)

(Clause 5.2(b))

Deed of Novation

ABN [ABN [[ABN [





Deed of Novation made at

on

Parties

[insert name] ABN [insert] of [insert] (Retiring Party)

[Insert name] ABN [insert] of [insert] (Continuing Party)

[Insert name] ABN [insert] of [insert] (Substitute Party)

Recitals

- A The Retiring Party and the Continuing Party are parties to the Contract.
- B The Retiring Party and the Substitute Party have asked the Continuing Party to agree to the novation of the Contract on the terms and conditions of this deed.
- The Continuing Party has agreed to the novation of the Contract on the terms and conditions of this deed.

This deed provides

1. Definitions and interpretation

1.1 Definitions

Defined terms in the Contract have the same meanings in this deed, unless the contrary intention appears.

In this deed:

"Claim" means any claim, notice, demand, action, proceeding, litigation, investigation or judgment whether based in contract, tort, statute or otherwise.

"Contract" means the agreement between the Retiring Party and the Continuing Party described in the Schedule.

"Effective Date" means [insert date].

"GST" means the Goods and Services Tax as defined in the A New Tax System (Goods and Services) Act 1999 (Cth.).

"Liability" means all liabilities, losses, Claims, damages, outgoings, costs and expenses of whatever description.

"Related Entity" has the meaning ascribed to that term in section 9 of the Corporations Act 2001 (Cth).

1.2 Interpretation

In this deed:

headings are for convenience only and do not affect interpretation; (a)

and unless the context indicates a contrary intention:

Doc ID 607060023/v9



- (b) an obligation or a liability assumed by, or a right conferred on, 2 or more persons binds or benefits them jointly and severally;
- person includes an individual, the estate of an individual, a corporation, an authority, an association or a joint venture (whether incorporated or unincorporated), a partnership and a trust;
- (d) a reference to a party includes that party's executors, administrators, successors and permitted assigns, including persons taking by way of novation and, in the case of a trustee, includes a substituted or an additional trustee;
- (e) a reference to a document (including this deed) is to that document as varied, novated, ratified or replaced from time to time;
- a reference to a statute includes its delegated legislation and a reference to a statute or delegated legislation or a provision of either includes consolidations, amendments, re-enactments and replacements;
- (g) a word importing the singular includes the plural (and vice versa), and a word indicating a gender includes every other gender;
- (h) a reference to a party, clause, schedule, exhibit, attachment or annexure is a reference to a party, clause, schedule, exhibit, attachment or annexure to or of this deed, and a reference to this deed includes all schedules, exhibits, attachments and annexures to it:
- if a word or phrase is given a defined meaning, any other part of speech or grammatical form of that word or phrase has a corresponding meaning;
- (j) Includes in any form is not a word of limitation; and
- (k) a reference to \$ or dollar is to Australian currency.

2. Condition Precedent to Novation

Clause 3 of this deed will have no force and effect until the Effective Date.

Novation

3.1 Novation

- (a) The parties novate the Contract so that the Substitute Party and the Continuing Party are parties to a new agreement on the same terms as the Contract.
- (b) Any reference in the Contract to the Retiring Party will be read as a reference to the Substitute Party.

3.2 Assumptions of rights and obligations

- (a) The Substitute Party:
 - (i) will be bound by and must comply with the terms of the Contract and will
 enjoy the rights and benefits conferred on the Retiring Party under the
 Contract; and



 (ii) will assume the obligations and Liability of the Retiring Party under the Contract.

in all respects as if the Substitute Party had originally been named in the Contract as a party instead of the Retiring Party.

(b) The Continuing Party will comply with the terms of the Contract on the basis that the Substitute Party has replaced the Retiring Party under the Contract in accordance with this deed.

3.3 Release by Continuing Party

- (a) The Continuing Party releases the Retiring Party from:
 - (i) any obligation or Liability under or in respect of the Contract; and
 - (ii) any action, claim and demand it has against the Retiring Party under or in respect of the Contract.
- (b) This release does not affect any rights the Continuing Party may have against the Substitute Party as a result of the assumption by the Substitute Party under the terms of this deed of the obligations and Liability of the Retiring Party under the Contract.

3.4 Insurance

As from the Effective Date:

- the Substitute Party must replace any insurances effected and maintained by the Retiring Party under the terms of the Contract; and
- (b) the Continuing Party will take the necessary steps to ensure that, for all insurances required to be effected by the Continuing Party under of the terms of the Contract, the Substitute Party is named in place of the Retiring Party as required by the Contract.

4. Ongoing Rights of Retiring Party

4.1 Direct Enquiries

In addition to any other rights which the Retiring Party may have, the Continuing Party and the Substitute Party each agree that the Retiring Party may make enquiries directly of the Continuing Party for the purpose of establishing whether the Continuing Party is complying with its obligations under the Contract.

4.2 Retiring Party to have benefit of Promises

- (a) The Continuing Party warrants in favour of the Retiring Party that in performing the Services it will comply with its obligations under the Contract and that the Retiring Party will continue to have the benefit of all promises, undertakings, covenants and warranties made or given by the Continuing Party under the Contract as if the Retiring Party remained a party to the Contract.
- (b) Without limiting the above, the Continuing Party undertakes to the Retiring Party that it will exercise all reasonable skill, care and diligence in performing the



Services including in issuing any certificates it is required to issue under the Contract and further acknowledges that the Retiring Party will be relying upon the skill and judgment of the Continuing Party in issuing those certificates and acknowledges that:

- in performing the Services it will owe a duty of care to the Retiring Party;
 and
- (ii) it is aware that the Retiring Party will be relying upon the skill and judgment of the Continuing Party in performing the Services and the warranties given by the Continuing Party in this deed.

4.3 Report by Continuing Party

The Continuing Party undertakes to the Retiring Party that it will exercise all reasonable skill, care and diligence to ensure that the design intent of the Works as contained in the Design Documentation in existence at the date of execution of this deed, is reflected in the completion of the Design Documentation and in the execution of the Works.

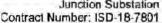
Without limiting the above, the Continuing Party must conduct such inspections of the Works at such times and in such detail as may reasonably be expected of a consultant engaged in a project of the size and complexity of the Works.

The Continuing Party must act in good faith and in the best interests of the Retiring Party and promptly advise the Retiring Party about any matter in which the Continuing Party has been instructed by the Substitute Party to provide the Services in a manner which is, or may result in an outcome which is, not in accordance with the requirements of the Contract, including:

- (a) any instruction or direction which it receives, or any work or services it becomes aware of, which in the reasonable opinion of the Continuing Party, is not in accordance with any provision of the Contract including where the Substitute Party's instructions:
 - in relation to design are not consistent with the Contract or may result in the Works to be constructed not being fit for their intended purpose; or
 - require the Continuing Party to Issue a certificate under the Contract where the conditions for the issue of that certificate under the Contract have not been satisfied; and
- (b) any non-conformity of any Design Documentation produced pursuant to the Contract, or to the Design Documentation in existence at the date of this deed, upon becoming aware of the non-conformity.

5. Overriding effect

The parties agree that the execution and operation of this deed will for all purposes be regarded as due and complete compliance with the terms of the Contract relating to any requirement for consent to assignment of the Contract so far as any such provisions would apply with respect to the novation of the Contract to the Substitute Party.





6. Representations and warranties

6.1 Authority

Each party represents and warrants to each other party that it has full power and authority to enter into and perform its obligations under this deed.

6.2 Authorisations

Each party represents and warrants to each other party that it has taken all necessary action to authorise the execution, delivery and performance of this deed in accordance with its terms.

6.3 **Binding obligations**

Each party represents and warrants to each other party that this deed constitutes its legal, valid and binding obligations and is enforceable in accordance with its terms.

7. Duties, costs and expenses

7.1 Stamp duty

The Substitute Party must pay all stamp duty, duties or other taxes of a similar nature (including but not limited to any fines, penalties and interest) in connection with this deed or any transaction contemplated by this deed (except to the extent the terms of the Contract provide otherwise).

7.2 Costs

Each Party must pay its own legal costs and expenses in negotiating, preparing and executing this deed.

GST 7.3

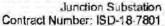
The parties agree that:

- (a) with any payment of amounts payable under or in connection with this deed including without limitation, by way of indemnity, reimbursement or otherwise, the party paying the amount must also pay any GST in respect of the taxable supply to which the amount relates:
- (b) the party receiving the payment will provide a tax invoice; and
- (c) the payment of any amount referred to in paragraph (a) which is a reimbursement or indemnification of a cost, expense, loss or liability will exclude any part of the amount for which the other party can claim an input tax credit.

8. General

8.1 Governing law

This deed is governed by and must be construed according to the laws of the State or Territory stated in Schedule 1.





8.2 Jurisdiction

Each party irrevocably:

- (a) submits to the non-exclusive jurisdiction of the courts of the State or Territory stated in Schedule 1, and the courts competent to determine appeals from those courts, with respect to any proceedings which may be brought at any time relating to this deed; and
- (b) waives any objection it may now or in the future have to the venue of any proceedings, and any claim it may now or in the future have that any proceedings have been brought in an inconvenient forum, if that venue falls within clause 8.2(a).

8.3 Amendments

This deed may only be varied by a document signed by or on behalf of each party.

8.4 Waiver

- (a) Failure to exercise or enforce, or a delay in exercising or enforcing, or the partial exercise or enforcement of, a right, power or remedy provided by law or under this deed by a party does not preclude, or operate as a waiver of, the exercise or enforcement, or further exercise or enforcement, of that or any other right, power or remedy provided by law or under this deed.
- (b) A waiver or consent given by a party under this deed is only effective and binding on that party if it is given or confirmed in writing by that party.
- (c) No waiver of a breach of a term of this deed operates as a waiver of any other breach of that term or of a breach of any other term of this deed.

8.5 Counterparts

This deed may be executed in any number of counterparts and by the parties on separate counterparts. Each counterpart constitutes the deed of each party who has executed and delivered that counterpart.

8.6 Severance

If at any time a provision of this deed is or becomes illegal, invalid or unenforceable in any respect under the law of any jurisdiction, that will not affect or impair:

- (a) the legality, validity or enforceability in that jurisdiction of any other provision of this deed: or
- (b) the legality, validity or enforceability under the law of any other jurisdiction of that or any other provision of this deed.

8.7 Further acts and documents

Each party must promptly do all further acts and execute and deliver all further documents (in form and content reasonably satisfactory to that party) required by law or reasonably requested by another party to give effect to this deed.



8.8 Assignment

A party cannot assign, novate or otherwise transfer any of its rights or obligations under this deed without the prior consent of each other party.



Power Supply Upgrade Program

Design & Construction of Chalmers Street Substation and Granville

Junction Substation

Contract Number: ISD-18-7801

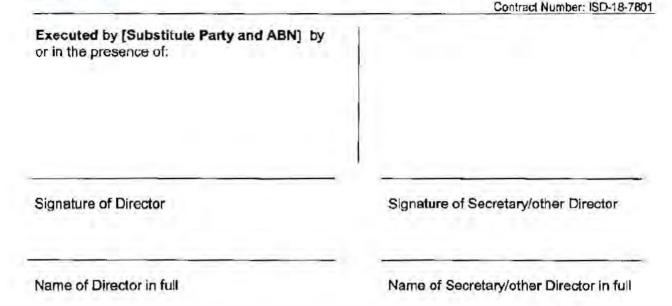
Schedule 1	
Contract (Clause 1.1)	
	••••••••••••••••••••••••••••••••••••••
Governing Law and Jurisdiction (Clause 1.1and 1.1)	**************************************



Executed as a deed.

Executed by [Retiring	Party	and	ABN]	by	or
in the presence of:					

Signature of Director	Signature of Secretary/other Director
Name of Director in full	Name of Secretary/other Director in full
Executed by [Continuing Party and ABN] by or in the presence of:	
Signature of Director	Signature of Secretary/other Director
Name of Director in full	Name of Secretary/other Director in full



Transport for NSW



Schedule 26 - Expert Determination Agreement

(Clauses 15.8(b) and 15.9)

Expert Determination Agreement made at

on

Parties 1

1 (Principal)

[Insert name and address of Contractor] (Contractor)

[Insert name and address of Expert agreed between the Parties or appointed pursuant to clause [to be inserted] of the Contract] (Expert)

Background

- A. The Principal and the Contractor (together "the Parties" and each "a Party") are parties to a contract (Contract) for [to be inserted].
- B. By written notice dated [to be inserted], the [insert the Principal or Contractor as applicable] has required that the matter described in Schedule 1, being a matter that the Contract requires or permits to be referred to an Expert for determination, be determined by an Expert appointed under clause 15,7 of the Contract (Matter).
- C. Pursuant to clause 15.7 of the Contract, the Expert has been appointed to determine the Matter in accordance with the process set out in this Agreement.

Operative part

1. Appointment of Expert

- (a) The Parties appoint the Expert to determine the Matter in the manner and within the times set out in this Agreement and the Expert accepts the appointment on the basis set out in this Agreement.
- (b) The Parties agree that:
 - (i) the Expert will act as an expert and not as an arbitrator;
 - (ii) neither the determination of the Matter, nor the process required by this Agreement is an arbitration and any conference conducted during the determination is not a hearing conducted under any legislation or rules relating to any form of arbitration;
 - the rules of evidence and natural justice do not apply to the determination; and
 - (iv) the Expert must conduct the determination of the Matter in accordance with the Rules for Expert Determination Process set out in Schedule 2;
- (c) If, at any time during the determination, the Expert becomes aware of circumstances that might reasonably be considered to adversely affect the Expert's capacity to act independently or impartially, the Expert must inform the



Contract Number: ISD-18-7801

Parties immediately and, unless the Parties agree otherwise, terminate this Agreement.

2. Confidentiality

All proceedings and submissions relating to the determination (including the fact that any step in the determination is occurring), and all documents prepared for the purposes of the determination (including the Expert's determination), must be kept confidential between the Parties and the Expert. No such proceedings, submissions or documents, nor any other information relating to or arising out of the determination, may be divulged to any other person, except with the prior written consent of both Parties or as may be required by law or to the extent necessary to give effect to or enforce the Expert's determination.

3. Costs and Fees

- (a) As between the Parties and the Expert, the Parties are jointly and severally liable for the payment of the Expert's fees and disbursements, calculated in accordance with the Schedule of Fees and Disbursements set out in Schedule 3. The Parties agree to comply with any direction from the Expert as to the provision of security deposits in respect of his or her fees and disbursements.
- (b) The Parties agree as between themselves that:
 - they will each pay one half of the Expert's fees and disbursements, calculated in accordance with the Schedule of Fees and Disbursements set out in Schedule 3; and
 - (ii) they will each bear their own costs of and incidental to the preparation of this Agreement and their participation in the determination.

4. Exclusion of Liability and Indemnity

Except in the case of fraud, the Expert will not be liable to either Party for any act or omission by the Expert in the performance or purported performance of this Agreement. The Parties jointly and severally indemnify the Expert against all claims arising out of or in any way referable to any act or omission by the Expert (except fraud) in the performance or purported performance by the Expert of the terms of this Agreement.

5. Co-operation of the Parties

Each Party agrees to take part in the determination in good faith and to comply with the reasonable requests and directions of the Expert in relation to the conduct of the determination.

Governing Law

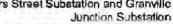
This Agreement is governed by and is to be construed in accordance with the laws in force in the State of New South Wales.



Contract Number: ISD-18-7801

7. Jurisdiction

- (a) The Parties and the Expert irrevocably submit to the non-exclusive jurisdiction of the courts of the State of New South Wales and the New South Wales courts to which the appeals from those courts may be made.
- (b) The Parties and the Expert irrevocably waive any objection they may now or in the future have to the venue of any proceedings, and any claim they may now or in the future have that any proceeding has been brought in an inconvenient forum, where that venue falls within clause 7(a).





Schedule 1 - The Matter

[To be inserted when it comes time for expert determination]



Schedule 2 - Rules for Expert Determination Process

1. Commencement

1.1 Except as provided in clause 4.3 of these Rules, the expert determination process begins when the Expert accepts an appointment to determine the Matter in accordance with these Rules and the Code of Conduct appended to these Rules.

2. Written Submissions

- Within 7 days after the date this process begins, Party A (ie the Party who gave notice under clause 15.1 of the Contract) must, in addition to any particulars provided by Party A under clause 15.1 of the Contract, give the other Party and the Expert a written statement of the Matter referred for Expert determination, any agreed statement of facts and a written submission on the Matter in support of Party A's contentions.
- 2.2 Within 7 days after the statement in clause 2.1 is served, the other Party must give Party A and the Expert a written response to Party A's submissions.
- 2.3 If the Expert considers it appropriate, Party A may reply in writing to the other Party's response in clause 2.2 within the time allowed by the Expert.
- 2.4 If the Expert decides further information or documentation is required for the determination of the Matter, the Expert may direct one or more Parties to provide such further submissions, information or documents as the Expert may require.

Conference

- 3.1 The Expert may, if he or she thinks appropriate, call a conference of the Parties. Unless the Parties agree otherwise, the conference will be held in Sydney.
- 3.2 At least 14 days before the conference, the Expert must inform the Parties of the date, venue and agenda for the conference.
- 3.3 The Parties must appear at the conference and may make submissions on the subject matter of the conference. If a Party fails to appear at a conference of which that Party had been notified under clause 3.2, the Expert and the other Party may nevertheless proceed with the conference and the absence of that Party will not terminate or discontinue the Expert determination process.

3.4 The Parties:

- (a) may be accompanied at a conference by legal or other advisers; and
- (b) will be bound by any procedural directions as may be given by the Expert in relation to the conference both before and during the course of the conference.
- 3.5 The conference must be held in private.
- 3.6 If required by any Party, transcripts of the conference proceedings must be taken and made available to the Expert and the Parties.



4. General

- 4.1 In making a determination or calling or holding a conference, the Expert must proceed in accordance with the Contract.
- 4.2 All proceedings and submissions relating to the Expert determination process must be kept confidential except:
 - (a) with the prior consent of the Parties;
 - (b) as may be required by law; or
 - (c) as may be required in order to enforce the determination of the Expert.
- 4.3 The Expert must:
 - (a) inform the Parties of:
 - any relationship or interest with the Parties or their respective officers, employees, contractors, consultants or agents;
 - (ii) any interest the Expert has in the matters in dispute; and
 - (iii) any circumstance which might reasonably be considered to adversely affect the expert's capacity to act independently or impartially.
 - (iv) immediately upon becoming aware of any such circumstances; and
 - (b) upon making any disclosure under this clause 4.3, unless and until the Parties agree otherwise terminate the proceedings.

5. The Determination

- 5.1 As soon as possible after receipt of the submissions or after any conference and, in any event not later than 90 days after the Expert's acceptance of appointment, the Expert must;
 - (a) determine the Matter between the Parties; and
 - (b) notify the Parties of that determination.
- 5.2 The determination of the Expert must:
 - (a) be in writing stating the Expert's determination and giving reasons;
 - (b) be made on the basis of the submissions (if any) of the parties, the conference (if any) and the Expert's own expertise; and
 - (c) meet the requirements of the Contract.
- 5.3 Subject to clause 5.4, to the extent permitted by law, the Expert's determination will be final and binding on the Parties unless a notice of appeal is given in accordance with clause 15.10 of the Contract.
- 5.4 If the Expert's determination 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 determination.

6. Costs

6.1 Security for costs must be deposited by both Parties at the commencement of the Expert determination process in accordance with any direction of the Expert.

7. Modification

7.1 These rules may be modified only by agreement of the Parties and, if the Expert has been appointed, the Expert.



APPENDIX 1 TO RULES FOR EXPERT DETERMINATION PROCESS

Code of Conduct for an Expert

- The function of the Expert is to make a determination of the Matter in accordance with the Contract and the Expert Determination Agreement, including the Rules and this Code of Conduct.
- The Expert must receive the written submissions and responses of the Parties in accordance with the procedures specified in the Rules and may require further information or documentation from the Parties which is reasonably necessary to determine the Matter.
- The Expert must decide whether a conference is necessary to receive further information.
 The Expert must inform the Parties of the subject matter of any conference and may hear representations only on those matters during any such conference.
- The Expert must disclose to both Parties all information and documents received.
- If a Party fails to make a written submission, the Expert may continue with the process.
- Subject to clause 3.3 of the Rules in relation to conferences, meetings and discussions with the Expert must only take place in the presence of both Parties.



Schedule 3 - The Expert's Fees and Disbursements

[To be inserted when it comes time for expert determination]



Power Supply Upgrade Program
Design & Construction of Chalmers Street Substation and Granville
Junction Substation

Contract Number: JSD-18-7801

Signed as an agreement. Signed for and on behalf of the Principal by [insert name] in the presence of:	
	[Signature]
[Name of witness]	
[Signature of witness]	
Signed for and on behalf of the Contractor by [insert name] in the presence of:	
	[Signature]
[Name of witness]	

[Signature of witness]



Power Supply Upgrade Program
Design & Construction of Chalmers Street Substation and Granville
Junction Substation
Contract Number: ISD-18-7801

Signed by the Expert [insert name] in the presence of:	
	[Signature]
[Name of witness]	
[Signature of witness]	



Schedule 27 - Principal Supplied Items

(Clause 7.10)

In relation to Portion 1 and Portion 2:

	(a) 0.5m	H 6400A E	OC ONAN Smoothing Reactor (1 unit	1);	_			
	MINERAL DIVISION	1500V D	C Rectifier Power Cubicle (3 units);					
	(c) 11kV Distribution Switchgear No. 1 and No.2 (2 units);							
	(d) 1500V DCCB Rectifier BHR50B (truck etc) including DCCB Base Frames (4 units);							
	 (e) 1500V DCCB Feeder BHF30B (truck etc) with ULME relay including DCCB Base Frames (21 operational units + 2 spares); 							
	(f) 1500V Harmonic Filter including Base Frames (2 units);							
	(g) 1500V DC Inter-trips panel (2 units);							
	(h) DSMSB No 1 and No 2 415V Switchboards (2 units);							
Principal Supplied	(i) Substation Locks (barrels and padlocks only);							
Items	(j) DTS Panel/Cubicle;							
	(k) P124 relays (3 units); and							
	(I) The f	ollowing C	able:					
	No. of Cores	Cable size (mm2)	Cable Type	Volt Grade	Qty (m)			
	1 + SCR	300	TR-XLPE/PVC, HD Scn, Cu, + DTS Fibre	19/33 kV	675			
	1 + SCR	300	TR-XLPE/PVC, HD Scn, Cu, + DTS Fibre (LSOH)	19/33 KV	1000			
	1 + SCR	300	TR-XLPE/PVC, HD Scn, Cu	19/33 kV	480			
	1 + SCR	120	TR-XLPE/PVC, HD Scn, Cu	19/33 kV	480			
	1 + SCR	35	TR-XLPE/PVC, HD Son, Cu	6.35/11kV	465			
Place of Availability	All equipment supplied by the Principal will be collected by the Contractor from Sydney Trains' equipment store at Chullora (Gate 3 Worth Street, Chullora NSW 2190).							
Date of Availability	The date which is seven days after the date on which the Principal receives a written notice from the Contractor requesting the relevant Principal Supplied item but which date will not be earlier than:							
Date of Availability		otember 2 e; and	016 for items a, b, c, h, k and l listed					
	2. 1 Ma	y 2017 for	all other Principal Supplied Items.					

In relation to Portion 3:



Contract Number: ISD-18-7801

Principal Supplied Item Item No.

Alstom 6.25MW - 33/11kV Transformer

Place of Availability:

The Alstom 6.25MW - 33/11kV Transformer supplied by the Principal will be collected by the Contractor from Sydney Trains' equipment store at Chullora (Worth Street, Chullora NSW 2190)

Date of Availability:

The date which is 7 days after the Principal receives a written notice from the Contractor requesting the item.

Item Principal Supplied Item No.

Schneider Electric - Protection Relays MiCOM P124

Place of Availability:

2

The Schneider Electric - Protection Relay MiCOM P124 (quantity X2) supplied by the Principal will be collected by the Contractor from Sydney Trains' equipment store at Chullora (Worth Street, Chullora NSW 2190)

Date of Availability:

The date which is 7 days after the Principal receives a written notice from the Contractor requesting the item.

Item Principal Supplied Item No.

3 Locks

Place of Availability:

Locks supplied by the Principal will be collected by the Contractor from Sydney Trains equipment store at Chullora (Worth Street, Chullora NSW 2190)

Date of Availability:

The date which is 7 days after the Principal receives a written notice from the Contractor requesting the item.



Item No.	Principal Supplied Item

4 DTS Fibre Link Cables

Place of Availability:

The DTS Fibre Link Cables supplied by the Principal will be collected by the Contractor from Sydney Trains' equipment store at Chullora (Worth Street, Chullora NSW 2190)

Date of Availability:

The date which is 7 days after the date on which the Principal receives a written notice from the Contractor requesting the item, provided however that the Contractor is not entitled to, and must not, make any such request before 1 January 2017.

Note: the delivery of this item is to be co-ordinated with the Principal by the Contractor

Item No.	Principal Supplied Item	
5	DTS Cabinet	

Place of Availability:

The DTS Cabinet supplied by the Principal will be collected by the Contractor from Sydney Trains' equipment store at Chullora (Worth Street, Chullora NSW 2190)

Date of Availability:

The date which is 7 days after the date on which the Principal receives a written notice from the Contractor requesting the item, provided however that the Contractor is not entitled to, and must not, make any such request before 1 January 2017.

Note: the delivery of this item is to be co-ordinated with the Principal by the Contractor

Item No.	Principal Supplied Item
6	Communications Cabinet Fitout Equipment
Place o	of Availability:
The Co	mmunications Cabinet Fitout Equipment supplied by the Principal will be collected by the

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014
Doc ID 607060023/v9



Contractor from Sydney Trains' equipment store at Chullora (Worth Street, Chullora NSW 2190)

Date of Availability:

The date which is 14 days after the date on which the Principal receives a written notice from the Contractor requesting the fit-out of the Communication cabinet, provided however that the Contractor is not entitled to, and must not, make any such request before 1 January 2017.

Note: the delivery of this item is to be co-ordinated with Sydney Trains by the Contractor



Contract Execution Page

Power Supply Upgrade Program
Design & Construction of Chalmers Street Substation and Granville
Junction Substation
Contract Number: ISD-18-7801

	r'
DATED 21 day of Decem	20.18
that the power of attorney has not been revo	on behalf of a party under a power of attorney declares oked, and that he or she is not aware of any fact or thority to execute this document under that power of
Executed and delivered as a Deed in Syd	ney
Signed, sealed and delivered for and on behalf of Transport for NSW (ABN 18 804 239 602) in the presence of:	
Signature of Witness	Signature of Authorised Delegate
	_ James Griffin_
Print Name	Print Name
(block letters)	(block letters)
PARTNER	Program Director
Position held	Position held
Executed by Abergeldie Contractors Pty Ltd (ABN 47 004 533 519) by its attorney, Hugh Thomson of 10 Sands Street, The Ponds, NSW under power of attorney dated 17 December 2018 in the presence of:	
Signature of attorney	Signature of witness
Full name of attorney	Full name of witness

The following pages describe the exhibits attached to this contract. The exhibits themselves are disclosed separately, bundled separately in relation to either Chalmers Street or Granville Substations. For more information about the exhibits, refer to the relevant exhibit page listed below and to the redaction schedule disclosed separately.



EXHIBIT A - TINSW STANDARD REQUIREMENTS

The TfNSW Standard Requirements comprises the following documents:

- a) TSR Prelude (Reference # 3849950_1);
- b) TSR C Communications and Community Liaison (Reference # 3849947_1);
- c) TSR E Environmental Management (Reference # 3849948_1);
- d) TSR P Project Administration (Reference # 3849949_1);
- e) TSR S Safety Management (Reference # 3849952_1); and
- f) TSR T Technical Management (Reference # 3849953 1).

Included on the attached CD titled "MEDIUM WORKS CONTRACT ~ DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."

Doc ID 607060023/v9



BITE	1.4	COL	10	DDI	
	- VV	CURT	10	HK.	-

The Works Brief comprises the following documents:

- (a) Exhibit B Works Brief Completion of Design and Construction of Chalmers Street Substation Program Delivery - Power Supply Upgrade (PSU) Infrastructure and Services.
- (b) Exhibit B Works Brief Design and Construction of Granville Junction Substation.

Included on the attached CD titled "MEDIUM WORKS CONTRACT - DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."



EXHIBIT C - PRINCIPAL'S INSURANCE POLICIES

Included on the attached CD titled "MEDIUM WORKS CONTRACT – DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."



EXHIBIT D - PLANNING APPROVAL

In relation to Portion 1 and Portion 2, the Planning Approval comprises the following documents:

- a) Review of Environmental Factors Chalmers Street Substation
- b) Determination Report Chalmers Street Substation including Conditions of Approval

In relation to Portion 3, the Planning Approval consists of Determination Report which includes the following appendices:

- a) Review of Environmental Factors
- b) Conditions of Approval
- c) Environmental Impact Assessment

Included on the attached CD titled "MEDIUM WORKS CONTRACT -- DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."



EXHIBIT E - CONTRACT SPECIFIC REQUIREMENTS

Appendix A - Site Plans

Appendix B - Constraints and Requirements on Particular Worksites

Appendix C - Possessions Programme

Included on the attached CD titled "MEDIUM WORKS CONTRACT - DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."



EXHI	BIT	F-	RE	PO	DTC
	DIL		ΝE		T 3

Included on the attached CD titled "MEDIUM WORKS CONTRACT – DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."



In relation to Portion 1 and Portion 2:

tem	Description	Author / Source	Date	Formal
F1	Report for Soil Contamination Assessment: Site A – Prince Alfred Sidings Central Station	GHD	April 2010	pdf
F2	Report for Prince Alfred Substation: BCA Compliance Review Report & Civil Scope of Works (Draft)	GHD	May 2011	pdf
F3	Report for Prince Alfred Substation and AC Switch House Upgrade: Structural Assessment for BCA 2009 Compliance	GHD	May 2011	pdf
F4	Report for Prince Alfred Substation BCA Compliance: Ventilation Work Scope	GHD	May 2011	pdf
F5	Hazardous Materials Survey Report: Prince Alfred Substation	WSP Environment & Energy	June 2011	pdf
F6	Detailed Investigation of Soil Contamination Phase III Central 2000 Project Central Station	CMPS&F Environmental	June 2011	pdf
F7	Chalmers Street Substation: Geotechnical Investigation (Rev 1)	GHD	February 2014	pdf
F8	Chalmers St Traction Substation Concept Earthing Design Report (Vers 1)	Tactical Earthing	March 2015	pdf

In relation to Portion 3:

Ref	Description/ Drawing Title Granville Junction Substation Power Study	Author/ Source	Date / Revision	File Format
ER0315	Western Line DC Power Study Scope Report	RailCorp	Februrary 2012	.pdf
ER0806	2018 Timetable Integrated Rail Delivery Program - Scenario 1 - DC Power Study Report	Sydney Trains	September 2015	.pdf
	Reports			



2759-GHD- HV-000001	Harmonic Monitoring at Granville Substation - 33kV and 11kV Buses (Normal Network Configuration) Analysis Report	GHD/Hill Michael	10/07/2015 Rev D1.0	.pdf
2759-GHD- SU-000003	Granville Junction Substation - TPD-14-4121 - Dilapidation Survey Report	GHD	20/08/2015 Rev 0	.pdf
	Granville Junction Substation - TPD-14-4121 - Hydrology Report	GHD	20/08/2015 Rev 0	.pdf
	Granville Junction Substation - TPD-14-4121 - Geotechnical and Contaimination Report	GHD	14/08/2015 Rev 0	.pdf
	Granville Junction Substation - TPD-14-4121 - Pre-Concept Desktop Earth Study	GHD	13/08/2015 Rev 0	pdf
	Granville Junction Substation - TPD-14-4121 - Internal Site Survey Report	GHD	14/08/2015 Rev 0	.pdf
	Granville Junction Substation - TPD-14-4121 - Soil Resistivity Measurement Report	GHD	14/08/2015 Rev 0	.pdf
2759-GHD- PE-000002	Granville Junction Substation - TPD-14-4121 - Noise and Vibration Assessment	GHD	August 2015 Rev 0	.pdf
2759-GHD- PE-000003	Granville Junction Substation - TPD-14-4121 - Electromagnetic Energy Report	GHD/EMC	July 2015 Rev 0	.pdf
2759-GHD- PE-000004	Granville Junction Substation - TPD-14-4121 - Sustainability Report	GHD	July 2015 Rev A	.pdf
212709	Granville Substation Pre- Demolition Hazardous Building Materials Assessment	GHD	December 2015	.pdf
	Survey			
2759-GHD- SU-000001	Granville Junction Substation - TPD-14-4121 - Topographic Survey - Area Plan	GHD/Lawrence Group Surveyors	Rev 0	.pdf
2759-GHD- SU-000002	Granville Junction Substation - TPD-14-4121 - Topographic Survey Report	GHD/Lawrence Group Surveyors	August 2015 Rev 0	.pdf
153189- DETL- 001/D	With Background- Combined issue 2	Lawrence Group Surveyors	1/09/2015	.pdf
153189- DETL- 001/D	With Background- Combined issue with track 2	Lawrence Group Surveyors	1/09/2015	.pdf
153189- DETL-	Detail & Level Survey	Lawrence Group Surveyors	1/09/2015	.dwg



001/D				
153189- DETL- 001/D	153189-DETL-001D	Lawrence Group Surveyors		.map
	gooee colour			.ctb
	MS18+141 F200716169 231110 AND114880500 - 02- Combined - Background		Version 2	.dwg



EXHIBIT G -	LIST OF MA	DDANTIES	DECHIDED	EDOME	RCONTRA	CTOPS
EXHIBIT G-	LIDI UF WA	RKANIES	RECOURED	FRUIVI SU	DOUGH RA	LURS



List of Warranties Required From Subcontractors

In relation to Portion 1 and Portion 2:

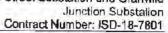
Description of Equipment and Warranty	Form	Period of Years	
Air Conditioning Plant & Equipment	Written	5	
All Electrical Cabling	Written	25	
All Electrical Fittings	Written	25	
Boiling / Chilled Water Units	Written	5	
Building & Wet Area Grates	Written	10	
Cast Iron Waste Pipe System	Written	20	
Chillers	Written	3	
CO2 Gaseoous Suppression Systems	Written	2	
Door Fixture and Fittings, Door Frames	Written	1	
Door Seals	Written	1	
Doors (separate warranty for each)	Written	5	
Doors and Hardware	Written	5	
Earthing Installation	Written	25	
Exterior Clear Sealer / Anti-Graffiti Coating	Written	15	
Exterior Paint Finish - Aluminum	Written	15	
Exterior Paint Finish - Concrete	Written	15	
Exterior Paint Finish - Steel	Written	15	
External cladding panels (Kerlite or similar)	Written	5	
External Louvres and other Louvres	Written	10	
External Pit Covers	Written	20	
Fall Arrest System	Written	20	
Fan Coil Units	Written	2	
Fencing	Written	10	
Fire Detection	Written	2	
Fire Extinguishers	Written	5	
Fire Hose Reel Pumps	Written	2	
Fire Hose Reels	Written	2	
Fire Protection	Written	2	



Description of Equipment and Warranty	Form	Period of Years
Fire Rated Door Panels (warranty for each)	Written	15
Fire Stopping	Written	15
Hydrant Pump	Written	2
Interior Paint Finish	Written	10
Mechanical Ventilation	Written	2
Metal Grates to Drains, Floor Outlets and Floor Access Aovers	Written	10
Paving Sealer	Written	5
Paving to External Areas	Written	10
Plasterboard, Fibre Cement Partitions and Ceilings and Wall Panels	Written	10
Powdercoat Finish	Written	15
Roofing and Roof Installation	Written	25
Sewage - Septic Tank	Written	1
Signage	Written	7
Sinks	Written	5
Specific Warranty - Ceiling and Wall Panels	Written	20
Specific Warranty - Glazing	Written	10
Specific Warranty - Louvres	Written	10
Specific Warranty - Low Voltage Electrical System	Written	2
Specific Warranty - W Beam Safety Barrier	Written	10
Stair Nosings	Written	10
Steel Balustrades	Written	10
Surface Pit Covers	Written	20
Filing, Paving and wet Area Waterproofing	Written	10
Toilets, Cisterns, Basins, Cleaners Sinks & Taps	Written	5
Warranty - Communications	Written	5
Vaterproofing	Written	15

In relation to Portion 3:

List of Warranties Required From Subcontractors:

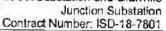




Description of Equipment and Warranty			
Roofing and Roof Installation	Written	25 Years	
Waterproofing	Written	15 Years	
Mechanical Ventilation	Written	2 Years	
Air Conditioning Plant & Equipment	Written	5 Years	
Split Systems	Written	5 Years	
Chillers	Written	3 Years	
Fan Coil Units	Written	2 Years	
Fire Hose Reel pumps	Written	2 Years	
Fire Extinguishers	Written	5 Years	
Kerlite Panels	Written	5 Years	
External Louvers	Written	10 Years	
Doors and Hardware	Written	5 Years	
Door Seals	Written	1 Years	
Fall Arrest System	Written	20 Years	
nterior Paint Finish	Written	10 Years	
Exterior Clear Sealer / Anti-Graffiti Coating	Written	15 Years	
Exterior Paint Finish - Steel	Written	15 Years	
Powdercoat Finish	Written	15 Years	
Exterior Paint Finish – Aluminium	Written	15 Years	
Paving Sealer	Written	5 Years	
Specific Warranty – Fire Detection	Written	2 Years	
Specific Warranty - Fire Protection	Written	2 Years	
Specific Warranty – CO2 Gaseous Suppression Systems	Written	2 Years	
lydrant Pumps	Written	2 Years	
ire Hose Reels	Written	2 Years	
arthing Installation	vvritten	25 Years	
Il electrical Cabling	Written	25 Years	
Il electrical Fittings	Written	25 Years	
ewage Septic -Tank	Written	1 Year	



Description of Equipment and Warranty	Form	Period of Years		
Building & Wet area grates	Written	10 Years		
Toilets, Cisterns, Basins, Cleaners Sinks & Taps	Written	5 Years		
Sinks	Written	5 Years		
Boiling / Chilled Water Units	Written	5 Years		
Cast Iron Waste Pipe System	Written	20 Years		
Surface Pit Covers	Written	20 Years		
Specific Warranty – Low Voltage Electrical System	Written	2 Years		
Warranty - Communications	Written	5 Years		
Specific Warranty – Paving to External Areas	Written	10 Years		
Specific Warranty - Stair Nosings	Written	10 Years		
Specific Warranty - External Pit Covers	Written	20 Years		
Specific Warranty - Fencing	Written	10 Years		
Specific Warranty – W Beam Safety Barrier	Written	10 Years		
Specific Warranty - Glazing	Written	10 Years		
Specific Warranty – Cellings and Wall Panels	Written	20 Years		
Specific Warranty – Plasterboard and Fibre Cement Partitions and Cellings	Written	10 Years		
Specific Warranty – Steel Balustrades	Written	10 Years		
Specific Warranty – Metal Grates to Drains, Floor Outlets and Floor Access Covers	Written	10 Years		
Specific Warranty - Louvres	Written	10 Years		
Specific Warranty – Tiling, Paving and vet Area Waterproofing	Written	10 Years		
Poor Fixture and Fittings	Written	1 Year		
Door Frames (various order numbers)	Written	1 Year		
ire Rated Door Panels (separate varranty for each)	Written	15 Years		
Doors (separate warranty for each)	Written	5 Years		
pecific Warranty – Signage	Written	7 Years		





Description of Equipment and Warranty	Form	Period of Years		
Specific Warranty - Fire Stopping	Written	15 Years		
Exterior Paint Finish- Concrete	Written	15 years		
Description of Equipment and Warranty	Form	Period of Years		
11kV Switchgear	Written	5 Years		
Rectifier and Power Transformers	Written	5 Years		
Auxiliary Transformer	Written	5 Years		
Rectfiers	Written	5 Years		
Isolation Rail Connecting Switches	Written	5 Years		
1500V DCCB	Written	5 Years		
AC Harmonic Filters	Written	5 Years		
DC Harmonic Filters	Written	5 Years		
SCADA	Written	5 Years		

List of Warranties Required From Manufacturer or Supplier:

Description of Equipment and Warranty	Form	Period of Years		
11kV Switchgear	Written	5 Years		
Rectifier and Power Transformers	Written	5 Years		
Auxiliary Transformer	Written	5 Years		
Rectifiers	Written	5 Years		
Isolation Rail Connecting Switches	Written	5 Years		
1500V DCCB	Written	5 Years		
AC Harmonic Filters	Written	5 Years		
DC Harmonic Filters	Written	5 Years		
SCADA	Written	5 Years		



FXHIBIT H -	PRFI	IMINARY	DESIGN

Included on the attached CD titled "MEDIUM WORKS CONTRACT - DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."



in relation to Portion 1 and Portion 2:

ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SCURGE	DATE / REVISION	REFERENCE NO. / EWG NO.
1.2	Principal's Design Drawings				Folder
1.2.1	Chalmers Street Substation - Reference Design Report - Appendix B - Drawings			67 Drawings	One PDF File
1.2.1.1	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Location Plan and Drawing Schedule		GHD	G	2656-2650-CSSS-AR-0001
1.2.1.2	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, Site	Plan	GHD	F	2656-2650-CSSS-AR-0002
1.2.1.3	Chalmers Street Airport Line 0,352km, Substations - Power Supply Upgrade. Basement Floor	Plan	GHD	F	2656-2650-CSSS-AR-0003
1.2.1.4	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. Ground Floor	Plan	GHD	F	2658-2850-CSSS-AR-0004
1.2.1.5	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, Level 1 Floor	Plan	GHD	G	2656-2650-CSSS-AR-0005
1.2.1.6	Chalmers Street Airport Line 0.352km, Substations Power Supply Upgrade, Roof	Plan	GHD	Ê	2656-2650-CSSS-AR-0006
1.2.1.7	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. North West	Elevation	GHD	G	2856-2650-CSSS-AR-0010
1.2.1.8	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. South West	Elevation	GHD	G	2656-2650-CSSS-AR-0011
1.2.1.9	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. North East	Elevation	GHD	E	2656-2850-CSSS-AR-0012
1.2.1.10	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, South East	Elevation	GHD	E	2656-2650-CSSS-AR-0013
1.2.1.11	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, Sections		GHD	F	2656-2650-CSSS-AR-0015
1.2 1.12	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, Perspectives		GHD	F	2656-2650-CSSS-AR-0020
1.2.1.13	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, PA Substation Cable Tunnel	Floor Plan & Section	GHD	Ė	2656-2650-CSSS-AR-0030
1.2.1.14	Chalmers Street Airport Line 0.352km, Substations Power Supply Upgrade. ESR 1500V Link Room and Environs	Floor Plan, Elevations & Section	GHD	F	2656-2650-CSSS-AR-0031
1.2.1.15	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. ESR 1500V Link Room Sections	Sections	GHD	D	2656-2650-CSSS-AR-0032
1.2.1.16	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade. ESR 1500V Link Room and Environs - PA SS Cable Shaft	Arrangements & Sections	GHD	D	2656-2650-CSSS-AR-0033
1.2.1.17	Chairners Street Airport Line 0.352km, Substations - Power Supply Upgrade. General Arrangement and Vehicle Turning Path	Plan	GHD	D	2656-2650-CSSS-CI-0101

EXECUTION VERSION -Design and Construction of Chalmers Street Substation and Granville Substation (607060023_9).pdf.docx © TfNSW 2014

Doc ID 607060023A9



ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
1.2.1.18	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Stormwater Dreinage	Plan	GHD	D	2656-2650-CSSS-CI-0102
1.2.1.19	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade ESR 1500V Link Room Existing Services	Plan	GHD	D	2656-2650-CSSS-CI-0110
1.2.1.20	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Substation Communications - Sheet 1 of 3	Block Diagram	GHD	E	2656-2650-CSSS-CO-0503
1.2.1.21	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Substation Communications - Sheet 2 of 3	Block Diagram	GHD	E	2656-2650-CSSS-CO-0504
1.2.1.22	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade. Substation Communications - Sheet 3 of 3	Block Diagram	GHD	E	2656-2650-CSSS-CO-050
1.2.1.23	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade. Substation Security Systems	Block Diagram	GHD	D	2656-2650-CSSS-CO-050
1.2.1.24	Chalmers Street Airport Line 0.352km, Substations — Power Supply Upgrade, Basement and Ground - Lightling and Power	Plan	GHD	E	2656-2650-CSSS-EL-040
1.2 1.25	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, Level 1 - Lighting and Power	Plan	GHD	P.	2656-2850-CSSS-EL-040
1.2.1.26	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, 125V DC Distribution Board No. 1 and No. 2	Schematic Diagram	GHD	E	2656-2650-CSSS-EL-040
1.2 1.27	Chalmers Street Airport Line 0.352km, Substations — Power Supply Upgrade. Auxiliary Supplies Change Over Panel	Schematic Diagram	GHD	D	2656-2650-CSSS-EL-040
1.2.1.28	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, Main Switchboard	Schematic Diagram	GHD	D	2656-2650-CSSS-EL-040
1.2.1.29	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade PA Cable Tunnels and ESR 1500V Link Room	Lighting Layout	GHD	E	2656-2650-CSSS-EL-041
1.2.1.30	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. Fire Detection and Alarm System	Legend & General Notes	GHD	D	2658-2650-CSSS-FP-080
1.2.1.31	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade. Fire Detection and Alarm System	Block Diagram	GHD	E	2658-2650-CSSS-FP-080
1.2.1.32	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. Hydraulic Services	Concept Plan	GHD	D	2858-2850-CSSS-PL-070
1.2,1,33	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. Roof Layout	Plan	GHD	D	2658-2650-CSSS-PL-070



ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
1.2.1.34	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade. Loadings Ground Floor	Plan	GHD	E	2658-2650-CSSS-ST-0205
1 2.1.35	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, Loadings Level 1	Plan	GHD	G	2656-2650-CSSS-ST-0206
1.2.1.36	Chalmers Street Airport Line 0.352km, Substations Power Supply Upgrade. Foundation / Pile Selout	Plan	GHD	E	2656-2650-CSSS-ST-0210
1,2,1,37	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Concrete Ground Floor	Plan	GHD	E	2656-2650-C\$SS-ST-0211
1.2.1.38	Chairners Street Airport Line 0.352km, Substations - Power Supply Upgrade, Concrete Level 1	Plan	GHD	G	2656-2650-CSSS-ST-0212
1,2,1,39	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade. Roof Framing	Plan	GHD	E	2856-2850-CSSS-ST-0230
1.2.1.40	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade Harmonic Filter	Plan	GHD	E	2656-2650-CSSS-ST-0235
1.2.1.41	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade ESR 1500V Link Room and Environs	Floor Slab & Structural Sections	GHD	D	2656-2850-CSSS-ST-0240
1.2.1.42	Chalmers Street Airport Line 0,352km, Substations — Power Supply Upgrade ESR 1500V Link Room and Environs	Tunnel, Typical Sections, Breakthrough to ESR Shaft	GHD	Ď	2656-2650-CSSS-ST-0241
1.2.1.43	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Ground Floor Equipment Layout	Plan	GHD	E	2656-2650-CSSS-TR-0303
1.2.1.44	Chalmers Street Airport Line 0.352km, Substations Power Supply Upgrade. Ground Floor Penetration Layout	Plan	GHD	E	2656-2650-CSSS-TR-0304
1.2.1.45	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Level 1 Equipment Layout	Plan	GHD	G	2656-2650-CSSS-TR-0305
1.2.1.46	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade. Level 1 Penetration Layout	Plan	GHD	G	2656 2650-CSSS-TR-0306
1.2.1.47	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade. Basement and Ground FI HV Cable Ladder Route	Plan	GHD	F	2656-2650-CSSS-TR-0310
1.2.1.48	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, HV Cable Ladder Roules - Sheet 1 of 2	Sections	GHD	Ė	2856-2650-CSSS-TR-0311
1.2.1.49	Chairners Street Airport Line 0.352km, Substations – Power Supply Opgrade. HV Cable Ladder Routes - Sheet 2 of 2	Sections	GHD	D	2658-2650-CSSS-TR-0312



ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
1.2,1,50	Chalmers Street Airport Line 0.352km, Substations ~ Power Supply Upgrade. HV Cable Ladder Routes	Plan	GHD	È	2656-2650-CSSS-TR-0313
1.2.1.51	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, HV Feeder Routes – Sheet 1 of 3	Plan	GHD	F	2656-2650-CSSS-TR-0315
1.2.1.52	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, HV Feeder Routes - Sheet 2 of 3	Plan	GHD	D	2656-2650-CSSS-TR-0316
1.2.1.53	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, HV Feeder Routes - Sheet 3 of 3	Plan	GHD	D	2656-2650-CSSS-TR-0317
1.2.1.54	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Electrical Earthing – Sheet 1 of 2	Schematic	GHD	E.	2656-2650-C\$SS-TR-0320
1,2,1,55	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Electrical Earthing – Sheet 2 of 2	Schematic	GHD	E	2656-2650-CSSS-TR-032
1.2.1.56	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, External Earthing	Layout	GHD	E	2656-2650-CSSS-TR-0322
1.2.1.57	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade ESR 1500V Link Room - Equipment Layout	Plan & Schedule	GHD	D	2856-2650-CSSS-TR-0340
1,21.58	Chalmers Street Airport Line 0.352km, Substations — Power Supply Upgrade ESR 1500V Link Room - HV Cable Route to ESR Shaft	Plan & Sections	GHD	E	2656-2650-GSSS-TR-034
1,2,1.59	Chalmers Street Airport Line 0.352km, Substations — Power Supply Upgrade 1500V Outdoor Link Area - Cable Support - Sheet 1 of 3	Plan	GHD	E	2656-2650-CSSS-TR-0345
1.2.1.60	Chalmers Street Airport Line 0.352km, Substations — Power Supply Upgrade 1500V Outdoor Link Area - Cable Support - Sheet 2 of 3	Plan	GHD	E	2656-2650-CSSS-TR-0346
1.2.1.61	Chalmers Street Airport Line 0.352km, Substations — Power Supply Upgrade 1500V Outdoor Link Area - Cable Support - Sheet 3 of 3	Plan	GHD	E	2656-2650-C\$SS-TR-034
1.2.1.62	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade 1500V Outdoor Link Area - Cable Support - Sheet 1 of 2	Sections	GHD	E	2656-2650-C\$SS-TR-0346
1,2 1.63	Chairners Street Airport Line 0.352km, Substations — Power Supply Upgrade 1500V Outdoor Link Area - Cable Support - Sheet 2 of 2	Sections	GHD	E	2656-2650-CSSS-TR-0349
1,2.1.64	Chalmers Street Airport Line 0.352km, Substations – Power Supply Upgrade, Preliminary Cable Schedule		GHD	C	2656-2650-CSSS-TR-0316
1.2.1.85	Chalmers Street Airport Line 0.352km, Substations - Power Supply Upgrade, Preliminary SCADA I/O Schedule		GHD	A	2656-2650-CSSS-TR-0319

Dec ID 607060023A9



ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR I SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
1.2.2	Chalmers Street Substation - Reference Design Report - Appendix B1 - Façade Documentation			16 Drawings	One PDF File
1.2.2.1	Chalmers Street Substation - Site Plan	Plan	TZG	2	SK-01
1.2.2.2	Chairners Street Substation - Ground Floor Plan	Plan	TZG	2	SK-11
1.2.2.3	Chalmers Street Substation - Level 1 Plan	Plan	TZG	2	SK-12
1.2.2.4	Chalmers Street Substation - Elevation 1	Elevation	TZG	3	SK-21
1.2.2.5	Chairners Street Substation - Elevation 2	Elevation	TZG	4	SK-22
1.2.2.6	Chalmers Street Substation - E/N North Elevation Overall	E/evation	TZG	2	SK-23
1.2.2.7	Chalmers Street Substation - Façade Plan Setout Detail - Ground Floor	Setout	TZG		SK-25
1.2.2.8	Chalmers Street Substation - Façade Datails 1	Details	TZG	1	SK-27
1.2.2.9	Chaimers Street Substation - Façade Details 2	Details	TZG	3	SK-28
1.2.2.10	Chalmers Street Substation - Finishes Schedule	Schedule	TZG	1	SK-29
1.2.2.11	Chalmers Street Substation - 3D View 1	Views	TZG	2	SK-31
1.2.2.12	Chalmers Street Substation - 3D View 2	Views	TZG	2	SK-32
1.2.2.13	Chalmers Street Substation - 3D View 3	Views	TZG	2	SK-33
1.2.2.14	Chalmers Street Substation - 3D View 1- View from North	Views	TZG	2	SK-35
1.2.2.15	Chalmers Street Substation - 3D View 2- View from Rail Corridor	Views	TZG	1	SK-36
1.2.2.16	Chalmers Street Substation - 3D View 3 - View from Park	Views	TZG	1	SK-37
1.2,3	Chalmers Street Substation - Reference Design Report - Appendix B2 - Operating Diagrams			30 Drawings	One PDF File
1.2.3.1	Chalmers Street Illawarra Line AL 0+352 Chalmers Street Substation Project - PSU - Proposed 33kV Operating Diagram	Single Line Schematic	GHD	к	2656-2650-CSSS-TR-1001
1.2.3.2	Chalmers Street Illawarra Line AL 0+352 Chalmers Street Substation Project - PSU - Proposed 11kV Operating Diagram	Single Line Schematic	GHD		2656-2650-CSSS-TR-1003
1.2.3.3	Metropolitan Area Chalmers Street Substation Project - PSU Wynyard Station No.1 and No.2 Substation - Proposed HV & LV Operating Diagram		GHD	С	2656-2650-CSSS-TR-1063
1.2.3.4	Sydney Signal Box No. 1 & No. 2 Substation Chalmers Street Substation Project - PSU - Proposed HV & LV Operating Diagram	Diagram	GHD	С	2656-2650-C\$SS-TR-1061

T2317765_10



ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
1.2.3.5	Metropolitan Area Chalmers Street Substation Project - PSU Sydney Transformer Room Substation - Proposed HV & LV Operating Diagram		GHD	С	2656-2650-CSSS-TR-1060
1.2.3.6	Metropolitan Area Chalmers Street Substation Project - PSU Redfern No.1 & No.2 Substation - Proposed HV & LV Operating Diagram		GHD	c	2656-2650-CSSS-TR-1068
1,2,3,7	Erskineville Substation Illawarra Line 2.726 km Chalmers Street Substation Project - PSU - Proposed HV Operating Diagram	Diagram	GHD	C	2656-2650-CSSS-TR-1056
1.2.3.8	Edgediff Substation Eastern Subarban Line 4.451 km Chalmers Street Substation Project - PSU - Proposed HV Operating Diagram	Diagram	GHD	С	2656-2650-CSSS-TR-1056
1.2.3.9	Argyle Substation North Shore Line 2.937 km Chalmers Street Substation Project - PSU - Proposed HV Operating Diagram	Dlagram	GHD	С	2656-2650-CSSS-TR-1053
1.2.3.10	Chalmers Street Substation to Meeks Road Substation Chalmers Street Substation Project - PSU - Proposed HV Reticulation Diagram	GHD	В	2656-2650-CSSS-TR-105	
1.2.3.11	Chalmers Street Substation to St Leonards Substation Chalmers Street Substation Project - PSU - Proposed HV Reticulation Diagram	Diagram	GHD	В	2656-2650-CSSS-TR-105
1.2.3.12	Inner Areas Chakmers Street SS Project - PSU Proposed Inner Areas 33 & 66kV System	Key Map	GHD		2656-2650-CSSS-TR-100
1.2.3.13	Metropolitan Area Chalmers Street SS Project - PSU Proposed Inner Area 11kV System	Key Map	GHD	Н	2656-2650-CSSS-TR-100
1.2.3.14	1500V Sectioning Diagrams Chalmers Street Substation Project - PSU - Proposed Key Map	Diagram	GHD	С	2656-2650-CSSS-TR-107
1.2.3.15	33kV Feeder Numerical Index Chalmers Street Substation Project - PSU - Proposed Sheet 1 of 2	Diagram	GHD	c	2656-2650-CSSS-TR-106
1.2,3.16	Prince Alfred Siding Illawarra Line 0.267 Chalmers Street Substation Project PSU - Proposed 11kV System Diagram	Single Line Schematic	GHD		2656-2650-CSSS-TR-100
1,2,3,17	Metropolitan Area Chalmers Street Substation Project - PSU City Rail Proposed 11 kV System Diagram (Extract)		GHD	C	2656-2650-CSSS-TR-106
1.2.3.18	Chalmers Street Substation to St Peters Chalmers Street Substation Project - PSU - Proposed 11 kV System Diagram (Extract)		GHD	С	2656-2650-CSSS-TR-106
1.2.3.19	Eastern Suburbs Railway Chalmers Street Substation Project - PSU Chalmers Street Substation to Bondi Junction Substation Proposed 11kV System Diagram (Extract)		GHD	С	2656-2650-CSSS-TR-106
1.2.3.20	Metropolitan Area Chalmers Street Substation Project - PSU Chalmers Street Substation to Lewisham Substation Proposed 11kV System Diagram (Extract)		GHD	c	2656-2650-C\$SS-TR-106
1,2,3.21	Argyle Substation North Shore Line 2.937 km Chalmers Street Substation Project - PSU- Proposed 1500V DC Operating Diagram	Diagram	GHD	C	2656-2650-CSSS-TR-105

Doc ID 607060023/v9



ITEM	DESCRIPTION / DRAWING TITLE	TYPE	AUTHOR / SOURCE	DATE / REVISION	REFERENCE NO. / DWG NO.
1.2.3.22	Art Gallery Substation Eastern Subsurban Line 2,689 km Chalmers Street Substation Project - PSU - Proposed 1500V DC Operating Diagram	Diagram	GHD	С	2656-2650-CS\$S-TR-1054
1 2.3.23	Erskineville Substation Illawarra Line 2.726 km Chalmers Street Substation Project - PSU - Proposed 1500V DC Operating Diagram		GHD	c	2656-2650-CSSS-TR-1057
1.2.3.24	Undercliff Substation Airport Line 9.500 km Chalmers Street Substation Project - PSU - Proposed 1500V DC Operating Diagram	Diagram	GHD	С	2656-2650-CSSS-TR-1062
1.2.3.25	Newtown Substation Main West 3.706 km Chalmers Street Substation Project - PSU - Proposed 1500V DC Operating Diagram	Diagram	GHD	C	2656-2650-CSSS-TR-1064
1.2,3.26	Metropolitan Area Chalmers Street Substation Project - PSU - Prince Alfred Substation Proposed HV Operating Diagram		GHD	В	2656-2650-CSSS-TR-1074
1.2.3.27	2kV Signalling & Lighting Feeders Chalmers Street Substation Project - PSU - Proposed Central - Macdonaldtown - Erskineville Reticulation Diagram		GHD	В	2656-2650-CSSS-TR-1073
1.2.3.28	2kV Signalling & Lighting Feeders Chalmers Street Substation Project - PSU - Proposed Key Map	Diagram	GHD	В	2656-2650-CSSS-TR-1072
1.2.3.29	Metropolitan Area Chalmers Street Substation Project - PSU - Proposed Prince Alfred Compressor House and Prince Alfred Sidings Low Voltage Switch Hut		GHD	В	2656-2650-CSSS-TR-1071
1.2.3.30	Metropolitan Area Illawarra Line 0.267 km Chalmers Street Substation Project - PSU - Prince Alfred Complex Proposed LV Operating Diagram		GHD	B	2656-2650-CSSS-TR-1075



In relation to Portion 3:

TPD Drawing No	TB DRG No	TB Rev No	Sheet Scale	Line Kilometrage	Drawings Title Full
re-Concept				./	
2759-GHD-SS-176204	CV0176204	A	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU LOCATION PLAN AND DRAWING SCHEDULE COVER SHEET
2759-GHD-AR-176205	CV0176205	В	1:200	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU SITE PLAN
2759-GHD-AR-176206	CV0176206	В	1:100	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU GROUND LEVEL
2759-GHD-AR-176207	CV0176207	В	1:100	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU SWITCHROOM LEVEL
2759-GHD-AR-176208	CV0176208	В	1:100	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU ELEVATIONS & MATERIAL PALETTE
2759-GHD-AR-176209	CV0176209	В	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU AERIAL PERSPECTIVES
2759-GHD-AR-176210	CV0176210	В	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU PERSPECTIVE SOUTH EAST VIEW

EXECUTION VERSION Design and Construction of
Chalmers Street Substation
and Granville Substation
(607060023_9).pdf.docx
© TfNSW 2014

Doc ID 607060023A9



TPD Drawing No	TB DRG No	TB Rev No	Sheet Scale	Line Kilometrage	Drawings Title Full
2759-GHD-AR-176211	CV0176211	В	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU PERSPECTIVE SOUTH WEST VIEW
2759-GHD-AR-176212	CV0176212	В	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU PERSPECTIVE NORTH EAST VIEW
2759-GHD-AR-176213	CV0176213	В	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU PHOTOMONTAGE SOUTH EAST VIEW
2759-GHD-AR-176214	CV0176214	В	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU PHOTOMONTAGE SOUTH WEST VIEW
2759-GHD-AR-176215	CV0176215	В	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU PHOTOMONTAGE NORTH VIEW
2759-GHD-CI-176221	CV0176221	С	1:200	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU CIVIL - GENERAL ARRANGEMENT
2759-GHD-CI-176222	CV0176222	В	1:200	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU CIVIL - STORMWATER DRAINAGE PLAN
2759-GHD-HV-587744	EL0587744	В	1:100	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU GROUND LEVEL EQUIPMENT LAYOUT
2759-GHD-HV-587745	EL0587745	В	1:100	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU SWITCHROOM LEVEL EQUIPMENT LAYOUT
2759-GHD-HV-587746	EL0587746	В	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU ELECTRICAL GENERAL ARRANGEMENT SITE PLAN - KEY DIAGRAM

Doc ID 607060023/49



TPD Drawing No	TB DRG No	TB Rev No	Sheet Scale	Line Kilometrage	Drawings Title Full
2759-GHD-HV-587747	EL0587747	В	1:500	MAIN SOUTH LINE 21,735km	GRANVILLE JUNCTION SS PROJECT - PSU ELECTRICAL GENERAL ARRANGEMENT SHEET 1
2759-GHD-HV-587748	EL0587748	В	1:500	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU ELECTRICAL GENERAL ARRANGEMENT SHEET 2
2759-GHD-HV-587749	EL0587749	В	1:500	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU ELECTRICAL GENERAL ARRANGEMENT SHEET 3
2759-GHD-HV-587750	EL0587750	В	1:500	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU ELECTRICAL GENERAL ARRANGEMENT SHEET 4
2759-GHD-HV-587751	EL0587751	В	1:500	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU ELECTRICAL GENERAL ARRANGEMENT SHEET 5
2759-GH D-M E-17 622 4	CV0176224	A	1:200	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU HYDRALIC SERVICES
2759-GHD-ME-176225	CV0176225	A	1:100	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT - PSU HYDRALIC SERVICES GROUND LEVEL
		1000		Operating Diagrams	
2759-GHD-HV-587712	EL0587712	F	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION - MAIN SOUTH LINE 21.735km PROPOSED 33 kV OPERATING DIAGRAM
2759-GHD-HV-587713	EL0587713	E	NTS	MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION - MAIN SOUTH LINE 21.735km PROPOSED 11 kV OPERATING DIAGRAM
2759-GHD-HV-587714	EL0587714	E	NTS	MAIN SOUTH LINE	GRANVILLE JUNCTION - MAIN SOUTH LINE 21.735km

Doc D 607060023A/9



TPD Drawing No	TB DRG No	TB Rev No	Sheet Scale	Line Kilometrage	Drawings Title Full	
				21.735km	PROPOSED 1500 V OPERATING DIAGRAM	
2759-GHD-HV-587715	EL0587715	E	NTS	N/A	GRANVILLE JUNCTION - METROPOLITAN - CLYDE TO MERRYLANDS - HARRIS PARK - CARLINGFORD - PROPOSED 1500 VOLT SECTIONING DIAGRAM	
2759-GHD-HV-587716	EL0587716	E	NTS	N/A	GRANVILLE JUNCTION - METROPOLITAN - STRATHFIELD TO GRANVILLE JUNCTION & SEFTON - PROPOSED RETICULATION DIAGRAM	
2759-GHD-HV-587717	EL0587717	E	NTS	N/A	GRANVILLE JUNCTION - METROPOLITAN AREA - STRATHFIELD TO GRANVILLE JUNCTION - PROPOSED 11 kV & 33 kV PROPOSED RETICULATION DIAGRAM	
2759-GHD-HV-587718	EL0587718	E	NTS	N/A	GRANVILLE JUNCTION - METROPOLITAN - WESTERN LINE GRANVILLE JUNCTION - EMU PLAINS - CLARENDON - PROPOSED HV RETICULATION DIAGRAM	
2759-GHD-HV-587719	EL0587719	E	NTS	N/A	GRANVILLE JUNCTION - METROPOLITAN - FLEMINGTON SS TO GRANVILLE JUNCTION SS - PROPOSED 11 kV SYSTEM DIAGRAM	
2759-GHD-HV-587720	EL0587720	Е	NTS	N/A	GRANVILLE JUNCTION - METROPOLITAN - GRANVILLE JUNCTION SS TO BLACKTOWN SS - PROPOSED 11 kV SYSTEM DIAGRAM	
2759-GHD-HV-587721	EL0587721	E	NTS	N/A	GRANVILLE JUNCTION - METROPOLITAN AREA - GRANVILLE JUNCTION SS TO CABRAMATTA SS - PROPOSED 11 kV SYSTEM DIAGRAM	

Doc D 607060023/v9



TPD Drawing No	TB DRG No	TB Rev No	Sheet Scale	Line Kilometrage	Drawings Title Full
2759-GHD-HV-587722	EL0587722	E	NTS	N/A	GRANVILLE JUNCTION - METROPOLITAN AREA - GRANVILLE JUNCTION SS TO WARWICK FARM & SEFTON - PROPOSED RETICULATION DIAGRAM
2759-GHD-HV-587723	EL0587723	D	NTS	N/A	GRANVILLE JUNCTION - KEY MAP - PROPOSED INNER AREAS 33 & 66 kV SYSTEM DIAGRAM
2759-GHD-HV-587724	EL0587724	D	NTS	N/A	GRANVILLE JUNCTION - KEY MAP - PROPOSED INNER AREAS 11 kV SYSTEM DIAGRAM
2759-GHD-HV-587725	EL0587725	D	NTS	N/A	GRANVILLE JUNCTION - KEY MAP - PROPOSED 1500 VOLT SECTIONING DIAGRAM
2759-GHD-HV-587726	EL0587726	D	NTS	MAIN SOUTH LINE 27.661km	GRANVILLE JUNCTION - CABRAMATTA SS - MAIN SOUTH LINE 27.661km - PROPOSED HV OPERATING DIAGRAM
2759-GHD-HV-587727	EL0587727	D	NTS	MAIN SUBURBAN 20.7km	GRANVILLE JUNCTION - CLYDE SS -MAIN SUBURBAN 20.7km - PROPOSED HV OPERATING DIAGRAM
2759-GHD-HV-587728	EL0587728	D	NTS	MAIN LINE 12.402km	GRANVILLE JUNCTION - STRATHFIELD SS -MAIN LINE 12.402km - PROPOSED 33 kV OPERATING DIAGRAM
2759-GHD-HV-587729	EL0587729	D	NTS	MAIN WEST 25.707km	GRANVILLE JUNCTION - WESTMEAD SS -MAIN WEST 25.707km - PROPOSED HV OPERATING DIAGRAM
2759-GHD-HV-587730	EL0587730	D	NTS	WMAIN WEST 25,707km	GRANVILLE JUNCTION - WESTMEAD SS -MAIN WEST 25.707km - PROPOSED 1500 V DC OPERATING DIAGRAM



TPD Drawing No	TB DRG No	TB Rev No	Sheet Scale	Line Kilometrage	Drawings Title Full
2759-GHD-HV-587731	EL0587731	D	NTS	MAIN SUBURBAN 19.46km	GRANVILLE JUNCTION - AUBURN SS -MAIN SUBURBAN 19.46km - PROPOSED HV OPERATING DIAGRAM
2759-GHD-HV-587732	EL0587732	D	NTS	MAIN SUBURBAN 19.46km	GRANVILLE JUNCTION - AUBURN SS -MAIN SUBURBAN 19.46km - PROPOSED 1500 V DC OPERATING DIAGRAN
2759-GHD-HV-587733	EL0587733	D	NTS	MAIN WEST 23.3km	GRANVILLE JUNCTION - PARRAMATTA STATION SS - MAIN WEST 23.3km - PROPOSED HV OPERATING DIAGRAM
2759-GHD-HV-587734	EL0587734	D	NTS	SOUTH 25.896km	GRANVILLE JUNCTION - GUILDFORD SS -MAIN OLD SOUTH 25.896km - PROPOSED HV OPERATING DIAGRAM
2759-GHD-HV-587735	EL0587735	D	NTS	MAIN OLD SOUTH 25.896km	GRANVILLE JUNCTION - GUILDFORD SS -MAIN OLD SOUTH 25.896km - PROPOSED 1500 V DC OPERATING DIAGRAM
2759-GHD-HV-587713	EL0587713	G		MAIN SOUTH LINE 21.735km	GRANVILLE JUNCTION SS PROJECT PSU PROPOSED 11Kv OPERATING DIAGRAM



EXHIBIT I - THIRD PARTY AGREEMENTS

Draft Third Party Agreements:

(a) Power Supply Upgrade - Program Safety Interface Agreement

Included on the attached CD titled "MEDIUM WORKS CONTRACT - DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."



EXHIBIT J - DOCUMENTS RELATING TO PRIOR WORK

Included on the attached CD titled "MEDIUM WORKS CONTRACT – DESIGN AND CONSTRUCTION CONTRACT, NUMBER: ISD-18-7801, POWER SUPPLY UPGRADE PROGRAM, DESIGN & CONSTRUCTION OF CHALMERS STREET SUBSTATION AND GRANVILLE JUNCTION SUBSTATION, ELECTRONIC FILES."

The parties acknowledge that the documents comprising this Exhibit J relate to the current status of the Prior Work as at the date of this Contract.

