BILL OF QUANTITIES NOVEMBER 2020

## WYEE WEST PAPER SUBDIVISION

LAKE MACQUARIE CITY COUNCIL

#### **Prepared For**

Lake Macquarie City Council Rider Levett Buckna
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#### Issued on

02 November 2020

### **Prepared By**

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#### **RLB.com**

#### **Our Ref**

17497-6.1.ES-1

#### **Project number**

17497





## **REPORTS ISSUED**

Report	Date	Title Description	Released By
1	02.11.2020	Bill of Quantities	Director

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Director

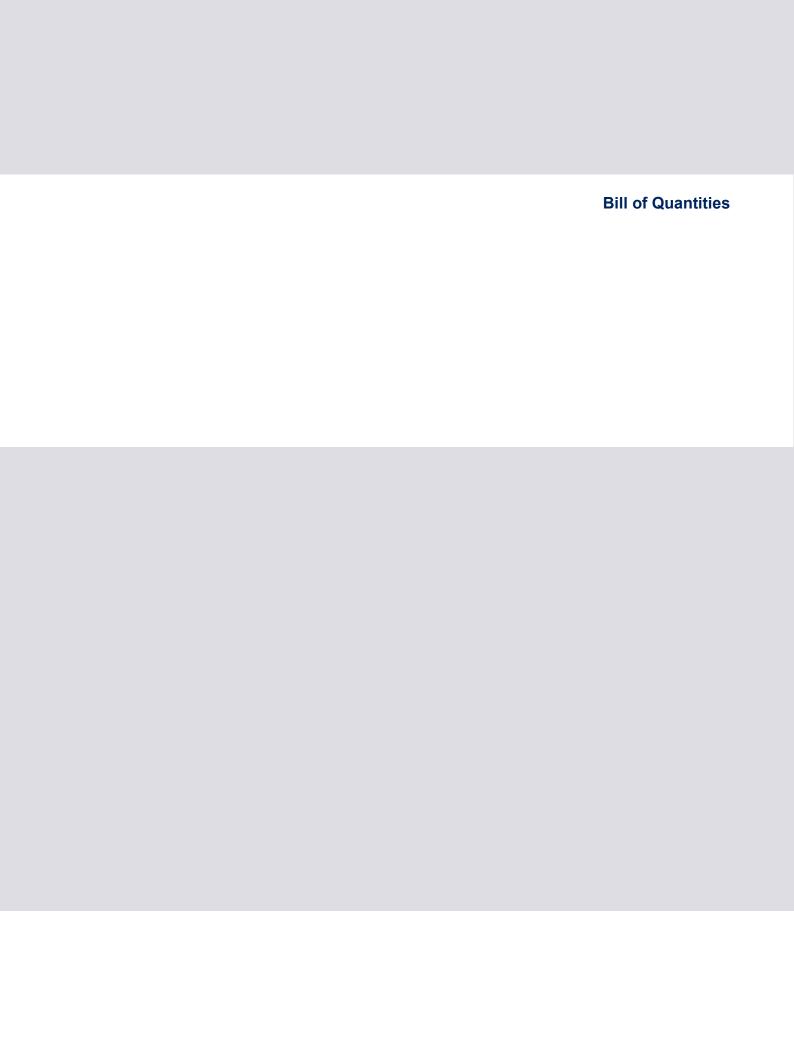
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3 GROUND WORKS 4 ROADWORKS 5 PROVISIONAL AND MONETARY SUMS 6 HYDRAULICS 6/7 \$5,002,669 7 ELECTRICAL INSTALLATIONS 7/4 \$2,567,220 8 PRELIMINARIES 9/5 \$2,243,300 9 EXTERNAL WORKS AND LANDSCAPING 7 Indices. The Tenderer shall ensure that no page is missing nor in duplicate.	1	GENERAL PRINCIPLES	1/10	
4 ROADWORKS 4/4 \$1,981,064 5 PROVISIONAL AND MONETARY SUMS 6 HYDRAULICS 6/7 \$5,002,669 7 ELECTRICAL INSTALLATIONS 7/4 \$2,567,220 8 PRELIMINARIES 8/5 \$2,243,300 9 EXTERNAL WORKS AND LANDSCAPING 7 This document contains 49 pages plus the Summary and 2 pages of indices. The Tenderer shall ensure that no page is missing nor in duplicate.	2	DEMOLITION	2/5	\$668,590
5 PROVISIONAL AND MONETARY SUMS 6 HYDRAULICS 7 ELECTRICAL INSTALLATIONS 7 PRELIMINARIES 8 PRELIMINARIES 8 PRELIMINARIES 9 EXTERNAL WORKS AND LANDSCAPING 7 This document contains 49 pages plus the Summary and 2 pages of indices. The Tenderer shall ensure that no page is missing nor in duplicate.	3	GROUND WORKS	3/6	\$4,339,430
6 HYDRAULICS 6/7 \$5,002,669 7 ELECTRICAL INSTALLATIONS 7/4 \$2,567,220 8 PRELIMINARIES 8/5 \$2,243,300 9 EXTERNAL WORKS AND LANDSCAPING 9/5 \$735,132 This document contains 49 pages plus the Summary and 2 pages of Indices. The Tenderer shall ensure that no page is missing nor in duplicate.	4	ROADWORKS	4/4	\$1,981,064
7 ELECTRICAL INSTALLATIONS 8 PRELIMINARIES 9 EXTERNAL WORKS AND LANDSCAPING 9 EXTERNAL WORKS AND LANDSCAPING 9/5 \$735,132  This document contains 49 pages plus the Summary and 2 pages of Indices. The Tenderer shall ensure that no page is missing nor in duplicate.	5	PROVISIONAL AND MONETARY SUMS	5/3	\$1,096,800
8 PRELIMINARIES 8/5 \$2,243,300 9 EXTERNAL WORKS AND LANDSCAPING 9/5 \$735,132  This document contains 49 pages plus the Summary and 2 pages of Indices. The Tenderer shall ensure that no page is missing nor in duplicate.	6	HYDRAULICS	6/7	\$5,002,669
9 EXTERNAL WORKS AND LANDSCAPING 9/5 \$735,132  This document contains 49 pages plus the Summary and 2 pages of Indices. The Tenderer shall ensure that no page is missing nor in duplicate.	7	ELECTRICAL INSTALLATIONS	7/4	\$2,567,220
This document contains 49 pages plus the Summary and 2 pages of Indices. The Tenderer shall ensure that no page is missing nor in duplicate.	8	PRELIMINARIES	8/5	\$2,243,300
Indices. The Tenderer shall ensure that no page is missing nor in duplicate.	9	EXTERNAL WORKS AND LANDSCAPING	9/5	\$735,132
Total \$18,634,205				
			Total	\$18,634,205



		Cost	
1	GENERAL PRINCIPLES		1/1
	GENERALLY MEASUREMENT AND PRICES	1/1 1/1	
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8	PRELIMINARIES		8/1
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SOFT LANDSCAPING AND IRRIGATION	9/3

			ERAL PRINCIPLES
	Item Unit Qty	Rate	Cost
	GENERALLY		
	Bill of Quantities		
Α	These Bills of Quantities do not describe methods of working, planning, programming or ordering procedures or detail resources of labour, material, plant and time required to carry out the works these matters being entirely the Contractor responsibility and any information required should be obtained by reference to all to contract documents		
В	The Bills of Quantities are for pricing purposes only and they should not be used for any other purpose including inter alia any functions described above	or	
С	The requirements of the Agreement/ Contract, Specification and drawings shall hap recedence over the Bill of Quantities, when the Schedule is a Contract Documen including any requirements for the functions described above		
	Method of Measurement		
D	This Bill of Quantities has NOT been measured in accordance with the Australian Standard Method of Measurement of Building Works.		
Е	This Bill of Quantities has been measured in accordance with the Rider Levett Bucknall Rules for Construction Measurement - Third Edition - May 2010		
F	The Contractor is advised that this is an abbreviated form of measurement that do not require measurement to the same extent of detail required by the Australian Standard Method of Measurement. It is imperative that the Contractor fully comprehends the system and prices the following items with careful attention to the Drawings and Specification to appreciate the exact nature and intent of the Works	e	
G	The quantities prepared using these Rules for Construction Measurement are not guaranteed and are provided for guidance only		
Н	Where, in this Bill of Quantities, additional information is provided to assist in pricir this shall not prejudice any other items in this document where the additional information is not provided	ng,	
I	It shall be the Contractor's responsibility to obtain any further information during the tender period that the Contractor deems necessary to assist in pricing	e	
J	Notwithstanding the above, any deviations from the system of measurement will be noted preceding the quantities or by adaption of the "prices to include" clauses	е	
	Item Coding		
K	The two letter code references that appear in parenthesis at the end of each item description are for the purpose of elemental cost analysis and are to be disregarded by the Contractor	ed	
	MEASUREMENT AND PRICES		
	Measurement		
	To C	ollection	

	Item	Unit	Qty	Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)				
	Measurement (Cont'd)				
	measurement (Sont u)				
A	Where quantities of work contained in these Bills of Quantities Provisional, such quantities will be remeasured during the pro the Quantity Surveyor. The Contractor shall base his tender u contained herein. The Contractor will be paid for the quantity completed and valued at the unit prices inserted herein, subject variations authorised by the Architect/Superintendent	gress of the pon the qua of work sati	e works by antities sfactorily		
	Prices				
В	Unless otherwise stated, all items shall be deemed to be fully necessary to fulfil the liabilities and obligations arising out of the include but not be limited to:				
	a. Materials and goods and all costs in connection therewith in	ncluding ma	aterials in		
	laps and joints and the like b. All costs in connection therewith such as conveying, deliver	y, unloadin	ıg, storing,		
	returning packings, handling, hoisting and lowering	<b>3</b> ,	J, J,		
	Square, straight, raking, splay and circular cutting     Waste of materials				
	e. Protection and removal on completion				
	f. Progressive and final cleaning				
	g. Samples h. Guarantees and warranties				
	Labour and all costs including overtime in connection therew	ith in settir	ng, fitting		
	and fixing of materials and goods in position				
	<ul><li>j. Fixings and consumables required to complete the items of</li><li>k. Site and other wage allowances, statutory levies, superanr</li></ul>		es travel		
	payroll tax, and other statutory loadings on wages	idation, idi	00, 110,701,		
	I. Shop drawings				
	<ul><li>m. Shop fabrication</li><li>n. As constructed drawings, completion and operations manual</li></ul>	als, etc			
	o. Testing	aio, 010			
	p. Tools, plant and equipment				
	q. Customs duties and the like				
С	Notwithstanding the foregoing item, each priced item in the Bi deemed to exclude all items listed in the Preliminaries Trade	ll of Quanti	ties shall be		
D	Where described as Fix Only, prices shall include for all of the	foregoing	except that		
	the purchase price of the material together with customs dutie	-	-		
	payable on imported material and any other tax relating to the material and carriage to the site, shall be excluded	purchase of	of the		
	General Attendance				
E	The Contractor shall ascertain from each Specialist Sub-Contrelating to the work with regard to the order of its execution are which chases, holes, mortices and similar items will be required put in hand, as no claim will be entertained for extra costs of calready executed due to failure of the Contractor to ascertain the beforehand	d the posited, before to	ions in he work is y work		
			To Collection	on	

Unit Item Qtv Rate Cost **MEASUREMENT AND PRICES (Cont'd)** General Attendance (Cont'd) Α Where items for general attendance have been given in the Bills, such general attendance by the Contractor shall include for all labour, material and services free of charge to the Specialist Sub-Contractor executing the work. Such attendance shall be deemed to include for: Supervision and co-ordination of the work of Specialist Sub-Contractors Providing programme information and ensuring that the requirements for their work is carried out in the proper sequence Providing details of location and setting out Assistance in taking delivery of materials at the site, checking of contents and signing delivery dockets Assistance in unloading, getting in, storage and protection of materials and plant Providing the necessary equipment, plant operators and dogmen for all hoisting, lowering and depositing of materials, plant and equipment at the required levels in locations from which access to final positions is practicable including hoisting specific to the work of the Specialist Sub-Contractor Transport of materials, plant, etc. around the site Water and reticulation to suitable positions on the site Power at the required voltage and phase reticulated to suitable positions on the site including provision of power for starting up, test running and commissioning of mechanical and electrical installations Use of plant, equipment, scaffolding and access in position for other purposes and for the provision of scaffolding and access specific to the work of the Specialist Sub-contractor Sanitary and messing accommodation and other facilities Provision of covered space for plant, storage of materials, etc Affording all reasonable facilities for carrying out the work Taking responsibility for setting out all chases, holes, sleeves, conduits, bolts, pipe hangers, brackets, etc., in floors and walls, building in and, where required, making good around the above Touching up and making good all work disturbed Protecting finished work Fix Only В Where items are described as FIX ONLY in the Bills, the prices for such items, in addition to the requirements of the various prices clauses contained in this and the other trade Bills, shall be deemed to include for all things necessary to provide the finished item in place including: Taking delivery, unloading, getting in, unpacking and disposal of packaging, checking for discrepancies and faults and co-ordinating necessary replacements Storing, removing from store, distributing, hoisting, lowering and placing in position Assembling as necessary and fixing as required Protecting and insuring goods from receipt to completion of Contract Taking risk for loss or damage Safe return of packages, crates, etc Measured Items Containing Prime Cost Rates and Equivalent Monetary Rates To Collection

	Item	Unit	Qty	Rate	Cost
		- Offic	— Giy	Nate	Cost
	MEASUREMENT AND PRICES (Cont'd)				
	Measured Items Containing Prime Cost Rates and Equivale (Cont'd)	nt Monetar	y Rates		
Α	Prime Cost (PC) Rates in measured items are for works carried Sub-Contractors or for goods or materials provided by Nomina Rates are used when the quantum of the work is known but the or goods and materials cannot be accurately defined or foreset of the Tender documents	ted Supplie e exact nat	ers. Such ure of work		
В	Prime Cost (PC) Rates for supply and fix of goods and material things necessary to provide the finished item in place including delivery to site, labour installing, handling, waste, storage, fixing the like, glue, templates, cutting, falsework, access and scaffol sub-contractor's profit. All other costs including profit and atternative Contractor shall be deemed to be included in the measured ite to adjustment	purchase gs, fillets, g ding and ndance by t	and grounds and the		
С	Prime Cost (PC) Rates for the supply only of goods and mater the purchase and delivery to store or site as applicable. All off to be included in the measured item and are not subject to adjulabour in installing, handling, waste, storage, fillets, grounds ar templates, cutting, falsework, access and scaffolding, supplier Contractor's profit	ner costs ar ustment, ind nd the like,	re deemed cluding glue,		
D	The quantum of the measured items is not subject to remeasu items are marked "Provisional"	rement unle	ess the		
	Location of Site				
E	Notwithstanding the requirements of clause 1.10.1 of the Rules Measurement, the address of the site is not given - the Contract design documentation and the proposed Contract Documents and other details related to the site	ctor is refer	red to the		
	Brief Description of the Works				
F	Notwithstanding the requirements of clause 1.11.1 of the Rules Measurement, a brief description of the works is not given - the referred to the design documentation for all such information				
G	Notwithstanding the requirements of clause 1.11.2 of the Rules Measurement, the gross floor areas, nett commercial areas an functional units have not been given - this information can be on the design documents	d the numb	ers of		
	Documents Used				
			To Collection	an .	
			TO CONECUIO	JII	J

	Item Un	nit	Qty	Rate	Cost
	MEASIDEMENT AND DDICES (Contd)				
	MEASUREMENT AND PRICES (Cont'd)				
	Documents Used (Cont'd)				
	, , , , , , , , , , , , , , , , , , , ,				
Α	The documents used in the preparation of these Bills of Quantities tender Specifications, drawings, details, schedules etc., issued for the second se				
	works.	cridering	uio		
	The following documentation has been used to prepare this Bill of C	Duantities			
	The following documentation has been used to prepare this bill of c	guai illiics	•		
	Infrastructure Works Drawings by ADW Johnson dated 6 August 20				
	239858-ENG-001 - Title Sheet, Drawing Index & Locality Plan - Re		5		
	239858-ENG-002 - Overall Site Plan, General Notes & Existing Infr D	astructure	e - Rev		
	239858-ENG-101 - Road & Stormwater Arrangement Plan: Sheet 1	I - Rev D			
	239858-ENG-102 - Road & Stormwater Arrangement Plan: Sheet 2				
	239858-ENG-103 - Road & Stormwater Arrangement Plan: Sheet 3				
	239858-ENG-104 - Road & Stormwater Arrangement Plan: Sheet 4	4 - Rev D			
	239858-ENG-111 - Road and Stormwater Typical Sections: Sheet				
	239858-ENG-112 - Road and Stormwater Typical Sections: Sheet 2				
	239858-ENG-113 - Road and Stormwater Typical Sections: Sheet 3	3 - Rev D			
	239858-ENG-121 - Road Setout Tables - Rev D 239858-ENG-201 - Road Longitudinal Section: MC01 - Sheet 1 - R	av D			
	239858-ENG-202 - Road Longitudinal Section: MC01 - Sheet 1 - R				
	239858-ENG-203 - Road Longitudinal Section: MC01 - Sheet 3 - R				
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	239858-ENG-205 - Road Longitudinal Sections: Karakunba Road -	Rev D			
	239858-ENG-206 - Road Longitudinal Sections: Tulkaba Road - Re				
	239858-ENG-207 - Road Longitudinal Section: Pirama Road - Rev				
	239858-ENG-208 - Road Longitudinal Section: Waropara Road - R				
	239858-ENG-209 - Road Longitudinal Section: Tullokan Road - Re 239858-ENG-210 - Road Longitudinal Sections: Dillabirra Road - R				
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	239858-ENG-239 - Road Cross Sections: Waropara Road - Sheet				
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	239858-ENG-244 - Road Cross Sections: Dillabirra Road - Sheet 2				
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Item	Unit	Qty	Rate	Cost
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Documents Used (Cont'd)				
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239858-ENG-302 - Intersection Detail Plan: Kerb Returns M	•			
239858-ENG-303 - Intersection Detail Plan: Kerb Returns M	1K05, 06, 39,	40 - Rev D		
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239858-ENG-308 - Intersection Detail Plan: Kerb Returns M		ev D		
239858-ENG-309 - Intersection Detail Plan: Kerb Return Mk	_	_		
239858-ENG-310 - Intersection Detail Plan: Kerb Returns M				
239858-ENG-311 - Intersection Detail Plan: Kerb Returns M		ev D		
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239858-ENG-404 - Stormwater Catchment Plan: Sheet 4 - F				
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239858-ENG-431 - Stormwater Longitudinal Sections: Lines Rev D	o ∠ʊ, ʊ∪, ʊ ɪ, ʊ	ı∠, JJ, JU <b>-</b>		
239858-ENG-432 - Stormwater Longitudinal Sections: Lines	s 51, 55 - Rev	D		
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239858-ENG-435 - Stormwater Longitudinal Sections: Lines				
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239858-ENG-437 - Stormwater Longitudinal Sections: Lines				
239858-ENG-438 - Stormwater Longitudinal Sections: Lines				
239858-ENG-439 - Stormwater Longitudinal Sections: Tank		ט		
239858-ENG-461 - Stormwater Details: Detention Tanks - R				
239858-ENG-462 - Stormwater Details: Scour Protection De		D		
239858-ENG-501 - Site Regrade and Tree Removal Plan: S	meet 1 - KeV	ט		
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Item	Unit	Qty Ra	te Cost
MEASUREMENT AND PRICES (Cont'd)			
Documents Used (Cont'd)			
239858-ENG-502 - Site Regrade and Tree Removal Plan: She 239858-ENG-503 - Site Regrade and Tree Removal Plan: She 239858-ENG-504 - Site Regrade and Tree Removal Plan: She 239858-ENG-801 - Erosion & Sediment Control Plan: Sheet 1 239858-ENG-802 - Erosion & Sediment Control Plan: Sheet 2 239858-ENG-803 - Erosion & Sediment Control Plan: Sheet 3 239858-ENG-804 - Erosion & Sediment Control Plan: Sheet 4 239858-ENG-811 - Erosion & Sediment Control Notes - Rev E 239858-ENG-812 - Erosion & Sediment Control Details - Rev 239858-ENG-901 - Linemarking & Signage Plan: Sheet 1 - Re 239858-ENG-903 - Linemarking & Signage Plan: Sheet 3 - Re 239858-ENG-904 - Linemarking & Signage Plan: Sheet 4 - Re 239858-ENG-904 - Linemarking & Signage Plan: Sheet 4 - Re	eet 3 - Rev D eet 4 - Rev D V D V D V D		
Sewer Mains Drawings by ADW Johnson dated 7 April 2020: 239858-SEW-001 - Proposed Sewermains Gorokan Road, W. 239858-SEW-002 - Proposed Sewermains Gorokan Road, W. 239858-SEW-003 - Proposed Sewermains Gorokan Road, W. 239858-SEW-004 - Proposed Sewermains Gorokan Road, W. 239858-SEW-005 - Proposed Sewermains Gorokan Road, W. 239858-SEW-006 - Proposed Sewermains Gorokan Road, W. 239858-SEW-007 - Proposed Sewermains Gorokan Road, W. 239858-SEW-008 - Proposed Sewermains Gorokan Road, W. 239858-SEW-009 - Proposed Sewermains Gorokan Road, W. 239858-SEW-010 - Proposed Sewermains Gorokan Road, W. 239858-SEW-011 - Proposed Sewermains Gorokan Road, W. 239858-SEW-012 - Proposed Sewermains Gorokan Road, W. 239858-SEW-013 - Proposed Sewermains Gorokan Road, W. 239858-SEW-015 - Proposed Sewermains Gorokan Road, W. 239858-SEW-016 - Proposed Sewermains Gorokan Road, W. 239858-SEW-017 - Proposed Sewermains Gorokan Road, W. 239858-SEW-018 - Proposed Sewermains Gorokan Road, W. 239858-SEW-018 - Proposed Sewermains Gorokan Road, W. 239858-SEW-018 - Proposed Sewermains Gorokan Road, W. 239858-SEW-019 - Proposed Sewermains Gorokan R	ree West - Rivee W	ev 0A	
Water Mains Drawings by ADW Johnson dated 7 April 2020: 239858-WAT-001 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-003 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-004 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-005 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-006 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-007 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-007 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-008 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-009 - Proposed Sewermains Gorokan Road, Wy 239858-WAT-010 - Landscape Plan - Rev B 12527.5 - CC - L101 - Landscape Plan - Rev B 12527.5 - CC - L103 - Landscape Plan - Rev B 12527.5 - CC - L104 - Landscape Plan - Rev B	ree West - Re ree West - Re	ev OA	
		To Collection	

	Item	Unit	Qty	Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)				
	Documents Used (Cont'd)				
	12527.5 - CC - L105 - Landscape Plan - Rev B				
	12527.5 - CC - L106 - Landscape Plan - Rev B				
	12527.5 - CC - L107 - Landscape Plan - Rev B				
	12527.5 - CC - L108 - Landscape Plan - Rev B				
	12527.5 - CC - L109 - Landscape Plan - Rev B 12527.5 - CC - L110 - Landscape Plan - Rev B				
	12527.5 - CC - L111 - Landscape Plan - Rev B				
	12527.5 - CC - L201 - Plant Schedule / Details				
	12527.5 - CC - L202 - Details				
	12527.5 - CC - L801 - Specification - Rev B				
	12527.5 - CC - L802 - Specification - Rev B				
	12527.5 - CC - L803 - Specification - Rev B 12527.5 - CC - L901 - Schedule 1 - Rev B				
	12527.5 - CC - L901 - Schedule 1 - Rev B				
	URD Subdivision Drawings by Power Solutions dated 13 M				
	AN-20031 Sheet 1 of 15 - Legend, Locality Sketch & Syste	em Diagram - F	Rev 0		
	AN-20031 Sheet 2 of 15 -Site Plan 'A' AN-20031 Sheet 3 of 15 -Site Plan 'B'				
	AN-20031 Sheet 4 of 15 - Site Plan 'C'				
	AN-20031 Sheet 5 of 15 - Site Plan 'D'				
	AN-20031 Sheet 6 of 15 - LV Overhead Service Works				
	AN-20031 Sheet 7 of 15 - Kiosk Profile, Earthing, Kiosk No.				
	AN 20031 Sheet 8 of 15 - Kiosk Profile, Earthing, Kiosk No				
	AN-20031 Sheet 9 of 15 - O/H Profiles, Earthing Designs & AN-20031 Sheet 10 of 15 - Construction Schedules	& Stringing Ch	arı		
	AN-20031 Sheet 11 of 15 - Construction Schedules				
	AN-20031 Sheet 12 of 15 - Construction Schedules				
	AN-20031 Sheet 13 of 15 - Trench Sections & Substation S				
	AN-20031 Sheet 14 of 15 - LV Schematics & Pillar Schema	atics			
	AN-20031 Sheet 15 of 15 - Ausgrid Property Rights				
	Report on Geotechnical Investigation by Douglas Partners	dated 8 Octob	per 2018		
	Abbreviations				
A	Throughout these Bills of Quantities, the following measure	ement unit ahh	reviations		
'`	are used:		/ Ovidiono		
	m metre				
	m metre m millimetre				
	m/r metre rise (for vertical height of staircases)				
	m2 square metre				
	m3 cubic metre				
	t tonne				
	No number MPa megapascal				
	kg kilogram				
	wk week				
			To Collect	ion	
			10 Collect	.1011	
					J

MEASUREMENT AND PRICES (Cont'd)  Abbreviations (Cont'd)  A Throughout these Bills of Quantities, the following general abbreviations are used:  approx		Item	Unit	Qty	Rate	Cost
A Throughout these Bills of Quantities, the following general abbreviations are used:  approx approximately AS Australian Standard AS/NZS Australian StandardNew Zealand Standard average BS British Standard CHS circular hollow section c.i. cast fron c.p. chrome plated c.o.p. circular-on-plan c.o.e. circular-on-elevation dia diameter EA equal angle (f) finished size f.c. fibre coment galv galvanised i.d. internal diameter max maximum MDF medium density fibreboard min minimum mad sep measured separately n.b. nominal bore n.e. not exceeding nom nominal o.d. outside diameter PFC parallel flange channel PVC poly vinyl chloride rad radius RHS rectangular hollow section reduced level s.c.p. satin chrome plated UA unequal angle UB universal bearn up lie UC universal column WC Welded column percent		MEASUREMENT AND PRICES (Cont'd)				
approx AS AS/NZS As/SIAS As/SIAS As/SIAS As/SIAS Birtish Standard/New Zealand Standard ave average BS British Standard CHS circular hollow section c.D. c.D. chrome plated c.D.P. croular-on-plan diameter EA equal angle (f) finished size fic. fibre coment galv galvanised i.d. internal diameter max maximum MDF medium density fibreboard min minmum md sep measured separately n.b. nominal bore n.e. not exceeding nom nominal o.d. d. usisted diameter pFC parallel flarge channel pVC poly vinyl chloride radus RHS rectangular hollow section reduced level s.c.p. satin chrome plated SHS square hollow section s.s. stainless steel TFB Lapered flange beam UA unequal angle UB universal beam UB Welded beam WC Welded beam WC Welded column percent		Abbreviations (Cont'd)				
ASINES Australian Standard/New Zealand Standard ave average BS British Standard Ches circular hollow section c.l. cast iron c.p. chrome plated c.o.p. circular-on-plan circular on-plan circular standard ches average (f) circular-on-plan circular	А	Throughout these Bills of Quantities, the following general at	breviations	are used:		
To Collection	A	approx Australian Standard AS/NZS Australian Standard/New Zealand Standard ave average BS British Standard CHS circular hollow section c.i. cast iron c.p. chrome plated c.o.p. circular-on-plan c.o.e. circular-on-elevation dia diameter EA equal angle (f) finished size f.c. fibre cement galv galvanised i.d. internal diameter max maximum MDF medium density fibreboard min minimum msd sep measured separately n.b. nominal bore n.e. not exceeding nom nominal o.d. outside diameter PFC parallel flange channel PVC poly vinyl chloride rad radius RHS rectangular hollow section RL reduced level s.c.p. satin chrome plated SHS square hollow section s.s. stainless steel TFB tapered flange beam UA unequal angle UB universal bearing pile UC universal column WB Welded beam WC Welded column	poreviations	are used:		
				To Collec	tion	



	Page	Cost
COLLECTION		
	1/1	
	1/2	
	1/3	
	1/4	
	1/5	
	1/6	
	1/7	
	1/8	
	1/9	
	1 - GENERAL PRINCIPLES To S	ummary



	Item Unit Qty Rat	te Cost
	GENERALLY	
	Method of Measurement	
Α	This Bill of Quantities has NOT been measured in accordance with the Australian Standard Method of Measurement of Building Works	
В	This Bill of Quantities has been measured in accordance with the Rider Levett Bucknall Rules for Construction Measurement - Third Edition - May 2010	
С	The Contractor is advised that this is an abbreviated form of measurement that does not require measurement to the same extent of detail required by the Australian Standard Method of Measurement. It is imperative that the Contractor fully comprehends the system and prices the following items with careful attention to the Drawings and Specification to appreciate the exact nature and intent of the Works	
D	The quantities prepared using these Rules for Construction Measurement are not guaranteed and are provided for guidance only	
Е	Where, in this Bill of Quantities, additional information is provided to assist in pricing, this shall not prejudice any other items in this document where the additional information is not provided	
F	It shall be the Contractor's responsibility to obtain any further information during the tender period that the Contractor deems necessary to assist in pricing	
G	Notwithstanding the above, any deviations from the system of measurement will be noted preceding the quantities or by adaption of the "prices to include" clauses	
	Item Coding	
Н	The two letter code references that appear in parenthesis at the end of each item description are for the purpose of elemental cost analysis and are to be disregarded by the Contractor	
	MEASUREMENT AND PRICES	
	Specification	
I	The Contractor is referred to the Specification, Drawings and other Contract documents for full descriptions and details of workmanship, materials, etc., related to the work measured in this Bill and shall allow here or in the prices for measured work for all costs incurred therewith	Nil
	Prices	
	To Collection	



	Item	Ur	nit	Qty	Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)					
	Prices (Cont'd)					
Α	Prices for Demolition are deemed to include for:					
	a. Giving notices, obtaining permits, paying statutory feet the Demolition works b. Inspection of the existing premises c. Protection of existing works or adjacent premises, occord. Breaking up and grubbing out e. Dismantling f. Disconnecting and taking out, taking up, taking down a all services g. Removal of rubbish and debris arising from demolition h. Temporary shoring, propping, strutting, scaffolding, princeessary except when shoring is designed and detailed i. Making good all work disturbed during demolition j. Incidental making good to work in alterations including reveals of new openings in existing and the like k. Preparation of dilapidation surveys and reports l. Vibration monitoring	cupants and and removi n rotection, e d on the dra	d the pung and ttc., as nawings	blic sealing of nay be		
В	Prices for Demolition of Walls are deemed to include for	:				
	a. Demolishing doors, windows, finishes, attachments, a	and the like				
С	Prices for Demolition shall also be deemed to include for	r:				
	<ul> <li>Protecting retained parts of existing buildings including</li> <li>Patching and otherwise making good to surfaces where removed in retained parts of existing buildings</li> <li>Removing all associated frames, plates, packers, trims adhesives, etc</li> </ul>	e bolts and		_		
D	The Contractor shall be deemed to have satisfied himse extent of work represented in this Bill and shall allow aga all costs in connection therewith					
E	If any clause, item or quantity is not priced it shall be decincluded elsewhere or no remuneration is required in resquantity					
	ALLOWANCE ITEMS					
F	Allow for temporary dustproof, weatherproof and secure hoardings, screens, coverings, etc	(XX) Ite	·m			Nil
G	Allow for complying with all conditions and restrictions imposed by the Specification and/or Authorities in carrying out the works	(XX) Ite	em			100,000
Н	Sundry demolition to affected areas	(XX) Ite	em			25,000
				To Collection	on	\$125,000



	Item		Unit	Qty	Rate	Cost
	ALLOWANCE ITEMS (Cont'd)					
А	Allowance for coordination with supply authorities for disconnection of electrical services prior to demolition	(XX)	Item			50,000
В	Allow for temporary services to residential properties during demolition	(XX)	Item			Excl.
С	Allowance to return utility providers property removed from site	(XX)	Item			Incl.
	HAZARDOUS MATERIALS REMOVAL					
D	Allow for the safe removal and disposal of all hazardous materials identified in the Specification or other separate reports including hazardous materials discovered during the course of the demolition works	(XX)	Item			Excl.
	DEMOLITION WORKS GENERALLY					
E	The Contractor is to carry out the demolition works in a statutory and OH&S requirements, including design of appropriately qualified personnel					
F	The impact of all works including demolition, noise, dus adjoining buildings and properties and their operations agreed with the Project Manager prior to works comme	are to be				
G	The nature of the works to be demolished are not clear documents, and consequently, also not clearly defined Contractor should inspect the works to be demolished items measured herein are appropriately priced	in this B	ill of Qua	antities. The		
Н	Remove 300mm existing road pavement along Control Line MC01	(XX)	m²	281	100	28,100
I	Saw cut and removal of existing pavement for services installations under public roadways	(XX)	m²	7	300	2,100
J	Sawcut existing pavement along Control Line MC01	(XX)	m	937	20	18,740
К	Remove existing overhead LV electrical cable including terminations	(XX)	m	956	150	143,400
L	Remove existing overhead SV electrical cable including terminations	(XX)	m	549	100	54,900
М	Remove existing overhead HV electrical services cable including terminations, stay wires and associated components	(XX)	m	907	150	136,050
N	Remove existing DN100 water mains	(XX)	m	3	500	1,500
				To Collecti	on	\$434,790
				TO COHECU	011	φ <del>4</del> 34,790



	Item		Unit	Qty	Rate	Cost
	DEMOLITION WORKS GENERALLY (Cont'd)					
А	Remove existing hydrant point	(XX)	No	1	1,500	1,500
В	Demolish existing 300 diameter culvert including headwalls	(XX)	No	1	500	500
С	Demolish existing twin 600 diameter culvert including associated headwalls and pit	(XX)	No	2	700	1,400
D	Remove existing timber powerpole and conductors	(XX)	No	27	1,500	40,500
E	Terminate HV conductors from pole BU-10466	(XX)	No	1	1,200	1,200
F	Remove conductors from pole 3 (BU-10114) to pole 4 (BU-10128) and terminate connection	(XX)	No	1	750	750
G	Remove existing distribution pillar	(XX)	No	6	1,200	7,200
Н	Remove conductors from pole 31 (BU-10285) to pole 33 (BU-10467) and terminate connection	(XX)	No	1	750	750
ı	Disconnect and remove existing substations	(XX)	Item			50,000
J	Remove existing earth mound	(XX)	Item			5,000
				To Collec	tion	\$108,800



	Page		Cost
COLLECTION			
	2/1		
	2/2		\$125,000
	2/3		\$434,790
	2/4		\$108,800
	2 - DEMOLITION	To Summary	\$668,590

17497-1



	Item	Unit	Qty	Rate	Cost
	GENERALLY				
	Method of Measurement				
Α	This Bill of Quantities has NOT been measured in accordance Standard Method of Measurement of Building Works	with the Au	ıstralian		
В	This Bill of Quantities has been measured in accordance with Bucknall Rules for Construction Measurement - Third Edition -		evett		
С	The Contractor is advised that this is an abbreviated form of mot require measurement to the same extent of detail required Standard Method of Measurement. It is imperative that the Concomprehends the system and prices the following items with concomprehends and Specification to appreciate the exact nature and	by the Aus ntractor full areful atten	tralian y tion to the		
D	The quantities prepared using these Rules for Construction Meguaranteed and are provided for guidance only	easurement	t are not		
E	Where, in this Bill of Quantities, additional information is provided this shall not prejudice any other items in this document where information is not provided				
F	It shall be the Contractor's responsibility to obtain any further in tender period that the Contractor deems necessary to assist in		during the		
G	Notwithstanding the above, any deviations from the system of noted preceding the quantities or by adaption of the "prices to				
	Item Coding				
Н	The two letter code references that appear in parenthesis at the description are for the purpose of elemental cost analysis and by the Contractor				
	MEASUREMENT AND PRICES				
	Specification				
I	The Contractor is referred to the Specification, Drawings and other Contract documents for full descriptions and details of workmanship, materials, etc., related to the work measured in this Bill and shall allow here or in the prices for measured work for all costs incurred therewith	Item			Incl.
	Prices				
			To Collect	ion	

MEASUREMENT AND PRICES (Cont'd)  Prices (Cont'd)  A Prices for Excavation are deemed to include for:  a. Complying with all requirements, restrictions and recommendations concerning the method of carrying out excavations or backfilling as described by the Specifications and requisitions or as required by site conditions b. Engaging services of a Geotechnical Engineer to verify bearing capacities and founding levels c. Excavating in all types of strate except rock as defined in this Section d. Overbreak excavation to footings, etc., and resultant backfilling including formwork e. Levelling bottoms of excavations, grading, trimming, scabbling rock, keeping sides plumb, backfilling, compaction, profor finging, stockpling, spoil heaps and multiple handling, disposing of surplus excavated material including any tip charges f. Trimming faces of excavation to receive sprayed concrete retention walls, etc. g. Maintaining faces of excavation to receive sprayed concrete retention walls, etc. g. Maintaining faces of excavation to receive sprayed concrete retention walls, etc. g. Removing and sealing of redundant drainage pipes k. Additional costs of excavations of bored holes j. Removing and sealing of redundant drainage pipes k. Additional costs of excavations grades and trainage pipes k. Additional costs of excavations grades and trainage pipes k. Additional costs of excavations protection testing n. Vibration monitoring  B Prices for Filling are deemed to include for: a. Executing in layers b. Rolling, compacting, watering c. Surface and edge treatments of filling and beds d. Testing of samples e. Compaction testing f. fibration monitoring  C Prices for Membranes are deemed to include for: a. Lapping, joints and taping b. Wrapping and sealing around service pipes and the like which pass through  Prices for Excavation and Filling shall also be deemed to include for:  Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures encountered Colaming out excavation prior to f		Item	Unit	Qty	Rate	Cost
A Prices for Excavation are deemed to include for:  a. Complying with all requirements, restrictions and recommendations concerning the method of carrying out excavations or backfilling as described by the Specifications and regulations or as required by site conditions  b. Engaging services of a Geotechnical Engineer to verify bearing capacities and founding levels  c. Excavating in all types of strata except rock as defined in this Section  d. Overbreak excavation to footings, etc., and resultant backfilling including formwork  e. Leveling bottoms of excavation, sgrading, trimming, caabbling rock, keeping sides plumb, backfilling, compaction, proof rolling, stockpiling, spoil heaps and multiple handling, disposing of surplus excavated material including any tip charges  f. Trimming faces of excavation to receive sprayed concrete retention walls, etc g. Maintaining faces of excavation  h. Forming, reforming and removing temporary ramps  i. Cleaning out bottoms of bored holes  j. Removing and sealing off redundant drainage pipes  k. Additional costs of excavation basements in sequences to suit other work (e.g. basement external retaining walls, site retention, etc)  l. Provision of samples  m. Compaction testing  n. Vibration monitoring  B Prices for Filling are deemed to include for:  a. Executing in layers  b. Rolling, compacting, watering  c. Surface and edge treatments of filling and beds  d. Testing of samples  e. Compaction testing  f. Vibration monitoring  C Prices for Excavation and Filling shall also be deemed to include for:  Breaking of samples  c. Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures encountered  Cleaning out excavation and Filling shall also be deemed to include for:  Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures aprior to compaction  Providing certified records of measurement  Site restoration  Erosion control measures  Bearing pressure and spoon testing under foot		MEASUREMENT AND PRICES (Cont'd)				
a. Complying with all requirements, restrictions and recommendations concerning the method of carrying out excavations or backfilling as described by the Specifications and regulations or as required by site conditions.  b. Engaging services of a Geotechnical Engineer to verify bearing capacities and founding levels  c. Excavating in all types of strata except rock as defined in this Section  d. Overbreak excavation to footings, etc., and resultant backfilling including formwork  e. Leveling bottoms of excavations, grading, trimming, acabibing rock, keeping sides plumb, backfilling, compaction, proof rolling, stockpilling, spoll heaps and multiple handling, disposing of surplus excavated material including any tip charges  f. Trimming faces of excavation to receive sprayed concrete retention walls, etc  g. Maintaining faces of excavation to receive sprayed concrete retention walls, etc  g. Maintaining faces of excavation to receive sprayed concrete retention walls, etc  g. Removing and sealing off redundant drainage pipes  k. Additional costs of excavating basements in sequences to suit other work (e.g. basement external retaining walls, site retention, etc)  l. Provision of samples  m. Compaction testing  n. Vibration monitoring  B. Prices for Filling are deemed to include for:  a. Executing in layers  b. Rolling, compacting, watering  c. Surface and edge treatments of filling and beds  d. Testing of samples  c. Compaction testing  f. Vibration monitoring  C. Prices for Membranes are deemed to include for:  a. Lapping, joints and taping  b. Wrapping and sealing around service pipes and the like which pass through  D. Prices for Excavation and Filling shall also be deemed to include for:  Serfifying surfaces prior to compaction  Freviding certified records of measurement  Site restoration  Erosion control measures  Bearing pressure and spoon testing under footings, etc		Prices (Cont'd)				
the method of carrying out excavations or backfilling as described by the Specifications and regulations or as required by site conditions b. Engaging services of a Geotechnical Engineer to verify bearing capacities and founding levels c. Excavating in all types of strata except rock as defined in this Section d. Overbreak excavation to footings, etc., and resultant backfilling including formwork e. Levelling bottoms of excavations, grading, trimming, scabbing rock, keeping sides plumb, backfilling, compaction, proof rolling, stockpiling, spoil heaps and multiple handling, disposing of surplus excavated material including any tip charges f. Trimming faces of excavation to receive sprayed concrete retention walls, etc g. Maintaining faces of excavation h. Forming, reforming and removing temporary ramps i. Cleaning out bottoms of bored holes j. Removing and sealing off redundant drainage pipes k. Additional costs of excavation so fore the description, etc) l. Provision of samples m. Compaction testing p. Vibration monitoring m. Vibration monitoring p. Vibration monitoring p. Vibration monitoring b. Rolling, compacting, watering c. Surface and edge treatments of filling and beds d. Testing of samples p. Rolling, compacting, watering c. Surface and edge treatments of filling and beds d. Testing of samples p. Compaction testing f. Vibration monitoring p. Wrapping and sealing around service pipes and the like which pass through D. Prices for Excavation and Filling shall also be deemed to include for:  Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures encountered Cleaning out excavation prior to further construction work therein Seartying surfaces prior to compaction Providing certified records of measurement Site restoration Erosion control measures Bearing pressure and spoon testing under footings, etc	Α	Prices for Excavation are deemed to include for:				
a. Executing in layers b. Rolling, compacting, watering c. Surface and edge treatments of filling and beds d. Testing of samples e. Compaction testing f. Vibration monitoring  C Prices for Membranes are deemed to include for: a. Lapping, joints and taping b. Wrapping and sealing around service pipes and the like which pass through  D Prices for Excavation and Filling shall also be deemed to include for:  Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures encountered Cleaning out excavation prior to further construction work therein Scarifying surfaces prior to compaction Providing certified records of measurement Site restoration Erosion control measures Bearing pressure and spoon testing under footings, etc		the method of carrying out excavations or backfilling as descr Specifications and regulations or as required by site condition b. Engaging services of a Geotechnical Engineer to verify bear founding levels c. Excavating in all types of strata except rock as defined in the d. Overbreak excavation to footings, etc., and resultant backfie. Levelling bottoms of excavations, grading, trimming, scabb plumb, backfilling, compaction, proof rolling, stockpilling, spoil handling, disposing of surplus excavated material including a f. Trimming faces of excavation to receive sprayed concrete reg. Maintaining faces of excavation h. Forming, reforming and removing temporary ramps i. Cleaning out bottoms of bored holes j. Removing and sealing off redundant drainage pipes k. Additional costs of excavating basements in sequences to basement external retaining walls, site retention, etc) l. Provision of samples m. Compaction testing	ibed by the s aring capaci his Section Iling includir ling rock, ke heaps and ny tip charg etention wal	ities and  ng formwork eeping sides multiple ges lls, etc		
b. Rolling, compacting, watering c. Surface and edge treatments of filling and beds d. Testing of samples e. Compaction testing f. Vibration monitoring  C Prices for Membranes are deemed to include for:  a. Lapping, joints and taping b. Wrapping and sealing around service pipes and the like which pass through  D Prices for Excavation and Filling shall also be deemed to include for:  Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures encountered Cleaning out excavation prior to further construction work therein Scarifying surfaces prior to compaction Providing certified records of measurement Site restoration Erosion control measures Bearing pressure and spoon testing under footings, etc	В	Prices for Filling are deemed to include for:				
a. Lapping, joints and taping b. Wrapping and sealing around service pipes and the like which pass through  D Prices for Excavation and Filling shall also be deemed to include for:  Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures encountered  Cleaning out excavation prior to further construction work therein  Scarifying surfaces prior to compaction  Providing certified records of measurement  Site restoration  Erosion control measures  Bearing pressure and spoon testing under footings, etc		<ul><li>b. Rolling, compacting, watering</li><li>c. Surface and edge treatments of filling and beds</li><li>d. Testing of samples</li><li>e. Compaction testing</li></ul>				
b. Wrapping and sealing around service pipes and the like which pass through  D Prices for Excavation and Filling shall also be deemed to include for:  Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures encountered  Cleaning out excavation prior to further construction work therein  Scarifying surfaces prior to compaction  Providing certified records of measurement  Site restoration  Erosion control measures  Bearing pressure and spoon testing under footings, etc	С	Prices for Membranes are deemed to include for:				
<ul> <li>Breaking out boulders, concrete slabs, footings, foundations, buried tanks, and other such buried structures encountered</li> <li>Cleaning out excavation prior to further construction work therein</li> <li>Scarifying surfaces prior to compaction</li> <li>Providing certified records of measurement</li> <li>Site restoration</li> <li>Erosion control measures</li> <li>Bearing pressure and spoon testing under footings, etc</li> </ul>			ich pass thr	rough		
other such buried structures encountered Cleaning out excavation prior to further construction work therein Scarifying surfaces prior to compaction Providing certified records of measurement Site restoration Erosion control measures Bearing pressure and spoon testing under footings, etc	D	Prices for Excavation and Filling shall also be deemed to inclu	ude for:			
To Collection		other such buried structures encountered     Cleaning out excavation prior to further construction work     Scarifying surfaces prior to compaction     Providing certified records of measurement     Site restoration     Erosion control measures		tanks, and		
				To Collect	tion	



	Item		Unit	Qty	Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)					
	Prices (Cont'd)					
Α	Prices for Underpinning shall be deemed to include for	r:				
	a. All matters covered under the 'Prices' clauses as ite Sections herein     b. All necessary temporary support	emised in	all other	Trade		
В	Prices for Site Retention shall be deemed to include for	or:				
	<ul><li>a. All matters covered under the 'Prices' clauses as its Sections herein</li><li>b. Additional overpour concrete and reinforcement at t</li><li>c. Washing off and cleaning down exposed surfaces of</li></ul>	ops of bo	red pier			
С	The Contractor shall be deemed to have satisfied hims extent of work represented in this Bill and shall allow a all costs in connection therewith					
D	If any clause, item or quantity is not priced it shall be concluded elsewhere or no remuneration is required in requantity					
	Work in Other Trades					
Е	The Contractor is referred to the External Works and L excavation associated with external works	₋andscap	ing trade	e for		
	ALLOWANCE ITEMS					
F	Allow for removal and grubbing of existing trees, subject to future detail	(XP)	No	419	200	83,800
G	Allowance for additional removal of trees in area as required	(XP)	m²	6,816	25	170,400
Н	Allow for any dilapidation surveys of adjacent buildings and properties that may become affected by site works, all as may be required by the Specification, drawings or other contract documentation	(SB)	Item			75,000
I	Allow for excavation for blinding concrete both to seal bottoms of excavation and to achieve founding levels	(SB)	Item			Excl.
J	Allow for protecting trees and shrubs to be retained	(XP)	Item			50,000
К	Allow for additional cost of excavating in contaminated ground	(XP)	Item			Excl.
				To Collect	ion	\$379,200
				10 0011000		Ψ313,200



	Item		Unit	Qty	Rate	Cost
	SITE PREPARATION					
А	Strip topsoil from roads, footpaths, pathways & batters and regrade areas (where applicable) 200mm thick to stockpile, quantity as advised by LMCC via email correspondence on 03.09.2020	(XP)	m³	5,550	4	22,200
В	Site clearance including removal of vegetation, undergrowth, bushes, hedges and rubbish, etc. (In 58,765m2)	(XP)	Item			50,000
	BULK EXCAVATION					
С	Cut to subgrade level or base of select subgrade layer to fill, place, trim and compact, quantity as advised by LMCC via email correspondence on 03.09.2020	(XP)	m³	2,730	12	32,760
D	Cut to subgrade level or base of select subgrade layer off-site disposal as directed by superintendent, quantity as advised by LMCC via email correspondence on 03.09.2020	(XP)	m³	8,215	190	1,560,850
E	Extra over cut to subgrade level or base of select subgrade layer off-site disposal for off-site disposal of GSW allowed 20%	(XP)	m³	1,643	500	821,500
F	Load, cart, place, trim and compact trench spoil as per superintendent instruction, quantity as advised by LMCC via email correspondence on 03.09.2020	(XP)	m³	4,421	30	132,630
G	Allow for the additional cost of excavating in rock (for the purposes of this item rock is defined as any non-rippable natural or artificial material encountered in excavations which cannot be removed until broken up by mechanical means such as jack-hammers or percussion drills - it excludes rippable rock which can be removed by a single tine "D9" ripper or similar equipment)	(XP)	m³	1,095	100	109,500
	DETAILED EXCAVATION					
Н	Excavation to trenches for services installations as per superintendent instruction, quantity as advised by LMCC via email correspondence on 03.09.2020	(XP)	m³	4,421	120	530,520
I	Allow for the additional cost of excavating in rock (for the purposes of this item rock is defined as any non-rippable natural or artificial material encountered in excavations which cannot be removed until broken up by mechanical means such as jack-hammers or percussion drills - it excludes rippable rock which can be removed by a single tine "D9" ripper or similar equipment)	(XP)	m³	443	180	79,740
				To Colle	ection	\$3,339,700



	Item		Unit	Qty	Rate	Cost
	FILLING					
А	Place, spread, trim and compact topsoil from stockpile - 250mm thick to footpaths, batters and regrade areas, parks, etc, quantity as advised by LMCC via email correspondence on 03.09.2020	(XP)	m³	5,550	7	38,850
В	Place, spread, trim and compact topsoil to turfed areas	(XP)	Item			Incl.
	SUB-BASES					
С	Subbase course, 280mm thick including compaction	(XR)	m²	14,791	30	443,730
D	Subbase course, 405mm thick including compaction	(XR)	m²	3,091	40	123,640
E	50mm sand blinding layer to footpaths	(XR)	m²	2,862	5	14,310
				To Co	ollection	\$620,530



	Page		Cost
COLLECTION			
	3/1		
	3/2		
	3/3		\$379,200
	3/4		\$3,339,700
	3/5		\$620,530
	3 - GROUND WORKS	To Summary	\$4,339,430



	Item Unit	Qty	Rate	Cost
	GENERALLY			
	Method of Measurement			
А	The Contractor is advised that this is an abbreviated form of measurement not require measurement to the same extent of detail required by the Austandard Method of Measurement. It is imperative that the Contractor full comprehends the system and prices the following items with careful attemprayings and Specification to appreciate the exact nature and intent of the contractor of the contr	stralian lly ntion to the		
В	This Bill of Quantities has NOT been measured in accordance with the A Standard Method of Measurement of Building Works	ustralian		
С	It shall be the Contractor's responsibility to obtain any further information tender period that the Contractor deems necessary to assist in pricing	during the		
D	The quantities prepared using these Rules for Construction Measuremer guaranteed and are provided for guidance only	nt are not		
E	This Bill of Quantities has been measured in accordance with the Rider I Bucknall Rules for Construction Measurement - Third Edition - May 2010			
F	Where, in this Bill of Quantities, additional information is provided to assi this shall not prejudice any other items in this document where the additi information is not provided			
G	Notwithstanding the above, any deviations from the system of measurem noted preceding the quantities or by adaption of the "prices to include" of			
	Item Coding			
Н	The two letter code references that appear in parenthesis at the end of edescription are for the purpose of elemental cost analysis and are to be oby the Contractor			
	MEASUREMENT AND PRICES			
	Specification			
I	The Contractor is referred to the Specification, Drawings and other Contract documents for full descriptions and details of workmanship, materials, etc., related to the work measured in this Bill and shall allow here or in the prices for measured work for all costs incurred therewith			Nil
	Prices			
		To Collecti	on	



	Item		Unit	Qty	Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)					
	Prices (Cont'd)					
Α	Prices for Roadworks generally are deemed to include	for:				
	<ul> <li>a. Complying with all 'Prices Shall Include For' clauses</li> <li>b. Engaging services of Geotechnical\ Engineer to verifounding levels</li> <li>c. Design and shop drawings</li> <li>d. Testing, curing and protection of concrete and finished</li> <li>e. Provision of samples and prototypes</li> </ul>	fy bearin	g capac			
В	Prices for Paving are deemed to include for:					
	a. Grading, rolling and compacting to required falls, croprofiles	ossfalls c	ambers	and other		
С	Prices for Kerbs, Channels, Spoon Drains, etc. are dee	emed to i	nclude f	or:		
	a. Kerbs, channels, spoon drains, etc. being both in str b. Transitions, junctions, joints and the like	raight or o	curved r	uns		
D	The Contractor shall be deemed to have satisfied hims extent of work represented in this Schedule and shall a item for all costs in connection therewith					
Е	If any clause, item or quantity is not priced it shall be dincluded elsewhere or no remuneration is required in requantity					
	ALLOWANCE ITEMS					
F	Allowance to match new surface to existing	(XR)	m	937	50	46,850
G	Allow for keeping excavations free from water	(XR)	Item			25,000
Н	Allow for protecting trees and shrubs to be retained	(XR)	Item			50,000
I	Allow for excavation and filling to soft spots	(XR)	Item			100,000
J	Allow for blinding concrete and its excavation both to seal bottoms of excavation and to achieve founding levels	(XR)	Item			Excl.
	ROAD PAVING					
K	Basecourse, 150mm thick including compaction	(XR)	m²	16,330	20	326,600
L	Wearing course 45mm thick asphaltic concrete	(XR)	m²	3,098	35	108,430
М	Wearing course 30mm thick asphaltic concrete	(XR)	m²	13,239	25	330,975
				To Collec	tion	\$987,855



						4 - ROADWORKS
	Item		Unit	Qty	Rate	Cost
	ROAD PAVING (Cont'd)					
А	Primeseal, assume 7mm	(XR)	m²	16,330	7	114,310
В	N32 concrete slab 200mm thick, SL82 mesh top and bottom	(XR)	m²	77	140	10,780
С	Selected subgrade, 200mm thick as advised by Douglas Partners Report on Geotechnical Investigation dated 8/10/2018	(XR)	m²	21,504	14	301,056
	KERBS, CHANNELS, SPOON DRAINS, ETC					
D	RT kerb, as per LMCC Drawing EGSD-101 Version 4 dated 29.07.2016	(XR)	m	2,830	100	283,000
Е	SA kerb, as per LMCC Drawing EGSD-101 Version 4 dated 29.07.2016	(XR)	m	1,528	120	183,360
F	SB dish drain	(XR)	m	73	300	21,900
G	Driveway layback, allowed to SA kerb only	(XR)	No	77	1,000	77,000
	LINEMARKING AND SIGNAGE					
Н	Linemarking TB, Give Way line	(XR)	m	83	16	1,328
ı	Linemarking BB, Barrier line	(XR)	m	47	5	235
J	Linemarking TB1, Give Way line	(XR)	m	15	16	240
				To Coll	ection	\$993,209



	Page		Cost
COLLECTION			
	4/1		
	4/2		\$987,855
	4/3		\$993,209
_	4 - ROADWORKS	To Summary	\$4 004 0c4
	4 - NOADWORKS	10 Summary	\$1,981,064

	Item	Unit	Qty	Rate	Cost
	GENERALLY				
	Method of Measurement				
Α	The Contractor is advised that this is an abbreviated form of not require measurement to the same extent of detail required Standard Method of Measurement. It is imperative that the Cocomprehends the system and prices the following items with a Drawings and Specification to appreciate the exact nature and	I by the Aus intractor ful careful atter	stralian ly ntion to the		
В	This Bill of Quantities has NOT been measured in accordance Standard Method of Measurement of Building Works	with the A	ustralian		
С	It shall be the Contractor's responsibility to obtain any further it tender period that the Contractor deems necessary to assist in		during the		
D	The quantities prepared using these Rules for Construction M guaranteed and are provided for guidance only	easuremer	it are not		
Е	This Bill of Quantities has been measured in accordance with Bucknall Rules for Construction Measurement - Third Edition				
F	Where, in this Bill of Quantities, additional information is provided this shall not prejudice any other items in this document where information is not provided				
G	Notwithstanding the above, any deviations from the system of noted preceding the quantities or by adaption of the "prices to				
	Item Coding				
Н	The two letter code references that appear in parenthesis at the description are for the purpose of elemental cost analysis and by the Contractor				
	MEASUREMENT AND PRICES				
	Prices				
I	The Contractor shall be deemed to have satisfied himself as to extent of work represented in this Schedule and shall allow agreement for all costs in connection therewith	-	-		
J	If any clause, item or quantity is not priced it shall be deemed included elsewhere or no remuneration is required in respect quantity				
K	The Contractor is referred to the relevant trades for the meast having Prime Cost Rates and Equivalent Monetary Rates	urement of	items		
			To Collecti	ion	
					J

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	Item		Unit	Qty	Rate	Cost
	PROVISIONAL SUMS AND EQUIVALENT MONETAI	RY SUMS				
А	Provisional and Equivalent Monetary Sums are defined or costs, the extent of which cannot be accurately defissue of the Tender documents. Such Sums are deer materials and all things required to produce the finish excluding Contractor's profit and attendance	fined or fo	reseen at the ude labour a	e time of and		
В	Provisional sum allowance for connection of NBN services to lots; \$600 per lot as advised by LMCC via email 28/08/2020	(XC)	Item			110,400
С	Provisional sum allowance for works as executed plans; \$300 per lot as advised by LMCC via email 28/08/2020	(PL)	Item			55,200
D	Provisional sum allowance for Hunter Water Corporation inspections; \$75 per lot as advised by LMCC via email dated 28/08/2020	(HS)	Item			13,800
Е	Provisional sum allowance for additional works resulting from design development not otherwise included in the trade sections	(PR)	Item			804,400
F	Provisional sum allowance for Ecologist during tree clearance; as advised by LMCC via email 28/08/2020	(PL)	Item			5,000
G	Provisional sum allowance for Jemena Lands Coordinator and Jemena Representative; as advised by LMCC via email 28/08/2020 based on 10 month programme at \$10,000 per month	(XG)	Item			100,000
Н	Provisional sum allowance for Ausgrid fees prior to commencement; as advised by LMCC 23/10/2020	(XE)	Item			8,000
				To Collection		\$1,096,800

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	Page		Cost
COLLECTION			
	5/1		
	5/2		\$1,096,800
	5 - PROVISIONAL AND MONETARY SUMS	To Summary	\$1,096,800



	ltem Unit	Qty	Rate	Cost
	GENERALLY			
	Method of Measurement			
Α	The Contractor is advised that this is an abbreviated form of measurement not require measurement to the same extent of detail required by the Austr Standard Method of Measurement. It is imperative that the Contractor fully comprehends the system and prices the following items with careful attenti Drawings and Specification to appreciate the exact nature and intent of the	alian on to the		
В	This Bill of Quantities has NOT been measured in accordance with the Aus Standard Method of Measurement of Building Works	tralian		
С	It shall be the Contractor's responsibility to obtain any further information d tender period that the Contractor deems necessary to assist in pricing	uring the		
D	The quantities prepared using these Rules for Construction Measurement a guaranteed and are provided for guidance only	are not		
E	This Bill of Quantities has been measured in accordance with the Rider Let Bucknall Rules for Construction Measurement - Third Edition - May 2010	vett		
F	Where, in this Bill of Quantities, additional information is provided to assist this shall not prejudice any other items in this document where the addition information is not provided			
G	Notwithstanding the above, any deviations from the system of measurement noted preceding the quantities or by adaption of the "prices to include" clauses			
	Item Coding			
Н	The two letter code references that appear in parenthesis at the end of each description are for the purpose of elemental cost analysis and are to be disby the Contractor			
	MEASUREMENT AND PRICES			
	Specification			
I	The Contractor is referred to the Specification, Drawings and other Contract documents for full descriptions and details of workmanship, materials, etc., related to the work measured in this Bill and shall allow here or in the prices for measured work for all costs incurred therewith			Nil
	Prices			
J	Prices for Plant, Appliances and Equipment shall be deemed to include for	:		
	<ul><li>a. Vibration mounts</li><li>b. Flexible connections</li><li>c. Accessories</li><li>d. Fixings and supports</li></ul>			
		To Collection		
		10 Collection		

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	Item	Unit	Qty	Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)				
	Prices (Cont'd)				
Α	Prices for Sanitary Fixtures and Taps shall be deemed to include	de for:			
	<ul><li>a. Connectors, brackets, jointing materials, fixings and support</li><li>b. Short pipework connections including fittings</li><li>c. Traps</li></ul>	s			
В	Prices for Pipework shall be deemed to include for:				
	a. Fittings on pipe up to and including 50mm b. Excavation for in ground services c. Maintaining faces of excavation including additional excavation keeping excavations free from water, bedding and backfilling with specified, consolidating, disposal of surplus excavated material wrapping, for pipework in trenches d. Pipe joints including flanges, sockets, running joints, cutting on pipes and for extra joints e. Back nuts, nipples f. Inspection openings to pipe fittings g. Expansion loops and expansion joints h. Joints between pipework of differing materials and to fittings i. Fixing to all backgrounds including incidental fittings, clips, sa straps, hangers, screws, nails, power fastenings, anchors, bolts j. Sleeves, wall flanges, etc k. Cutting and forming holes and penetrations including sealing required fire and acoustic ratings l. Chasing into structure where required m. Provision of all noggings, etc., for fixtures, etc n. Pipeline identification	with material I and protect and waste f and appliar addles, braces and the like	s as ctive for fittings nces ckets,		
С	Prices for Pipework shall also be deemed to include for:  · Bends and junctions of all sizes on flexible pipes · Junctions with branches at the required angle to suit pipe brain adjacent to junctions to give the required angle, (bends have not immediately adjacent to junction branches) · Concrete anchor blocks, thrust blocks, and the like and holdine. Concrete bases to standpipes, traps, gullies, upturn bends and · Concrete surrounds to vertical pipes in the ground · Fire collars and the like · Cover plates · Gauges, thermostats, thermometers, etc	ot been mea	asured		
D	Prices for Pits, Sumps and the like shall be deemed to include  Openings in pit walls to suit pipes and building in pipe ends Benching to base of pits Step irons	for:			
			To Collection	on	



	Item	Unit	Qty	Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)				
	Prices (Cont'd)				
А	Prices for Hydraulic Services shall also be deemed the Prices clauses contained in the following trades:		ings listed in		
	<ul><li> Groundworks</li><li> Concrete</li><li> Formwork</li><li> Reinforcement</li></ul>				
В	The Contractor shall be deemed to have satisfied hi extent of work represented in this Bill and shall allow all costs in connection therewith		• •		
С	If any clause, item or quantity is not priced it shall be included elsewhere or no remuneration is required in quantity				
	Work in Other Trades				
D	The Contractor is referred to the External Works and Installations associated with landscaping works	d Landscaping trac	de for Irrigation		
E	The Contractor is referred to the Demolition trade for Hydraulics	r Demolition assoc	ciated with		
	ALLOWANCE ITEMS				
F	Allow for design and shop drawings	(HS) Item			Incl.
G	Allow for engineering	(HS) Item			Incl.
Н	Allow for as-built drawings and manuals	(HS) Item			Incl.
I	Allow for provision of prototypes and samples	(HS) Item			Incl.
J	Allow for giving notices, obtaining permits and completion certificates, paying fees and charges	(HS) Item			20,000
К	Allow for painting and other protective and decorative treatments	(HS) Item			Incl.
L	Allow for testing and commissioning	(HS) Item			231,700
М	Allow for preventative maintenance	(HS) Item			Incl.
N	Allow for spares	(HS) Item			Incl.
0	Allow for sterilising	(HS) Item			Incl.
Р	Allow for providing guarantees	(HS) Item			Incl.
			To Collec	tion	\$251,700



	Item		Unit	Qty	Rate	Cost
	ALLOWANCE ITEMS (Cont'd)					
А	Allow for builders work in connection with hydraulic services	(HS)	Item			Excl.
В	Allow for detailed excavation, trenching, backfilling etc to stormwater drainage items as necessary	(HS)	Item			Incl.
С	Connection to existing water main	(HS)	Lot	1	7,500	7,500
	HYDRAULICS SERVICES					
D	Allow for the supply, installation, testing and operational maintenance of the hydraulic services together with all associated minor works, to cover the whole of the works described in the Hydraulic Services Specification and related drawings including any P.C. / Provisional Sums listed therein and all sanitary fixtures and tapware scheduled by the Architect	(HS)	Item			Incl.
E	Allow for Contractor's allowance and profit on the foregoing	(HS)	Item			Incl.
F	Allow for general attendance on Specialist executing the above works, all as listed in the General Principles trade	(HS)	Item			Excl.
G	Allow for all other attendance and Contractor's work items required to be executed in connection with the Specialist executing the above works, all as described in the Hydraulic Services Specification and as shown on the Hydraulic Services drawings	(HS)	Item			Incl.
	EXTERNAL WATER SUPPLY					
Н	Water mains; DN150 including bends and connections	(HS)	m	2,492	80	199,360
I	Water mains; DN100 including bends and connections	(HS)	m	1,089	70	76,230
J	Single service connection pipework	(HS)	m	140	80	11,200
К	Split service connection pipework	(HS)	m	583	80	46,640
L	Hydrant point	(HS)	No	39	1,500	58,500
М	Valve complete	(HS)	No	28	1,500	42,000
	EXTERNAL STORMWATER DRAINAGE					
N	Stormwater pipe, assumed 150mm uPVC pipework installed in trench	(HS)	m	249	100	24,900
				To Co	llection	\$466,330



	Item		Unit	Qty	Rate	Cost
	EXTERNAL STORMWATER DRAINAGE (Cont'd)					
А	Stormwater pipe, assumed 225mm uPVC pipework installed in trench	(HS)	m	630	135	85,050
В	Stormwater pipe, assumed 300mm uPVC pipework installed in trench	(HS)	m	459	215	98,685
С	Stormwater pipe, assumed 375mm uPVC pipework installed in trench	(HS)	m	1,588	255	404,940
D	Stormwater pipe, assumed 450mm RCP pipework installed in trench	(HS)	m	250	385	96,250
E	Stormwater pipe, assumed 525mm RCP pipework installed in trench	(HS)	m	317	420	133,140
F	Stormwater pipe, assumed 600mm RCP pipework installed in trench	(HS)	m	255	480	122,400
G	Stormwater pipe, assumed 675mm RCP pipework installed in trench	(HS)	m	12	585	7,020
Н	Box culvert, 1,200mm x 600mm	(HS)	m	19	1,050	19,950
I	Box culvert, 1,500mm x 600mm	(HS)	m	55	1,500	82,500
J	Box culvert, 1,800mm x 600mm	(HS)	m	11	1,874	20,614
К	Stormwater pit, 600mm x 600mm grated surface inlet pit	(HS)	No	26	3,000	78,000
L	Stormwater pit, 600mm x 900mm grated surface inlet pit	(HS)	No	50	4,000	200,000
М	Stormwater pit, 900mm x 900mm grated surface inlet pit	(HS)	No	24	4,200	100,800
N	Stormwater pit, 900mm x 900mm junction pit	(HS)	No	3	3,200	9,600
0	Stormwater pit, 1,500mm x 1,500mm grated surface inlet pit	(HS)	No	2	10,000	20,000
Р	Concrete headwall including outlet scour protection	(HS)	No	5	15,000	75,000
Q	Inlet pit, 2.4m precast lintel	(HS)	No	84	5,500	462,000
R	Inlet pit, 3.0m precast lintel	(HS)	No	13	6,000	78,000
S	Ecosol GPT 4450, gross pollutant trap	(HS)	No	3	49,000	147,000
Т	Ecosol GPT 4300, gross pollutant trap	(HS)	No	1	25,000	25,000
U	Ecosol GPT 4600, gross pollutant trap	(HS)	No	1	53,000	53,000
				To C	ollection	\$2,318,949

6/5



	Item		Unit	Qty	Rate	Cost
	EXTERNAL STORMWATER DRAINAGE (Cont'd)					
Α	OSD tank 01; 45m x 5.5m x 2m deep	(HS)	Lot	1	180,000	180,000
В	OSD tank 02; 35m x 5.5m x 1.7m deep	(HS)	Lot	1	140,000	140,000
С	OSD tank 03; 25m x 5.5m x 0.8m deep	(HS)	Lot	1	90,000	90,000
D	OSD tank 04; 25m x 8m x 1.35m deep	(HS)	Lot	1	130,000	130,000
E	Allowance to form North and South swales; no details	(HS)	Item			20,000
	Work in Other Trades					
F	The Contractor is referred to the Ground Works trade excavation to trenches for services installations	for details	s regard	ling		Nil
	EXTERNAL SEWER DRAINAGE					
G	Sewer mains; DN225 uPVC	(XD)	m	4,472	230	1,028,560
Н	Sewer mains; DN150 uPVC	(XD)	m	462	165	76,230
ı	Precast maintenance chamber	(XD)	No	24	2,500	60,000
J	Maintenance holes	(XD)	No	28	3,500	98,000
К	Terminal maintenance shaft	(XD)	No	19	2,500	47,500
L	Connection to lots	(XD)	No	159	600	95,400
				To Col	lection	\$1,965,690



Page	Cost
COLLECTION	
6/1	
6/2	
6/3	\$251,700
6/4	\$466,330
6/5	\$2,318,949
6/6	\$1,965,690
6 - HYDRAULICS To Summary	\$5,002,669

	Item Unit Qty	Rate	Cost
	GENERALLY		
	Method of Measurement		
А	The Contractor is advised that this is an abbreviated form of measurement that does not require measurement to the same extent of detail required by the Australian Standard Method of Measurement. It is imperative that the Contractor fully comprehends the system and prices the following items with careful attention to the Drawings and Specification to appreciate the exact nature and intent of the Works		
В	This Bill of Quantities has NOT been measured in accordance with the Australian Standard Method of Measurement of Building Works		
С	It shall be the Contractor's responsibility to obtain any further information during the tender period that the Contractor deems necessary to assist in pricing		
D	The quantities prepared using these Rules for Construction Measurement are not guaranteed and are provided for guidance only		
E	This Bill of Quantities has been measured in accordance with the Rider Levett Bucknall Rules for Construction Measurement - Third Edition - May 2010		
F	Where, in this Bill of Quantities, additional information is provided to assist in pricing, this shall not prejudice any other items in this document where the additional information is not provided		
G	Notwithstanding the above, any deviations from the system of measurement will be noted preceding the quantities or by adaption of the "prices to include" clauses		
	Item Coding		
Н	The two letter code references that appear in parenthesis at the end of each item description are for the purpose of elemental cost analysis and are to be disregarded by the Contractor		
	MEASUREMENT AND PRICES		
	Specification		
I	The Contractor is referred to the Specification, Drawings and other Contract documents for full descriptions and details of workmanship, materials, etc., related to the work measured in this Bill and shall allow here or in the prices for measured work for all costs incurred therewith		Nil
	Prices		
J	The Contractor shall be deemed to have satisfied himself as to nature, type and extent of work represented in this Bill and shall allow against each clause or item for all costs in connection therewith		
K	If any clause, item or quantity is not priced it shall be deemed that either the cost has been included elsewhere or no renumeration is required in respect of that clause, item or quantity		
	To Collection		

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	Item		Unit	Qty	Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)					
	Work in Other Trades					
Α	The Contractor is referred to the Groundworks trade for Electrical Installations	or Excava	tion asso	ciated with		
В	The Contractor is referred to the Demolition trade for l Electrical Installations	Demolition	n associa	ed with		
	ALLOWANCE ITEMS					
С	Allow for design and shop drawings	(XE)	Item			Incl.
D	Allow for engineering	(XE)	Item			Incl.
Е	Allow for as-built drawings and manuals	(XE)	Item			Incl.
F	Allow for provision of prototypes and samples	(XE)	Item			Incl.
G	Allow for giving notices, obtaining permits and completion certificates, paying fees and charges	(XE)	Item			50,000
Н	Allow for painting and other protective and decorative treatments	(XE)	Item			100,000
I	Allow for testing and commissioning	(XE)	Item			234,200
J	Allow for spares	(XE)	Item			Incl.
K	Allow for builders work in connection with electrical installations	(XE)	Item			Excl.
	ELECTRICAL INSTALLATIONS					
L	Allow for the supply, installation, testing and operational maintenance of the electrical services together with all associated minor works, to cover the whole of the works described in the Electrical Services Specification and related drawings including any P.C./Provisional Sums listed therein	(XE)	Item			Incl.
M	Allow for Contractor's allowance and profit on the foregoing	(XE)	Item			Incl.
N	Allow for general attendance on Specialist executing the above works, all as listed in the General Principles trade	(XE)	Item			Incl.
0	Allow for all other attendance and Contractor's work items required to be executed in connection with the Specialist executing the above works	(XE)	Item			Incl.
Р	Kiosk substation, 800kVA	(XE)	Lot	2	500,000	1,000,000
				To Collec	etion	\$1,384,200

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	ELECTRICAL INSTALLATIONS (Cont'd)					Cost
	ELECTRICAL INSTALLATIONS (COIII u)					
	Relocate conductors from pole 2 (BU-17034) to pole 1 (BU-10466)	(XE)	No	1	10,000	10,000
	Underground high voltage cable; 11kV 400mm2 AL3 TRXQ 35 CU(WS) HV cabling including joints, terminations and conduit installed in trench	(XE)	m	1,308	230	300,840
	Underground low voltage cable; 415v 240mm2 AL4 XQ Z / SAC LV cabling including joints, terminations and conduit installed in trench	(XE)	m	4,457	60	267,420
	Underground low voltage cable; 4 x 415v 185mm2 CU1 XQ Z LV cabling including joints, terminations and conduit installed in trench	(XE)	m	644	220	141,680
	Underground street light cable; assumed 16mm2 Cu XLPE cable including joints, terminations and conduit installed in trench as per Ausgrid NS119	(XE)	m	715	40	28,600
	Underground service cable; assumed 25mm2 Cu XLPE cable including conduit installed in trench	(XE)	m	1,117	40	44,680
G	Underground to overhead connection	(XE)	No	4	10,000	40,000
	Allowance for termination of service cable to residential lots	(XE)	No	183	200	36,600
	Street lighting, including pole, footings and luminaire; no details	(XE)	No	42	4,100	172,200
	Timber power pole including connections and footings	(XE)	No	3	15,000	45,000
К	Distribution pillar	(XE)	No	96	1,000	96,000
				To Col	lection	\$1,183,020

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	Page	Cost
COLLECTION		
	7/1	
	7/2	\$1,384,200
	7/3	\$1,183,020
	T. ELECTRICAL MICTALLATIONS TO	<b>A.</b>
	7 - ELECTRICAL INSTALLATIONS To Summary	\$2,567,220

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	Item	Unit	Qty	Rate	Cost
	GENERALLY				
	Method of Measurement				
А	This Bill of Quantities has NOT been measured in accordance Standard Method of Measurement of Building Works	with the A	ustralian		
В	This Bill of Quantities has been measured in accordance with Bucknall Rules for Construction Measurement - Third Edition -				
С	The Contractor is advised that this is an abbreviated form of mot require measurement to the same extent of detail required Standard Method of Measurement. It is imperative that the Cocomprehends the system and prices the following items with a Drawings and Specification to appreciate the exact nature and	l by the Aus ntractor ful areful atter	stralian ly ntion to the		
D	The quantities prepared using these Rules for Construction M guaranteed and are provided for guidance only	easuremer	nt are not		
E	Where, in this Bill of Quantities, additional information is provided this shall not prejudice any other items in this document where information is not provided				
F	It shall be the Contractor's responsibility to obtain any further it tender period that the Contractor deems necessary to assist in		during the		
G	Notwithstanding the above, any deviations from the system of noted preceding the quantities or by adaption of the "prices to				
	Item Coding				
Н	The two letter code references that appear in parenthesis at the description are for the purpose of elemental cost analysis and by the Contractor				
	MEASUREMENT AND PRICES				
	Prices				
I	The Contractor shall be deemed to have satisfied himself as to extent of work represented in this Bill and shall allow against all costs in connection therewith	-	-		
J	If any clause, item or quantity is not priced it shall be deemed included elsewhere or no remuneration is required in respect quantity				
	GENERAL PRELIMINARIES				
	Specification				
			To Collection	on	



	Item		Unit	Qty	Rate	Cost
	GENERAL PRELIMINARIES (Cont'd)					
	Specification (Cont'd)					
A	The Contractor is referred to the Specification, Drawings and other Contract documents for full descriptions and details of workmanship, materials, etc., related to the work measured in this Bill and shall allow here or in the prices for measured work for all costs incurred therewith	(PR)	Item			Nil
	Names of Parties					
В	Notwithstanding the requirements of clause 2.1.1 of the Measurement, the names of parties is not given - the Coproposed Contract Documents for such information					
	PRELIMINARIES, CONDITIONS OF CONTRACT, TENE	DERING	, ETC			
	Preliminaries					
С	For full particulars of Preliminaries, the Contractor is referred to the Specification and shall allow here for all costs in connection therewith	(PR)	Item			1,351,300
D	Allowance for staging of works	(PR)	Item			Excl.
Е	Allowance for traffic control	(PR)	Item			500,000
F	Allowance for accomodation of residents for duration of works	(PR)	Item			Excl.
G	Allowance for COVID preliminaries	(PR)	Item			26,600
Н	Where any of the clauses are time related the Contractor cost into appropriate sub-divisions such as establishment costs, etc					
	General Conditions of Contract					
I	For full particulars of General Conditions of Contract, the Contractor is referred to the proposed Contract Documents and shall allow here for all costs in connection therewith	(PR)	Item			Excl.
J	Where any of the clauses are time related the Contractor cost into appropriate sub-divisions such as establishment costs, etc					
	Contract Conditions of Particular Application					
К	For full particulars of Contract Conditions of Particular Application, the Contractor is referred to the proposed Contract Documents and shall allow here for all costs in connection therewith	(PR)	Item			Incl.
				To Collec	tion	\$1,877,900



	Item Unit Qty	Rate	Cost
	PRELIMINARIES, CONDITIONS OF CONTRACT, TENDERING, ETC (Cont'd)		
	Contract Conditions of Particular Application (Cont'd)		
A	Where any of the clauses are time related the Contractor shall break down the item cost into appropriate sub-divisions such as establishment, running and removal costs, etc		
	Conditions of Tendering		
В	For full particulars of Conditions of Tendering, the Contractor is referred to the proposed Contract Documents and shall allow here for all costs in connection therewith		Incl.
С	Where any of the clauses are time related the Contractor shall break down the item cost into appropriate sub-divisions such as establishment, running and removal costs, etc		
	General Conditions of Tendering and Form of Tender		
D	For full particulars of General Conditions of Tendering and Form of Tendering, the Contractor is referred to the proposed Contract Documents and shall allow here, or in his prices for measured work in later Bills for all costs in connection therewith		Excl.
E	Where any of the clauses are time related the Contractor shall break down the item cost into appropriate sub-divisions such as establishment, running and removal costs, etc		
	DESIGN AND CONSTRUCT		
F	Where the proposed Conditions of Contract require the Contractor to assume a Design and Construct responsibility the Contractor shall ascertain the nature and extent of his responsibilities (e.g. payment of design consultant's fees where applicable, management of design development including holding meetings, administration, etc.) and shall allow here for all costs in connection therewith		Incl.
G	Where any of the costs are time related the Contractor shall break down the item cost into appropriate sub-divisions such as establishment, running and removal costs, etc		
	DESIGN DEVELOPMENT		
н	While every care has been taken to measure all works normally associated with the trade sections, additional works resulting from design development are likely to occur. The Contractor should examine the Tender documentation and assess the extent of any development still required to complete the design		
	To Collection	า	



	Item		Unit	Qty	Rate	Cost
	SEPARATE CONTRACTORS					
А	Where the proposed Contract Documents envisages that be employed directly by the Proprietor and/or Tenants to during the currency of the Works, Tenderers are to ascert requirements of all of these Separate Contracts	carry o	out work	s at the Site		
В	Allow for all requirements and costs associated with Separate Contractors	(PR)	Item			Incl.
	CONTRACTOR'S OVERHEAD AND PROFIT					
С	Allow for Contractor's overhead and profit	(PR)	Item			365,400
	ESCALATION					
D	Allow for escalation in costs between the Tender Date and the Project Completion Date where so required by the proposed Contract Documents	(PR)	Item			Excl.
	GOODS AND SERVICES TAX					
E	Allow for Goods and Services Tax (if applicable on this Project)	(PR)	Item			Excl.
				To Collection		\$365,400
				TO Collection	1	<b>გახ</b> ნ,400



	Page		Cost
COLLECTION			
	8/1		
	8/2		\$1,877,900
	8/3		
	8/4		\$365,400
_			
	8 - PRELIMINARIES	To Summary	\$2,243,300

	Item Unit Qty	Rate	Cost
	GENERALLY		
	Method of Measurement		
А	The Contractor is advised that this is an abbreviated form of measurement that does not require measurement to the same extent of detail required by the Australian Standard Method of Measurement. It is imperative that the Contractor fully comprehends the system and prices the following items with careful attention to the Drawings and Specification to appreciate the exact nature and intent of the Works		
В	This Bill of Quantities has NOT been measured in accordance with the Australian Standard Method of Measurement of Building Works		
С	It shall be the Contractor's responsibility to obtain any further information during the tender period that the Contractor deems necessary to assist in pricing		
D	The quantities prepared using these Rules for Construction Measurement are not guaranteed and are provided for guidance only		
E	This Bill of Quantities has been measured in accordance with the Rider Levett Bucknall Rules for Construction Measurement - Third Edition - May 2010		
F	Where, in this Bill of Quantities, additional information is provided to assist in pricing, this shall not prejudice any other items in this document where the additional information is not provided		
G	Notwithstanding the above, any deviations from the system of measurement will be noted preceding the quantities or by adaption of the "prices to include" clauses		
	Item Coding		
Н	The two letter code references that appear in parenthesis at the end of each item description are for the purpose of elemental cost analysis and are to be disregarded by the Contractor		
	MEASUREMENT AND PRICES		
	Specification		
I	The Contractor is referred to the Specification, Drawings and other Contract documents for full descriptions and details of workmanship, materials, etc., related to the work measured in this Bill and shall allow here or in the prices for measured work for all costs incurred therewith		Nil
	Prices		
	To Colle	ection	

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	Item Unit Qty Rate	Cost
	MEASUREMENT AND PRICES (Cont'd)	
	Prices (Cont'd)	
Α	Prices for External Works and Landscaping generally are deemed to include for:	
	<ul> <li>a. Complying with all 'Prices Shall Include For' clauses contained in this document</li> <li>b. Engaging services of Geotechnical\ Engineer to verify bearing capacities\ and founding levels</li> <li>c. Design and shop drawings</li> <li>d. Testing, curing and protection of concrete and finished surfaces</li> <li>e. Provision of samples and prototypes</li> </ul>	
В	Prices for Paving are deemed to include for:	
	a. Grading, rolling and compacting to required falls, crossfalls cambers and other profiles	
С	Prices for Kerbs, Channels, Spoon Drains, etc. are deemed to include for:	
	<ul><li>a. Kerbs, channels, spoon drains, etc. being both in straight or curved runs</li><li>b. Transitions, junctions, joints and the like</li></ul>	
D	Prices for Fences and Gates are deemed to include for:	
	a. Excavating post holes     b. Filling excavations with cement stabilized backfilling or concrete as specified and temporary supports	
E	Prices for Topsoil are deemed to include for:	
	<ul><li>a. Preparatory treatment (e.g. harrowing, rotary hoeing, etc., of the ground surface)</li><li>b. Grading, screening, spreading and raking to even tilth</li></ul>	
F	Prices for Grassing and Planting are deemed to include for:	
	<ul><li>a. Mixing, sowing, raking, fertilizing and watering</li><li>b. Digging holes for plants</li><li>c. Supports, protection, maintenance</li></ul>	
G	Prices for Grassing and Planting shall also be deemed to include for:	
	· Binding, rolling, scarifying · Labelling	
Н	The Contractor shall be deemed to have satisfied himself as to nature, type and extent of work represented in this Bill and shall allow against each clause or item for all costs in connection therewith	
I	If any clause, item or quantity is not priced it shall be deemed that the cost has been included elsewhere or no remuneration is required in respect of that clause, item or quantity	
	ALLOWANCE ITEMS	
J	Allow for keeping excavations free from water (XL) Item	10,000
	To Collection	\$10,000

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	Item		Unit	Qty	Rate	Cost
	ALLOWANCE ITEMS (Cont'd)					
А	Allow for additional cost of excavating in contaminated ground - EXLUDED	(XL)	Item			Excl.
В	Allow for blinding concrete and its excavation both to seal bottoms of excavation and to achieve founding levels	(XL)	Item			Excl.
С	Allow for protecting trees and shrubs to be retained	(XL)	Item			10,000
D	Allow for maintenance of grass, trees and shrubs	(XL)	Item			Excl.
E	Allow for compliance with authority requirements requested by Department of Transport or other authorities relating to interface with or proximity to utilities	(XL)	Item			Excl.
	Work in Other Trades					
F	Allow for detailed excavation and backfilling including trimming, compacting soil etc, as necessary. Included in Ground Works trade	(XL)	Item			Incl.
	FOOTPATH PAVING					
G	Basecourse to footpath, assume 150mm DGB20	(XR)	m²	2,862	20	57,240
Н	Allowance for 1.2m wide concrete footpath	(XR)	m²	2,862	100	286,200
I	Pram ramp to SA kerb	(XR)	No	12	1,500	18,000
J	Pram ramp to RT kerb	(XR)	No	3	1,500	4,500
	STREET SIGNAGE					
К	Signage type R1-2, Give Way including pole and footing	(XR)	No	7	350	2,450
L	Signage type R5-4-2, No Parking including post and footing	(XR)	No	4	330	1,320
	SOFT LANDSCAPING AND IRRIGATION					
М	T1: Buffalo turf installed on imported topsoil	(XL)	m²	20,431	12	245,172
N	Timber edge and tree guard	(XL)	m	1,386	15	20,790
0	Tree GF; Glochidion Ferdinandi 100lt installed as per Terras Landscape Architects drawing L201	(XL)	No	75	340	25,500
Р	Tree CE; Corymbia Exima "Nana" 100lt installed as per Terras Landscape Architects drawing L201	(XL)	No	47	340	15,980
				To Co	ollection	\$687,152

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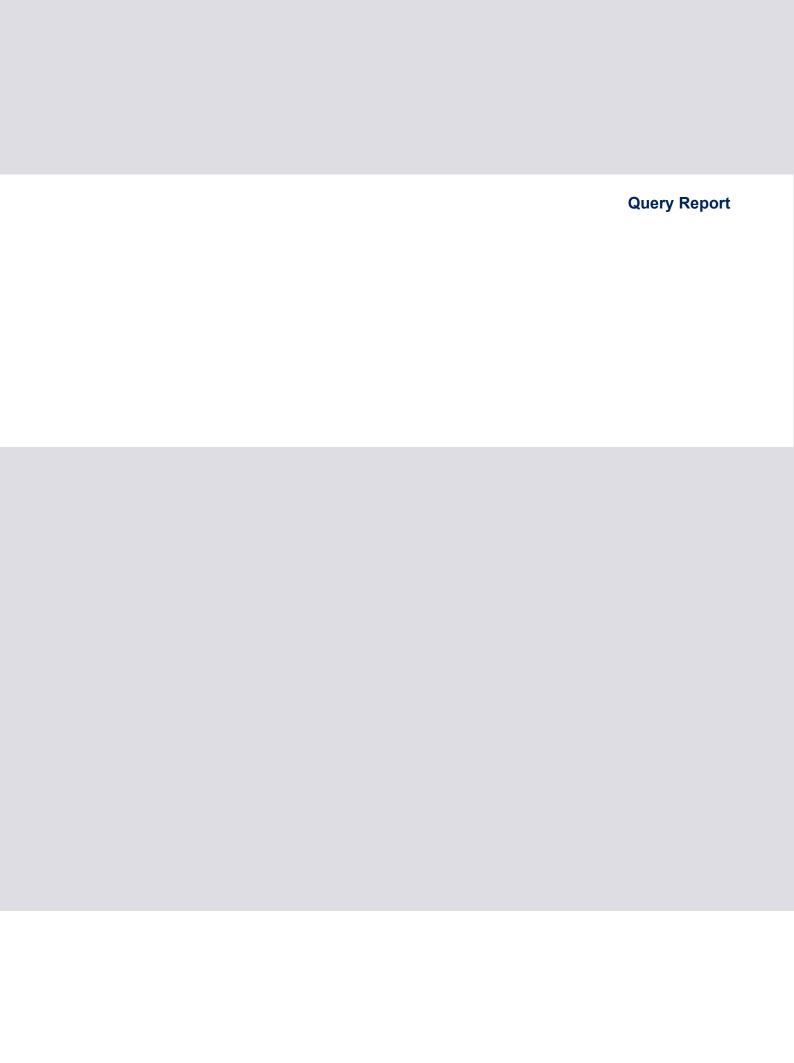


		3 - EXTERNAL WORKS			12 2 11 12 3 0 / 11 11 0	
	Item		Unit	Qty	Rate	Cost
	SOFT LANDSCAPING AND IRRIGATION (Cont'd)					
A	Tree CF; Corymbia Ficifolia 100lt installed as per Terras Landscape Architects drawing L201	(XL)	No	37	340	12,580
В	Tree TL; Tristaniopsis Laurina 100lt installed as per Terras Landscape Architects drawing L201	(XL)	No	23	380	8,740
С	Tree CA; Cupaniopsis Anacardioides 100lt installed as per Terras Landscape Architects drawing L201	(XL)	No	31	340	10,540
D	Tree AH; Angophora Hispida 100lt installed as per Terras Landscape Architects drawing L201	(XL)	No	18	340	6,120
E	Allowance for irrigation to soft landscaping	(XL)	Item			Excl.
				To Collect	tion	\$37,980
				TO Collect	uOII	φ31,360

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COLLECTION  9/1  9/2  \$10  9/3  \$687  9/4  \$37	ost
9/2 \$10. 9/3 \$687.	
9/3 \$687	
9/4 \$37	
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<b> </b>	
9 - EXTERNAL WORKS AND LANDSCAPING To Summary \$735	32





## Wyee West Paper Subdivision Bill of Quantities

## Query Report

No.	Query	Answer	Answered	Comments
1	By: Kai Barbosa On: 21 September 20 Drawing(s): Various Road material composition not specified	By: Rachel Parker On: 21 September 20 Geotechnical Report provided by LMCC via email correspondence on 15.09.2020	Yes	Measured as per recommendations in Geotechnical Pavement and Stormwater Investigation Report.
2	By: Laura Chen On: 21 September 20 Drawing(s): 501, 502, 503, 504 Bulk earthworks quantities requested.	By: Rachel Parker On: 21 September 20 Provided by ADW Johnson c/o LMCC via email correspondence on 03.09.2020	Yes	Earthworks quantities used as per advice provided by ADW Johnson c/o LMCC via email correspondence on 03.09.2020

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## Wyee West Paper Subdivision Bill of Quantities

## Ouery Report

Query	Keboii	

No.	Query	Answer	Answered	Comments
3	By: Nicholas Helmers On: 28 October 20 Drawing(s): N/A Requirement for the following allowances; Staging, resident accommodation during the works and authority fees	By: Rachel Parker On: 28 October 20 Clarification received from LMCC via email correspondence on 23.10.2020 By: Rachel Parker On: 28 October 20 Authority fees: In addition to the information provided previously from ADW, we are also aware of a further approx. \$8,000 fee to Ausgrid prior to the commencement of works, please allow for this. By: Rachel Parker On: 28 October 20 Staging: Assume the works are to be completed in a single stage, in speaking with Kai, the BOQ has been priced to reflect the nature of the existing site and the additional cost of working around the existing residences. By: Rachel Parker On: 28 October 20 Resident accommodation: Please exclude this from the BOQ, the approach to this issue will be decided on further into the project and we believe it is too variable at this stage to place a figure against. please exclude this from the BOQ, the approach to this issue will be decided on further into the project and we believe it is too variable at this stage to place a figure against.	Yes	

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