

BLACK HILL 39 NO. LOT INDUSTRIAL SUDIVISION
6 No. STAGES
DETAILED COST REPORT

Newcastle :: Sydney :: Melbourne 14 AUGUST 2018



14 August 2018

F&F Properties C/-Barr Property & Planning 92 Young Street, **CARRINGTON NSW 2294**

ATTENTION: LIAM BUXTON

BLACK HILL 39 NO. LOT INDUSTRIAL SUBDIVISION - 6 No. STAGES RE: **DETAILED COST REPORT**

As per your request dated 31st July 2018, Muller Partnership has prepared the Detailed Cost Report Update for the above project stages and enclose our report.

Stage 2 [32.09 Ha] - 8 No. Lots Stage 3 [31.17 Ha] - 7 No. Lots Stage 4 [35.86 Ha] - 6 No. Lots	\$ 12,835,000 Excl GST \$ 14,095,000 Excl GST \$ 13,835,000 Excl GST \$ 16,430,000 Excl GST \$ 11,910,000 Excl GST
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Please note the attached Detailed Cost Report have been prepared based on the current preliminary information and should be updated if additional information becomes available. Please take note of our Assumptions (Item 3.0) and Exclusions (Item 4.0).

Should you wish to discuss any of the above please do not hesitate to contact either Matthew Lochrin or the undersigned.

Yours faithfully

MULLER PARTNERSHIP

CAMERON BEARD

DIRECTOR

CB:ML 18248 Black Hill Industrial Sudivision - Detailed Cost Report



Disclaimer

Muller Partnership have prepared this report in part on the basis of information supplied to it in the ordinary course of business by Liam Buxton of Barr Property & Planning.

Whilst all reasonable professional care and skill have been exercised to validate its accuracy and authenticity, Muller Partnership is unable to provide any Guarantee in that regard, and will not be liable to any party for any loss arising as a result of any such information subsequently being found to be inaccurate, lacking authenticity or having been withheld.

This report is only intended for use by Barr Property & Planning and Muller Partnership accepts no responsibility to other parties who use opinions or information contained herein. They do so at their own risk.

In acting as Quantity Surveyor for Barr Property & Planning, Muller Partnership's liability is limited to the scope of services and value limit, as defined in their Professional indemnity insurance cover. A copy is available on request.

This report covers only the items as contained in this report. Should the Barr Property & Planning require additional items or areas of assessment, these should be specifically requested and will be actioned as agreed between the parties.

The construction costs are current as at the date of this assessment only. The values assessed herein may change significantly and unexpectedly over a relatively short period (including as a result of general market movements or factors specific to the particular property). We do not accept liability for losses arising from such subsequent changes in values.

Document history & status

Revision	Date	Description	Ву	Review	Approved
1	10/08/2018	Detailed Cost Report	ML	СВ	СВ
2	14/08/2018	Detailed Cost Report	ML	СВ	СВ

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Glossary of Key Terms

Preliminaries & Margin

The Preliminaries and Margin Allowance is an allowance for the builder margin and their establishment and management of the site. This item will therefore include for items such as site fencing & amenities, site foreman, head office overheads, insurances, scaffolding & hoarding, cranage, site cleaning, OH&S management, QA, etc.



1.0 EXECUTIVE SUMMARY

Project Description

Muller Partnership has been engaged by Liam Buxton of Barr Property & Planning on behalf of F&F Properties to prepare a Detailed Cost Estimate for the proposed 6 No. stages of industrial subdivision and 2 No. intersection works at John Renshaw Drive, Black Hill.

The project comprises of site establishment, demolition and disposal of rubbish and road pavement, site clearance, earthworks, eastern & western intersection works, road pavement, concrete kerbs / medians / footpaths, subsoil drainage, stormwater drainage, detention basin, potable water reticulation, sewer reticulation, LV & HV cable reticulation, communications reticulation, traffic control signals, signage and line marking, sediment and erosion control and landscaping.

2.0 SCHEDULE OF INFORMATION

Muller Partnership has used the following information in compiling our Detailed Cost Report:

- 1. ADW Johnson drawings provided by Liam Buxton of Barr Property & Planning 31st July 2018 and titled as follows:
 - 239590-CON-001(D) Overall Site Plan [dated 6/06/2018];
 - 239590-CON-002(D) Clearing Plan [dated 6/06/2018];
 - 239590-CON-004(D) Superlot Staging Plan [dated 19/07/2018];
 - 239590-CENG-005(C) Earthworks Plan [dated 28/09/2017];
 - 239590-CENG-202(E) Draft Watermain layout [dated 6/06/2018];
 - 239590-CENG-302(D) Gravity Sewer layout [dated 6/06/2018];
 - 239590-ESK-101(B) Strategic Plan Proposed Shared Access [dated 9/05/2018];
- 2. ADW Johnson Civil Drawings titled 'Black Hill Industrial Subdivision Development Application' dated 3rd August 2018, received 31st July 2018 and named as follows:
 - 239590(1)-CENG-001 to 239590(1)-CENG-502 [29 sheets, Rev A];
- ADW Johnson Report titled 'Stormwater Management Plan Proposed industrial Subdivision' [Ref: N:\239590\Design\Documents\SWMP\SWMP BLACK HILL INDUSTRIAL.docx] dated 3rd August 2018, Rev A and received 31st July 2018;
- Power Design & Energy Project Pty Ltd Electrical Drawing titled 'Black Hill Industrial/Commercial Subdivision – Due Diligence Sketch' received 31st July 2018;
- 5. Email and telephone correspondence with Liam Buxton of Barr Property & Planning in relation to scope (numerous);

All rates used within our Detailed Cost Report have been gathered from our inhouse databases as well as being constructed from first principles namely labour, materials and waste to reflect current market and project specific value.

3.0 ASSUMPTIONS

We have made the following assumptions in the preparation of our Detailed Cost Report:-

- 1. The works will be competitively tendered to a number of suitable qualified contractors on a lump sum basis;
- 2. A construction contingency of 10% has been included for all estimates;
- The Contractor will have clear uninterrupted access to the site;
- 4. All approaching lanes of traffic to the new East and West intersections on John Renshaw Drive will be demolished and new pavement laid;
- A provisional allowance of \$50,000 Excl GST has been included for geotechnical testing and certification per stage;
- 6. A provisional allowance of \$50,000 *Excl GST* has been included for location of services per stage;
- 7. A provisional allowance of \$100,000 Excl GST has been included for protection of services per stage;
- 8. A provisional allowance of \$25,000 Excl GST has been included for removal and disposal of all rubbish within development area per stage;
- 9. We have used ADW Johnson Pty Ltd's cut to fill quantities;
- 10. We have used ADW Johnson Pty Ltd's rip and recompact rock quantities;
- 11. We have allowed to crush 10% of ripped rock as per ADW Johnson Pty Ltd's quantities;
- 12. An excavation depth of 450mm has been allowed for existing area of John Renshaw Drive to receive new pavement;
- 13. We have allowed a pavement build-up of 440 thick subbase, 100 thick basecourse, 50 thick asphaltic concrete and 7mm primer seal to all roads;
- 14. Flush points have been assumed at 150m points for the subsoil drainage;
- 15. A provisional allowance of \$500,000 Excl GST has been included for stormwater detention basins per stage as per ADW Johnson Pty Ltd's Estimate of Development Costs [NB: No design detail provided];
- A provisional allowance of \$10,000 Excl GST has been included to connect to existing 1200 dia potable water reticulation service in stage 1;
- 17. A provisional allowance of \$5,000 *Excl GST* has been included to connect to existing 1200 dia potable water reticulation service in stage 3;
- 18. Allowed for one 600 long x 300 wide x 250 high mass concrete thrust block per lot [NB: No design details provided];
- 19. A provisional quantity of 1 maintenance shaft per 100m has been provided for each stage [NB: No design detail provided];

3.0 Assumptions Cont...

- 20. A provisional allowance of \$10,000 Excl GST has been included to connect to existing sewer reticulation service in stage 1;
- 21. A provisional allowance of \$5,000 *Excl GST* has been included to connect LV cables to power supply per stage;
- 22. A provisional allowance of \$15,000 Excl GST has been included to connect HV cables to power supply per stage;
- 23. We have allowed 1 electrical distribution pillar per lot;
- 24. We have allowed for 2 no. NBN conduits per communications line on electrical concept drawing;
- 25. We have allowed for 2 no. communication distribution pits per stage;
- 26. A provisional allowance of \$5,000 Excl GST has been included for regulatory signs and sightboards as required per stage;
- 27. We have allowed for 1 street tree per 50m of road either side of the street;

4.0 EXCLUSIONS

Within the following Detailed Cost Estimate the acronym `EXCL' means work that has **not** been included in our estimate. We specifically note the following exclusions from the estimated cost:

- 1. GST;
- 2. Escalation;
- 3. Authority's fees and charges & legal fees;
- 4. Client Side Project Management;
- 5. Delay costs including latent conditions;
- 6. Design Consultant costs;
- 7. Works outside the specified site area;
- 8. Finance costs;
- 9. Works outside normal hours;
- 10. Land Acquisition;
- 11. Contamination allowances [NB: Unless Otherwise Noted];
- 12. Treatment/ disposal of unsuitable material [NB: Unless Otherwise Noted];
- 13. Acid Sulphate soils;
- 14. Exporting of excavated materials [NB: Unless Otherwise Noted];
- 15. Aboriginal and Heritage impacts;
- 16. Approval delays including Environmental Approvals;
- 17. Dewatering;
- 18. Relocation of 132kV transmission line and electrical easement;
- 19. Lead-in electricity infrastructure;
- 20. Lead-in water infrastructure;
- 21. Lead-in sewer infrastructure;
- 22. Lighting to internal roads [NB: None shown on concept drawing];
- 23. Reimbursements for intersection or utilities works;
- 24. Ecological offset credits;

APPENDIX A - DETAILED COST ESTIMATE



MAIN COST SUMMARY

Ref	Description	%	Cost/ m2	Sub Total	Total
1.0	STAGE 1 [18.73 Ha] - 6 No. Lots	16.68		12,835,000	12,835,000
	STAGE 2 [32.09 Ha] - 8 No. Lots	18.31		14,095,000	14,095,000
	STAGE 3 [31.17 Ha] - 7 No. Lots	17.97		13,835,000	13,835,000
	STAGE 4 [35.86 Ha] - 6 No. Lots	21.35		16,430,000	16,430,000
	STAGE 5 [29.10 Ha] - 6 No. Lots	15.47		11,910,000	11,910,000
	STAGE 6 [28.89 Ha] - 6 No. Lots	10.22		7,865,000	7,865,000
	GST EXCLUSIVE TOTAL				76,970,000
,	0,790 1 2000 00	100.00		76,970,000	76,970,000

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
1.0 S	TAGE 1 [18.73 Ha] - 6 No. Lots				
	GENERAL				
1	Site Establishment	1.00	Item	100,000.00	100,000.00
2	Supervision, management, amenities, etc	16.00	Weeks	10,000.00	160,000.00
3	Survey and setout of works by surveyor	15.00	Days	1,800.00	27,000.00
4	Geotechnical testing and certification [NB:	1.00	Item	50,000.00	50,000.00
5	Provisional Allowance] Location of services [NB: Provisional Allowance]	1.00	Item	50,000.00	50,000.00
6	Protection of services [NB: Provisional	1.00	Item	100,000.00	100,000.0ს
7	Allowance] Traffic control [NB: Provisional Allowance]	1.00	Item	115,000.00	115,000.00
8	Temporary traffic barrier allowance including	900.00	m	200.00	180,000.00
9	supply, rental and moving Subtotal				<u>782,000.00</u>
	CLEARING & DEMOLITION				
	Site Clearance				
10	Clear site including grubbing and mulching as required	187,140.00	m2	1.50	280,710.00
11	Allowance to remove significant trees		No		INCL
12	Allowance for protection of existing trees		No		INCL
	Demolition				
13	Removal and disposal of entire road pavement	9,985.00	m2	15.00	149,775.00
	Removal and disposal of all rubbish within the development area including removal of existing fence as required :[NB: Provisional Allowance] Subtotal	1.00	Item	25,000.00	25,000.00 455,485.00
13	BULK EARTHWORKS				433,463.66
	Topsoil				
16	Strip and stockpile 150mm of topsoil complete	28,071.00	m3	15.00	421,065.00
	Replace topsoil to disturbed areas 150mm	28,071.00		12.00	336,852.00
18	thick Remove off site remaining spoil material	28,071.00	m3		EXCL
	Cut				
19	Cut to required level and push to fill	94,638.00	m3	10.00	946,380.00
20	Rip and recompact rock	687.00	m3	10.00	6,870.00
21	Crush ripped rock [NB: Allowed 10%]	69.00	m3	15.00	1,035.00
22	Allow to box out existing road basecourse to	4,494.00	m3	35.00	157,290.00
23	required levels [NB: Allowed for depth of 450] Allow to dispose of excess material offsite	4,494.00	m3	30.00	134,820.00
					14/Aug/18

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
1.0	ST	AGE 1 [18.73 Ha] - 6 No. Lots				(Continued)
		Trimming				
2	24	Trim subgrade to roads	9,148.00	m2	1.00	9,148.00
2	25	Trim subgrade to footpaths	1,517.00	m2	1.00	1,517.00
2	26	Trim subgrade to regrade areas	176,476.00	m2	1.00	176,476.00
2	27	Subtotal				<u>2,191,453.00</u>
		ROADWORKS				
		Road Pavement				
		MC01 Road				
2	28	440mm subbase	5,263.00	m2	48.50	255,255.50
2	29	100mm basecourse	5,263.00	m2	11.00	57,893.00
3	30	50mm Asphaltic concrete (AC14)	5,263.00	m2	28.00	147,364.0
		7mm Primer Seal	5,263.00	m2	4.00	21,052.0
		MC06 Road				
3	32	440mm subbase	3,886.00	m2	48.50	188,471.0
3	33	100mm basecourse	3,886.00	m2	11.00	42,746.0
3	34	50mm Asphaltic concrete (AC14)	3,886.00	m2	28.00	108,808.0
3	35	7mm Primer Seal	3,886.00	m2	4.00	15,544.0
		John Renshaw Drive Eastern (shared)				
	36	Intersection Widening Allowance to tie road widening in to the	863.00	m	150.00	129,450.0
		existing road			48.50	798,261.5
a.		440mm subbase	16,459.00		11.00	
		100mm basecourse	16,459.00			181,049.0
		50mm Asphaltic concrete (AC14)	16,459.00		28.00	460,852.0
•	40	7mm Primer Seal	16,459.00	m2	4.00	65,836.0
		Connection into Existing Road			150.00	2 100 0
•	41	Allowance to make smooth connection between new and existing road pavement as	14.00	m	150.00	2,100.0
	42	per council requirements Subtotal				<u>2,474,682.0</u>
	-	CONCRETE WORKS				
		Kerbs				
	43	Allow for 150 high barrier SF kerb	658.00	m	75.00	49,350.0
		Allow for 150 high barrier SA kerb	1,213.00		140.00	169,820.0
		Infill to Median				
		30 11000				14/Aug/18

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
1.0 ST	ГАGE 1 [18.73 Ha] - 6 No. Lots			,	(Continued)
45	150 thick reinforced concrete [25MPa] median infill comprising SL72 reinforcement mesh and finish :[NB: Assumed] Footpaths	987.00	m2	110.00	108,570.00
46	2500 wide reinforced concrete footpath	1,928.00	m2	115.00	221,720.00
47	Subtotal				<u>549,460.00</u>
	SUBSOIL DRAINAGE				
48	300 wide x approx. 750 deep subsoil drainage including detailed excavation, clean draining filter sand wrapped in Bidim A24 geofabric and 100 dia socked subsoil pipe	1,213.00	m	58.00	70,354.0
49	Flushing points to last	10.00	No	135.00	1,350.00
50	Subtotal				<u>71,704.00</u>
	STORMWATER DRAINAGE				
	Detailed Excavation				
51	Allowance for detailed excavation to stormwater pipework Pipework	594.00	m3	65.00	38,610.00
52	Allow for new / extension to existing 450 dia Reinforced concrete stormwater pipe including excavation, supply, bed, lay, joint and backfill complete Pits	466.00	m	220.00	102,520.00
53	1800 long kerb lintel with pit insert including excavation complete Filtration Systems	3.00	No	5,000.00	15,000.00
54	'Ecosol' 4600 high flow gross pollutant trap	1.00	No	80,000.00	80,000.00
	Detention Basin				
55	Allowance for stormwater detention basin [NB:	1.00	Item	500,000.00	500,000.00
56	Provisional Allowance] Subtotal				<i>736,130.00</i>
	POTABLE WATER RETICULATION				
	Main Reticulations				
57	Allow for 150 dia DICL water main pipe	329.00	m	165.00	54,285.00
58	Allow for 200 dia ditto	280.00	m	235.00	65,800.00
59	Allowance to connect to existing 1200 dia potable water reticulation services [NB: Provisional Allowance] Split Services	1.00	Item	10,000.00	10,000.00
60	Allow for 32 dia polyethylene PN16 pipe off 150 DICL water main	46.00	m	85.00	3,910.00

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
1.0	ST	AGE 1 [18.73 Ha] - 6 No. Lots				(Continued)
		Thrust Blocks				
		600 long x 300 wide x 250 high mass concrete thrust block [NB: Assumed] Subtotal	6.00	No	240.00	1,440.00 <u>135,435.00</u>
		SEWER RETICULATION				
		Gravity Sewer Reticulation				
6	3	Allow for 150 dia. uPVC SN8 sewer pipe including trench excavation and backfill	1,263.00	m	100.00	126,300.00
6	4	complete Allow for maintenance shaft [NB: Provisional Quantity]	13.00	No	1,500.00	19,500.00
6	55	Allowance for connection tee joint including capping for future works [NB: Provisional; no details provided]	6.00	No	500.00	3,000.00
6	66	Allowance to connect to existing sewer	1.00	Item	10,000.00	10,000.00
6		reticulation [NB: Provisional Allowance] Subtotal				<u>158,800.00</u>
		ELECTRICAL & COMMUNICATIONS RETICULATION Transmission Line				
•		Allowance to relocate 132kV transmission line and electrical easement [NB: Provisional Allowance] Electrical Reticulation	1.00	Item		EXCL
		LV Works				
•	59	Allow for LV cables and conduit including	1,097.00	m	260.00	285,220.00
7	70	excavation and backfilling complete Allowance to connect to power supply [NB: Provisional Allowance] HV Works	1.00	Item	5,000.00	5,000.00
7	71	Allow for HV cables and conduit including	1,277.00	m	800.00	1,021,600.00
7	72	excavation and backfilling complete Allowance to connect to power supply [NB: Provisional Allowance] Pillars	1.00	Item	15,000.00	15,000.00
7	73	Allow for distribution pillar	6.00	No	2,000.00	12,000.00
		Communications Reticulation				
		Conduits				
7	74	Allow for P100 NBN conduits	2,018.00	m	70.00	141,260.00
	75	NBN communication cables	2,018.00	m		EXCL
		<u>Pits</u>				
:	76	Allow for distribution / local network pit [NB: Provisional Quantity]	2.00	No	1,800.00	3,600.00

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
1.0	ST	TAGE 1 [18.73 Ha] - 6 No. Lots				(Continued)
	77	Subtotal				<u>1,483,680.00</u>
		TRAFFIC CONTROL SIGNALS				
		Supply and installation of complete 4 way signalised intersection [NB: Provisional Allowance] Subtotal	1.00	No	275,000.00	275,000.00 275,000.00
		SIGNAGE & LINE MARKING				
		Signage				
	80	Road Name Blade	2.00	No	400.00	800.00
	81	No parking/ stopping sign	4.00	No	400.00	1,600.00
		Keep left sign	1.00	No	400.00	400.00
	83	No through road sign	1.00	No	400.00	400.00
	84	Give Way sign	2.00	No	400.00	800.00
	85	Allowance for regulatory signs and sightboards	1.00	Item	5,000.00	5,000.00
	86	as required [NB: Provisional Allowance] Allowance for subdivision entry signage [NB: Provisional Allowance] Line Marking	1.00	Item	500,000.00	500,000.00
	87	E1 line marking to new pavement	3,628.00	m	5.00	18,140.00
	88	L1 ditto	1,799.00	m	5.00	8,995.00
	89	TB ditto	120.00	m	5.00	600.00
	90	Arrow ditto	11.00	No	150.00	1,650.00
	91	Subtotal				<u>538,385.0</u> ſ
		SEDIMENT & EROSION CONTROL				
		Sediment & Erosion Control				
	92	Silt fence	654.00	m	12.00	7,848.00
	93	Access shaker ramp	1.00	No	2,000.00	2,000.00
	94	Subtotal				<u>9,848.00</u>
		LANDSCAPING				
		Seeding				
	95	Seeding to disturbed areas	187,140.00		0.50	93,570.00
	96	Spread mulch to last	187,140.00	m2	2.00	374,280.00
	97	Refer to Bulk Earthworks Trade for respreading of existing topsoil Turf		Note		
	98	Allowance for 100 thick topsoil to new turf areas	3,942.00	m2	7.00	27,594.00



ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
1.0 S	TAGE 1 [18.73 Ha] - 6 No. Lots				(Continued)
99	Allowance for turf to all road reserve areas	3,942.00	m2	15.00	59,130.00
	Street Trees				
100	Trim and cultivate subgrade	25.00	m2	10.00	250.00
101	300 thick topsoil	25.00	m2	24.00	600.00
102	Allowance for 75L street trees [NB: Allowed	25.00	No	750.00	18,750.00
103	for a street tree every 50m] Allowance for timber edging to last	25.00	No	50.00	1,250.00
104	50 x 50 hardwood stakes to trees	25.00	No	5.00	125.00
	Miscellaneous				
105	Landscape maintenance	12.00	Months	2,400.00	28,800.00
106	Subtotal				604,349.00
107	PRELIMINARIES AND MARGIN	1.00	Item	1,255,969.00	1,255,969.00
108	GST EXCLUSIVE SUBTOTAL				11,722,380.00
109	CONSULTANTS FEES	1.00	Item	1,112,620.00	1,112,620.00
110	AUTHORITY FEES & CHARGES	1.00	Item		EXCL
111	GST EXCLUSIVE TOTAL - STAGE 1				12,835,000.00
112	s \$/Lot	1.00	Item	2,139,166.67	
113	s \$/m2 of Site Area	1.00	Item	68.59	
				Total:	12,835,000.00
2.0 9	STAGE 2 [32.09 Ha] - 8 No. Lots				
	GENERAL				
1	. Site Establishment	1.00	Item	100,000.00	100,000.00
2	Supervision, management, amenities, etc	24.00	Weeks	10,000.00	240,000.00
3	Survey and setout of works by surveyor	20.00	Days	1,800.00	36,000.00
4	Geotechnical testing and certification [NB:	1.00	Item	50,000.00	50,000.0
5	Provisional Allowance] Location of services [NB: Provisional	1.00	Item	50,000.00	50,000.0
	Allowance] 5 Protection of services [NB: Provisional	1.00	Item	100,000.00	100,000.0
	Allowance] 7 Traffic control [NB: Provisional Allowance]	1.00	Item	60,000.00	60,000.0
	3 Subtotal				636,000.0
	CLEARING & DEMOLITION				
	Site Clearance				
, 1	Clear site including grubbing and mulching as required	324,882.00	m2	1.50	487,323.0

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
2.0	S	FAGE 2 [32.09 Ha] - 8 No. Lots				(Continued)
1	.0	Allowance to remove significant trees		No		INCL
1	.1	Allowance for protection of existing trees		No		INCL
		Demolition				
		Removal and disposal of all rubbish within the development area including removal of existing fence as required :[NB: Provisional Allowance] Subtotal	1.00	Item	25,000.00	25,000.00 512,323.00
		BULK EARTHWORKS				
		Topsoil				
1	4	Strip and stockpile 150mm of topsoil complete	48,733.00	m3	15.00	730,995.00
1	15	Replace topsoil to disturbed areas 150mm	48,733.00	m3	12.00	584,796.00
1	l 6	thick Remove off site remaining spoil material	48,733.00	m3		EXCL
		Cut				
1	.7	Cut to required level and push to fill	204,586.00	m3	10.00	2,045,860.00
1	18	Rip and recompact rock	17,172.00	m3	10.00	171,720.00
1	19	Crush ripped rock [NB: Allowed 10%]	1,718.00	m3	15.00	25,770.00
		Trimming				
2	20	Trim subgrade to roads	14,966.00	m2	1.00	14,966.00
2	21	Trim subgrade to footpaths	2,427.00	m2	1.00	2,427.00
2	22	Trim subgrade to regrade areas	307,491.00	m2	1.00	307,491.00
2	23	Subtotal				<u>3,884,025.0</u>
		ROADWORKS				
		Road Pavement				
		MC01 Road				
		440mm subbase	11,037.00		48.50	535,294.50
		100mm basecourse	11,037.00		11.00	121,407.00
		50mm Asphaltic concrete (AC14)	11,037.00		28.00	309,036.00
2	27	7mm Primer Seal	11,037.00	m2	4.00	44,148.00
		MC05 Road	2 020 00	2	40.50	100 605 00
		440mm subbase	3,930.00		48.50	190,605.00
		100mm basecourse	3,930.00		11.00 28.00	43,230.00 110,040.00
		45mm Asphaltic concrete (AC14)	3,930.00 3,930.00		4.00	15,720.00
) <u>T</u>	7mm Primer Seal	3,730.00	1112	4.00	15,720.00



ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
2.0 S	TAGE 2 [32.09 Ha] - 8 No. Lots				(Continued)
32	Subtotal				<u>1,369,480.50</u>
	CONCRETE WORKS				
	Kerbs				
33	Allow for 130 high barrier SF kerb	1,380.00	m	75.00	103,500.00
34	Allow for 150 high barrier SA kerb	1,941.00	m	140.00	271,740.00
	Infill to Median				
35	infill comprising SL72 reinforcement mesh and finish: [NB: Assumed] Footpaths	2,070.00	m2	110.00	227,700.00
36	2500 wide reinforced concrete footpath	2,427.00	m2	115.00	279,105.00
37	Subtotal				<u>882,045.00</u>
	SUBSOIL DRAINAGE				
38	300 wide x approx. 750 deep subsoil drainage including detailed excavation, clean draining filter sand wrapped in Bidim A24 geofabric and	1,941.00	m ¹ Control (Control (Cont	58.00	112,578.00
39	100 dia socked subsoil pipe • Flushing points to last	13.00	No	135.00	1,755.00
40) Subtotal			Karan Marak San - Jawa 1	114,333.00
	STORMWATER DRAINAGE				
	Detailed Excavation				
41	Allowance for detailed excavation to stormwater pipework Pits	1,360.00	m3	65.00	88,400.00
42	2 1800 long kerb lintel with pit insert including excavation complete Pipework	6.00	No	5,000.00	30,000.00
4:	Allow for new / extension to existing 450 dia Reinforced concrete stormwater pipe including excavation, supply, bed, lay, joint and backfill complete Detention Basin	1,067.00	m	220.00	234,740.00
4	4 Allowance for stormwater detention basin [NB:	1.00	Item	500,000.00	500,000.00
	Provisional Allowance] 5 Subtotal				<u>853,140.00</u>
	POTABLE WATER RETICULATION				
	Main Reticulations				
4	6 Allow for 150 dia DICL water main pipe	330.00	m	165.00	54,450.0
4	7 Allow for 200 dia ditto	395.00	m ·	235.00	92,825.0
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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
2.0 S	TAGE 2 [32.09 Ha] - 8 No. Lots				(Continued)
48	Allowance for road crossings Split Services	38.00	m	150.00	5,700.00
49	Allow for 32 dia polyethylene PN16 pipe off 150 DICL water main Thrust Blocks	52.00	m	85.00	4,420.00
	600 long x 300 wide x 250 high mass concrete thrust block [NB: Assumed] Subtotal	8.00	No	240.00	1,920.00 <u>159,315.00</u>
	SEWER RETICULATION				
	Gravity Sewer Reticulation				
52	Allow for 150 dia. uPVC SN8 sewer pipe including trench excavation and backfill complete	916.00	m	100.00	91,600.00
53	Allow for maintenance shaft [NB: Provisional Quantity]	10.00	No	1,500.00	15,000.00
54	Dead end	1.00	No	1,300.00	1,300.00
55	Allowance for connection tee joint including capping for future works [NB: Provisional; no details provided]	8.00	No	500.00	4,000.00
56	Subtotal ELECTRICAL & COMMUNICATIONS RETICULATION Lead-In Infrastructure				<u>111,900.00</u>
57	Allowance for lead-in electricity infrastructure [NB: Provisional Allowance] Electrical Reticulation	1.00	Item		EXCL
	LV Works				
58	Allow for LV cables and conduit including excavation and backfilling complete	1,335.00	m	260.00	347,100.00
59	Allowance to connect to power supply [NB: Provisional Allowance] HV Works	1.00	Item	5,000.00	5,000.00
60	Allow for HV cables and conduit including	1,625.00	m	800.00	1,300,000.00
61	excavation and backfilling complete Allowance to connect to power supply [NB: Provisional Allowance] Pillars	1.00	Item	15,000.00	15,000.00
62	Allow for distribution pillar	8.00	No	2,000.00	16,000.00
	Communications Reticulation				
	Conduits				
63	Allow for P100 NBN conduits	2,546.00	m	70.00	178,220.00
64	NBN communication cables	2,546.00	m		EXCL

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
2.0	ST	TAGE 2 [32.09 Ha] - 8 No. Lots				(Continued)
		<u>Pits</u>				
	65	Allow for distribution / local network pit [NB:	2.00	No	1,800.00	3,600.00
	66	Provisional Quantity] Subtotal				<u>1,864,920.00</u>
		SIGNAGE & LINE MARKING				
		Signage				
	67	Road Name Blade	2.00	No	400.00	800.00
	68	No parking/ stopping sign	6.00	No	400.00	2,400.00
	69	Keep left sign	1.00	No	400.00	400.00
	70	No through road sign	1.00	No	400.00	400.00
	71	Give Way sign	2.00	No	400.00	800.00
	72	Allowance for regulatory signs and sightboards as required :[N.B: Provisional Allowance] Line Marking	1.00	Item	5,000.00	5,000.00
	73	E1 line marking to new pavement	3,209.00	m	5.00	16,045.00
	74	L1 ditto	529.00	m	5.00	2,645.00
	75	TB ditto	31.00	m	5.00	155.00
	76	Subtotal				<u>28,645.00</u>
		SEDIMENT & EROSION CONTROL				
	77	Silt fence	1,212.00	m	12.00	14,544.00
	78	Temporary sediment basin [NB: Provisional	1.00	No	50,000.00	50,000.00
	79	Allowance] Subtotal				64,544.00
		LANDSCAPING				
		Seeding				
	80	Seeding to disturbed areas	324,882.00	m2	0.50	162,441.00
	81	Spread mulch to last	324,882.00	m2	2.00	649,764.00
	82	Refer to Bulk Earthworks Trade for respreading of existing topsoil Turf		Note		
	83	Allowance for 100 thick topsoil to new turf	6,308.00	m2	7.00	44,156.00
	84	areas Allowance for turf to all road reserve areas	6,308.00	m2	15.00	94,620.00
		Street Trees				
	85	Trim and cultivate subgrade	39.00	m2	10.00	390.00
	86	300 thick topsoil	39.00	m2	24.00	936.00

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
2.0	ST	TAGE 2 [32.09 Ha] - 8 No. Lots				(Continued)
8	87	Allowance for 75L street trees [NB: Allowed	39.00	No	750.00	29,250.00
8	88	for a street tree every 50m] Allowance for timber edging to last	39.00	No	50.00	1,950.00
1	89	50 x 50 hardwood stakes to trees	39.00	No	5.00	195.00
		Miscellaneous				
9	90	Landscape maintenance	12.00	Months	2,400.00	28,800.00
9	91	Subtotal				<u>1,012,502.00</u>
9	92	PRELIMINARIES AND MARGIN	1.00	Item	1,379,180.50	1,379,180.5
9	93	GST EXCLUSIVE SUBTOTAL				<u>12,872,353.00</u>
9	94	CONSULTANTS FEES	1.00	Item	1,222,647.00	1,222,647.00
9	95	AUTHORITY FEES & CHARGES	1.00	Item		
9	96	GST EXCLUSIVE TOTAL - STAGE 2				<u>14,095,000.00</u>
9	97	\$/Lot		Item	1,761,875.00	
9	98	\$/m2 of Site Area	1.00	Item	43.38	
					Total :	14,095,000.00
3.0	ST	TAGE 3 [31.17 Ha] - 7 No. Lots				
3.0	SI	TAGE 3 [31.17 Ha] - 7 No. Lots <u>GENERAL</u>				
3.0			1.00	Item	100,000.00	100,000.00
3.0	1	GENERAL		Item Weeks	100,000.00	100,000.00 160,000.00
3.0	1 2	GENERAL Site Establishment		Weeks		160,000.00 27,000.00
3.0	1 2 3	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB:	16.00 15.00	Weeks	10,000.00	160,000.00
3.0	1 2 3 4	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional	16.00 15.00 1.00	Weeks Days	10,000.00	160,000.00 27,000.00
3.0	1 2 3 4 5	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional	16.00 15.00 1.00	Weeks Days Item	10,000.00 1,800.00 50,000.00	160,000.00 27,000.00 50,000.0u
3.0	1 2 3 4 5	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance]	16.00 15.00 1.00 1.00	Weeks Days Item Item	10,000.00 1,800.00 50,000.00 50,000.00	160,000.00 27,000.00 50,000.0u 50,000.00
3.0	1 2 3 4 5 6	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance]	16.00 15.00 1.00 1.00	Weeks Days Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00	160,000.00 27,000.00 50,000.00 50,000.00
3.0	1 2 3 4 5 6	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance]	16.00 15.00 1.00 1.00	Weeks Days Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00	160,000.00 27,000.00 50,000.00 50,000.00 100,000.00 60,000.00
3.0	1 2 3 4 5 6	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal	16.00 15.00 1.00 1.00	Weeks Days Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00	160,000.00 27,000.00 50,000.00 50,000.00 100,000.00 60,000.00
3.0	1 2 3 4 5 6 7 8	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal CLEARING & DEMOLITION Site Clearance Clear site including grubbing and mulching as	16.00 15.00 1.00 1.00 1.00	Weeks Days Item Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00	160,000.00 27,000.00 50,000.00 50,000.00 100,000.00 60,000.00
	1 2 3 4 5 6 7 8	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal CLEARING & DEMOLITION Site Clearance	16.00 15.00 1.00 1.00 1.00	Weeks Days Item Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00 60,000.00	160,000.00 27,000.00 50,000.00 50,000.00 100,000.00 60,000.00
	1 2 3 4 5 6 7 8	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal CLEARING & DEMOLITION Site Clearance Clear site including grubbing and mulching as required	16.00 15.00 1.00 1.00 1.00	Weeks Days Item Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00 60,000.00	160,000.00 27,000.00 50,000.00 50,000.00 100,000.00 60,000.00 547,000.00
	1 2 3 4 5 6 7 8	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal CLEARING & DEMOLITION Site Clearance Clear site including grubbing and mulching as required Allowance to remove significant trees	16.00 15.00 1.00 1.00 1.00	Weeks Days Item Item Item Item No	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00 60,000.00	160,000.00 27,000.00 50,000.00 100,000.00 60,000.00 547,000.00 INCL

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
3.0	S	TAGE 3 [31.17 Ha] - 7 No. Lots				(Continued)
		Removal and disposal of all rubbish within the development area including removal of existing fence as required :[NB: Provisional Allowance] Subtotal	1.00	Item	25,000.00	25,000.00 483,616.00
		BULK EARTHWORKS				
		Topsoil				
	14	Strip and stockpile 150mm of topsoil complete	45,862.00	m3	15.00	687,930.0
		Replace topsoil to disturbed areas 150mm	45,862.00	m3	12.00	550,344.0
		thick Remove off site remaining spoil material	45,862.00	m3		EXCL
		Cut				
	17	Cut to required level and push to fill	346,154.00	m3	10.00	3,461,540.0
	18	Rip and recompact rock	3,846.00	m3	10.00	38,460.0
	19	Crush ripped rock [NB: Allowed 10%]	385.00	m3	15.00	5,775.0
		Trimming				
	20	Trim subgrade to roads	11,966.00	m2	1.00	11,966.0
	21	Trim subgrade to footpaths	1,870.00	m2	1.00	1,870.0
	22	Trim subgrade to regrade areas	291,909.00	m2	1.00	291,909.0
	23	Subtotal				<i>5,049,794</i> .
		ROADWORKS				
		Road Pavement				
		MC01 Road				
	24	440mm subbase	11,966.00	m2	48.50	580,351.
	25	100mm basecourse	11,966.00	m2	11.00	131,626.
	26	50mm Asphaltic concrete (AC14)	11,966.00	m2	28.00	335,048.
	27	7mm Primer Seal	11,966.00	m2	4.00	47,864.
	28	Subtotal				<u>1,094,889.</u>
		CONCRETE WORKS				
		Kerbs				
	29	Allow for 150 high barrier SA kerb	1,496.00	m	140.00	209,440.
		Footpaths				
	30	2500 wide reinforced concrete footpath	1,870.00	m2	115.00	215,050.
		Subtotal				<u>424,490.</u>
		SUBSOIL DRAINAGE				
						14/Aug/18

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
3.0	S	TAGE 3 [31.17 Ha] - 7 No. Lots				(Continued)
		300 wide x approx. 750 deep subsoil drainage including detailed excavation, clean draining filter sand wrapped in Bidim A24 geofabric and 100 dia socked subsoil pipe Flushing points to last	1,496.00 10.00		58.00 135.00	86,768.00 1,350.00
		Subtotal				88,118.00
		DRAINAGE				
		Detailed Excavation				
	35	Allowance for detailed excavation to stormwater pipework Pipework	1,125.00	m3	65.00	73,125.00
	36	Allow for new / extension to existing 450 dia Reinforced concrete stormwater pipe including excavation, supply, bed, lay, joint and backfill complete Pits	883.00	m	220.00	194,260.00
	37	1800 long kerb lintel with pit insert including excavation complete Filtration Systems	3.00	No	5,000.00	15,000.00
	38	'Ecosol' 4600 high flow gross pollutant trap [NB: Provisional Allowance] Detention Basin	1.00	No	80,000.00	80,000.00
		Allowance for stormwater detention basin [NB: Provisional Allowance] Subtotal	1.00	Item	500,000.00	500,000.00 <u>862,385.00</u>
		POTABLE WATER RETICULATION				
		Main Reticulations				
9	41	Allow for 200 dia DICL water main pipe	1,077.00	m	235.00	253,095.00
3	42	Allowance for road crossings	19.00	m	150.00	2,850.00
	43	Allowance to connect to existing 200 dia potable water reticulation services [NB: Provisional Allowance] Single Services	1.00	Item	5,000.00	5,000.00
3	44	Allow for 32 dia polyethylene PN16 pipe off 150 DICL water main Split Services	6.00	m	85.00	510.00
	45	Allow for 32 dia polyethylene PN16 pipe off 150 DICL water main Thrust Blocks	130.00	m	85.00	11,050.00
	46	600 long x 300 wide x 250 high mass concrete	8.00	No	240.00	1,920.00
	47	thrust block [NB: Assumed] Subtotal				<u>274,425.00</u>
		SEWER RETICULATION				14/Aug/18

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
3.0	STAGE 3 [31.17 Ha] - 7 No. Lots				(Continued)
	Gravity Sewer Reticulation				
48	Allow for 150 dia. uPVC SN8 sewer pipe including trench excavation and backfill	651.00	m	100.00	65,100.00
49	complete Allow for maintenance shaft [NB: Provisional Ouantity]	7.00	No	1,500.00	10,500.00
50	Dead end	1.00	No	1,300.00	1,300.00
	Allowance for connection tee joint including capping for future works [NB: Provisional; no details provided]	7.00	No	500.00	3,500.00
52	2 Subtotal				<u>80,400.00</u>
	ELECTRICAL & COMMUNICATIONS RETICULATION Electrical Reticulation				
	LV Works				
53	Allow for LV cables and conduit including excavation and backfilling complete	953.00	m	260.00	247,780.00
54	Allowance to connect to power supply [NB: Provisional Allowance] HV Works	1.00	Item	5,000.00	5,000.00
5	Allow for HV cables and conduit including	1,218.00	m	800.00	974,400.00
5	excavation and backfilling complete Allowance to connect to power supply [NB: Provisional Allowance] Pillars	1.00	Item	15,000.00	15,000.00
5	7 Allow for distribution pillar	7.00	No	2,000.00	14,000.00
	Communications Reticulation				
	Conduits				
5	8 Allow for P100 NBN conduits	2,514.00	m	70.00	175,980.00
5	9 NBN communication cables	2,514.00	m		EXCL
	<u>Pits</u>				
6	Allow for distribution / local network pit [NB:	2.00	No	1,800.00	3,600.00
6	Provisional Quantity] 1 Subtotal				<u>1,435,760.00</u>
	SIGNAGE & LINE MARKING				
	Signage				
6	2 No parking/ stopping sign	6.00	No	400.00	2,400.00
	Allowance for regulatory signs and sightboards as required :[N.B: Provisional Allowance] Line Marking	1.00	Item	5,000.00	5,000.00
6	4 E1 line marking to new pavement	919.00	m	5.00	4,595.00
		1			14/Aug/18

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
3.0	SI	ГАGE 3 [31.17 Ha] - 7 No. Lots				(Continued)
	65	L1 ditto	460.00	m	5.00	2,300.00
(66	Subtotal				<u>14,295.00</u>
		SEDIMENT & EROSION CONTROL				
(67	Silt fence	81.00	m	12.00	972.00
(68	Subtotal				<u>972.00</u>
		LANDSCAPING				
		Seeding				
(69	Seeding to disturbed areas	305,744.00	m2	0.50	152,872.00
	70	Spread mulch to last	305,744.00	m2	2.00	611,488.00
,	71	Refer to Bulk Earthworks Trade for respreading of existing topsoil Turf		Note		
	72	Allowance for 100 thick topsoil to new turf	4,862.00	m2	7.00	34,034.00
	73	areas Allowance for turf to all road reserve areas	4,862.00	m2	15.00	72,930.00
		Street Trees				
	74	Trim and cultivate subgrade	30.00	m2	10.00	300.00
	75	300 thick topsoil	30.00	m2	24.00	720.00
	76	Allowance for 75L street trees [NB: Allowed	30.00	No	750.00	22,500.00
	77	for a street tree every 50m] Allowance for timber edging to last	30.00	No	50.00	1,500.00
	78	50 x 50 hardwood stakes to trees	30.00	No	5.00	150.00
		Miscellaneous				
	79	Landscape maintenance	12.00	Months	2,400.00	28,800.00
	80	Subtotal				<u>925,294.00</u>
	81	PRELIMINARIES AND MARGIN	1.00	Item	1,353,773.00	1,353,773.00
	82	GST EXCLUSIVE SUBTOTAL				<u>12,635,211.00</u>
	83	CONSULTANTS FEES	1.00	Item	1,199,789.00	1,199,789.00
	84	AUTHORITY FEES & CHARGES	1.00	Item		EXCL
	85	GST EXCLUSIVE TOTAL - STAGE 3				<u>13,835,000.00</u>
	86	\$/Lot	1.00	Item	1,976,428.57	
	87	\$/m2 of Site Area	1.00	Item	45.25	
					Total:	13,835,000.00

4.0 STAGE 4 [35.86 Ha] - 6 No. Lots



ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
4.0 S	TAGE 4 [35.86 Ha] - 6 No. Lots				
	GENERAL				
1	Site Establishment	1.00	Item	100,000.00	100,000.00
2	Supervision, management, amenities, etc	16.00	Weeks	10,000.00	160,000.00
3	Survey and setout of works by surveyor	15.00	Days	1,800.00	27,000.00
4	Geotechnical testing and certification [NB:	1.00	Item	50,000.00	50,000.00
5	Provisional Allowance] Location of services [NB: Provisional Allowance]	1.00	Item	50,000.00	50,000.00
6	Protection of services [NB: Provisional	1.00	Item	100,000.00	100,000.00
7	Allowance] Traffic control [NB: Provisional Allowance]	1.00	Item	115,000.00	115,000.00
8	Temporary traffic barrier allowance including	400.00	m	200.00	80,000.00
9	supply, rental and moving Subtotal				682,000.00
	CLEARING & DEMOLITION				
	Site Clearance				
10	Clear site including grubbing and mulching as required	345,863.00	m2	1.50	518,794.50
11	Allowance to remove significant trees		No		INCL
12	Allowance for protection of existing trees		No		INCL
	Demolition				
13	Removal and disposal of entire road pavement	14,745.00	m2	15.00	221,175.00
	Removal and disposal of all rubbish within the development area including removal of existing fence as required :[NB: Provisional Allowance] Subtotal	1.00	Item	25,000.00	25,000.00 <u>764,969.50</u>
	BULK EARTHWORKS				
	Topsoil				
10	Strip and stockpile 150mm of topsoil complete	51,032.00	m3	15.00	765,480.00
	Replace topsoil to disturbed areas 150mm	51,032.00	m3	12.00	612,384.00
18	thick Remove off site remaining spoil material	51,032.00	m3		EXCL
	Cut				
19	Cut to required level and push to fill	131,934.00	m3	10.00	1,319,340.00
20	Rip and recompact rock	4,675.00	m3	10.00	46,750.00
2:	Crush ripped rock [NB: Allowed 10%]	468.00	m3	15.00	7,020.00
2	Allow to box out existing road basecourse to	6,636.00	m3	35.00	232,260.00
2:	required levels [NB: Allowed for depth of 450] Allow to dispose of excess material offsite	6,636.00	m3	30.00	199,080.00

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
	TAGE 4 [35.86 Ha] - 6 No. Lots				(Continued)
	Allow to create batters	3,167.00	m2	30.00	95,010.00
	Trimming	,			
25	Trim subgrade to roads	12,449.00	m2	1.00	12,449.00
26	Trim subgrade to footpaths	2,223.00	m2	1.00	2,223.00
27	Trim subgrade to regrade areas	325,541.00	m2	1.00	325,541.00
28	Subtotal				<u>3,617,537.00</u>
	ROADWORKS				
	Road Pavement				
	MC03 Road				
29	440mm subbase	7,875.00	m2	48.50	381,937.50
30	100mm basecourse	7,875.00	m2	11.00	86,625.00
31	50mm Asphaltic concrete (AC14)	7,875.00	m2	28.00	220,500.00
32	7mm Primer Seal	7,875.00	m2	4.00	31,500.00
	MC04 Road				
33	440mm subbase	4,575.00	m2	48.50	221,887.50
34	100mm basecourse	4,575.00	m2	11.00	50,325.00
35	50mm Asphaltic concrete (AC14)	4,575.00	m2	28.00	128,100.00
36	7mm Primer Seal	4,575.00	m2	4.00	18,300.00
	John Renshaw Drive Eastern (shared)				
37	Intersection Widening Allowance to tie road widening in to the	183.00	m	150.00	27,450.0°
38	existing road 440mm subbase	15,649.00	m2	48.50	758,976.50
39	100mm basecourse	15,649.00	m2	11.00	172,139.00
40	50mm Asphaltic concrete (AC14)	15,649.00	m2	28.00	438,172.00
41	7mm Primer Seal	15,649.00	m2	4.00	62,596.00
	Connection into Existing Road				
	Allowance to make smooth connection between new and existing road pavement as per council requirements	14.00	m	150.00	2,100.00
43	Subtotal				<u>2,600,608.50</u>
	CONCRETE WORKS				
	Kerbs	. ==0 65		440.00	240.000.00
44	Allow for 150 high barrier SA kerb	1,779.00	m	140.00	249,060.00
	Footpaths				



ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
4.0	ST	AGE 4 [35.86 Ha] - 6 No. Lots				(Continued)
	45	2500 wide reinforced concrete footpath	2,223.00	m2	115.00	255,645.00
	46	Subtotal				<u>504,705.00</u>
		SUBSOIL DRAINAGE				
		300 wide x approx. 750 deep subsoil drainage including detailed excavation, clean draining filter sand wrapped in Bidim A24 geofabric and 100 dia socked subsoil pipe	1,779.00		58.00 135.00	1,620.00
		Flushing points to last	12.00	INO	133.00	104,802.00
	49	Subtotal				104,002.00
		STORMWATER DRAINAGE Detailed Excavation				
	50	Allowance for detailed excavation to stormwater pipework Pipework	1,068.00	m3	65.00	69,420.00
	51	Allow for new / extension to existing 450 dia Reinforced concrete stormwater pipe including excavation, supply, bed, lay, joint and backfill complete Pits	838.00	m	220.00	184,360.00
	52	1800 long kerb lintel with pit insert including excavation complete Culverts	8.00	No	5,000.00	40,000.00
	53	Allowance for 2 x 1.5 long x 0.75 high precast concrete culvert complete [NB: Provisional	1.00	Item	35,000.00	35,000.00
	54	Allowance] Allowance for 3 x 2.4 long x 1.8 high precast concrete culvert complete [NB: Provisional	1.00	Item	65,000.00	65,000.00
	55	Allowance] Precast concrete headwall to suit 1.5 x 0.75	2.00	No	10,000.00	20,000.00
	56	culvert [NB: Provisional Allowance] Precast concrete headwall to suit 2.4 x 1.8 culvert [NB: Provisional Allowance] Filtration Systems	2.00	No	15,000.00	30,000.00
	57	'Ecosol' 4450 high flow gross pollutant trap	2.00	No	70,000.00	140,000.00
	58	[NB: Provisional Allowance] 'Ecosol' 4600 high flow gross pollutant trap [NB: Provisional Allowance] Detention Basin	1.00	No	80,000.00	80,000.00
	59	Allowance for stormwater detention basin [NB:	1.00	Item	500,000.00	500,000.00
		Provisional Allowance] Subtotal				1,163,780.00
		TRAFFIC CONTROL SIGNALS		NI	250,000,00	350,000,00
		Supply and installation of complete 3 way signalised intersection [NB: Provisional] Subtotal	1.00	No	250,000.00	250,000.00 250,000.00 14/Aug/18

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
4.0 S	ГАGE 4 [35.86 Ha] - 6 No. Lots				(Continued)
	POTABLE WATER RETICULATION				
	Main Reticulations				
63	Allow for 150 dia DICL water main pipe	830.00	m	165.00	136,950.00
64	Allowance for road crossings	28.00	m	150.00	4,200.00
	Single Services				
65	Allow for 32 dia polyethylene PN16 pipe off 150 DICL water main Split Services	24.00	m	85.00	2,040.00
66	Allow for 32 dia polyethylene PN16 pipe off 150 DICL water main Thrust Blocks	6.00	m	85.00	510.00
67	600 long x 300 wide x 250 high mass concrete	6.00	No	240.00	1,440.00
68	thrust block [NB: Assumed] Subtotal				<u>145,140.00</u>
	SEWER RETICULATION				
	Gravity Sewer Reticulation				
69	Allow for 150 dia. uPVC SN8 sewer pipe including trench excavation and backfill	1,181.00	m	100.00	118,100.00
70	complete Allow for maintenance shaft [NB: Provisional	12.00	No	1,500.00	18,000.00
71	Quantity] Dead end	2.00	No	1,300.00	2,600.00
72	Allowance for connection tee joint including capping for future works [NB: Provisional; no details provided]	6.00	No	500.00	3,000.00
73	Subtotal				141,700.0
	ELECTRICAL & COMMUNICATIONS RETICULATION Electrical Reticulation				
	LV Works				
74	Allow for LV cables and conduit including excavation and backfilling complete	1,262.00	m	260.00	328,120.00
75	Allowance to connect to power supply [NB: Provisional Allowance] HV Works	1.00	Item	5,000.00	5,000.00
76	Allow for HV cables and conduit including	1,333.00	m	800.00	1,066,400.00
77	excavation and backfilling complete Allowance to connect to power supply [NB: Provisional Allowance] Street Light Works	1.00	Item	15,000.00	15,000.00
78	Allow for SL cables and conduit including excavation and backfilling complete	268.00	m	160.00	42,880.00

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
4.0	ST	AGE 4 [35.86 Ha] - 6 No. Lots				(Continued)
		Allowance for 6500 high LED 17W LED street lights including concrete footing complete Pillars	6.00	No	4,500.00	27,000.00
	80	Allow for distribution pillar	6.00	No	2,000.00	12,000.00
		Communications Reticulation				
		Conduits				
	81	Allow for P100 NBN conduits	2,631.00	m	70.00	184,170.00
	82	NBN communication cables	2,631.00	m		EXCL
		<u>Pits</u>				
	83	Allow for distribution / local network pit [NB:	2.00	No	1,800.00	3,600.00
	84	Provisional Quantity] Subtotal				1,684,170.00
	•	SIGNAGE & LINE MARKING				
		Signage				
	85	Road Name Blade	2.00	No	400.00	800.00
	86	No parking/ stopping sign	6.00	No	400.00	2,400.00
		Keep left sign	1.00	No	400.00	400.00
		No through road sign	1.00	No	400.00	400.00
		Give Way sign	2.00	No	400.00	800.00
		Allowance for regulatory signs and sightboards	1.00	Item	5,000.00	5,000.00
		as required [NB: Provisional Allowance] Allowance for subdivision entry signage [NB: Provisional Allowance] Line Marking	1.00	Item	500,000.00	500,000.00
	92	E1 line marking to new pavement	5,675.00	m	5.00	28,375.00
	93	L1 ditto	2,342.00	m	5.00	11,710.00
	94	TB ditto	45.00	m	5.00	225.00
	95	Arrow ditto	17.00	No	150.00	2,550.00
	96	Subtotal				<i>552,660.00</i>
		SEDIMENT & EROSION CONTROL				
	97	Silt fence	1,911.00	m	12.00	22,932.00
	98	Temporary diversion drain	335.00	m	30.00	10,050.00
	99	Access shaker ramp	1.00	No	2,000.00	2,000.00
1	L00	Temporary sediment basin [NB: Provisional	2.00	No	50,000.00	100,000.00
1	L01	Allowance] Subtotal				<u>134,982.00</u>
		LANDSCAPING				14/Aug/18

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
4.0 S	TAGE 4 [35.86 Ha] - 6 No. Lots				(Continued)
	Seeding				
102	Seeding to disturbed areas	345,863.00	m2	0.50	172,931.50
103	Spread mulch to last	345,863.00	m2	2.00	691,726.00
104	Refer to Bulk Earthworks Trade for respreading of existing topsoil Turf		Note		
105	Allowance for 100 thick topsoil to new turf	5,780.00	m2	7.00	40,460.00
106	areas Allowance for turf to all road reserve areas	5,780.00	m2	15.00	86,700.00
	Street Trees				
107	Trim and cultivate subgrade	36.00	m2	10.00	360.00
108	300 thick topsoil	36.00	m2	24.00	864.00
109	Allowance for 75L street trees [NB: Allowed	36.00	No	750.00	27,000.00
110	for a street tree every 50m] Allowance for timber edging to last	36.00	No	50.00	1,800.00
111	50 x 50 hardwood stakes to trees	36.00	No	5.00	180.00
	Miscellaneous				
112	Landscape maintenance	12.00	Months	2,400.00	28,800.00
113	Subtotal				<u>1,050,821.50</u>
114	PRELIMINARIES AND MARGIN	1.00	Item	1,607,745.50	1,607,745.50
115	GST EXCLUSIVE SUBTOTAL				<u>15,005,621.00</u>
116	CONSULTANTS FEES	1.00	Item	1,424,379.00	1,424,379.00
117	AUTHORITY FEES & CHARGES	1.00	Item		EXCL
118	GST EXCLUSIVE TOTAL - STAGE 4				<u>16,430,000.00</u>
119	\$/Lot	1.00	Item	2,738,333.33	
120	\$/m2 of Site Area	1.00	Item	47.50	
				Total :	16,430,000.00
5.0 S	TAGE 5 [29.10 Ha] - 6 No. Lots				
	GENERAL				
1	Site Establishment	1.00	Item	100,000.00	100,000.00
2	Supervision, management, amenities, etc	16.00	Weeks	10,000.00	160,000.00
3	Survey and setout of works by surveyor	15.00	Days	1,800.00	27,000.00
4	Geotechnical testing and certification [NB: Provisional Allowance]	1.00	Item	50,000.00	50,000.00

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
5.0	ST	AGE 5 [29.10 Ha] - 6 No. Lots				(Continued)
		Location of services [NB: Provisional	1.00	Item	50,000.00	50,000.00
		Allowance] Protection of services [NB: Provisional	1.00	Item	100,000.00	100,000.00
		Allowance] Traffic control [NB: Provisional Allowance]	1.00	Item	60,000.00	60,000.00
		Subtotal				<u>547,000.00</u>
		CLEARING & DEMOLITION				
		Site Clearance				
	9	Clear site including grubbing and mulching as	282,012.00	m2	1.50	423,018.00
	10	required Allowance to remove significant trees		No		INCL
	11	Allowance for protection of existing trees		No		INCL
		Demolition				
	12	Removal and disposal of all rubbish within the development area including removal of existing fence as required :[NB: Provisional Allowance]	1.00	Item	25,000.00	25,000.00
	13	Subtotal				<u>448,018.00</u>
		BULK EARTHWORKS				
		Topsoil				
	14	Strip and stockpile 150mm of topsoil complete	42,302.00	m3	15.00	634,530.00
	15	Replace topsoil to disturbed areas 150mm thick	42,302.00	m3	12.00	507,624.00
	16	Remove off site remaining spoil material	42,302.00	m3		EXCL
		Cut				
	17	Cut to required level and push to fill	227,107.00	m3	10.00	2,271,070.00
	18	Rip and recompact rock	11,631.00	m3	10.00	116,310.00
	19	Crush ripped rock [NB: Allowed 10%]	1,164.00	m3	15.00	17,460.00
		Trimming			141 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	20	Trim subgrade to roads	11,471.00		1.00	11,471.00
	21	Trim subgrade to footpaths	1,759.00		1.00	1,759.00
	22	Trim subgrade to regrade areas	268,783.00	m2	1.00	268,783.00
	23	Subtotal				<u>3,829,007.00</u>
		ROADWORKS				
		Road Pavement				
		MC01 Road		15,50 to 5	10.50	202 455 22
	24	440mm subbase	6,230.00	m2	48.50	302,155.00

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
5.0 S	TAGE 5 [29.10 Ha] - 6 No. Lots				(Continued)
25	100mm basecourse	6,230.00	m2	11.00	68,530.00
26	50mm Asphaltic concrete (AC14)	6,230.00	m2	28.00	174,440.00
27	7mm Primer Seal	6,230.00	m2	4.00	24,920.00
	MC03 Road				
28	440mm subbase	5,241.00	m2	48.50	254,188.50
29	100mm basecourse	5,241.00	m2	11.00	57,651.00
30	50mm Asphaltic concrete (AC14)	5,241.00	m2	28.00	146,748.0
31	7mm Primer Seal	5,241.00	m2	4.00	20,964.00
32	Subtotal				<u>1,049,596.50</u>
	CONCRETE WORKS				
	Kerbs				
33	Allow for 150 high barrier SA kerb	1,639.00	m	140.00	229,460.00
	Footpaths				
34	2500 wide reinforced concrete footpath	1,759.00	m2	115.00	202,285.00
35	Subtotal				<u>431,745.00</u>
	SUBSOIL DRAINAGE				
36	300 wide x approx. 750 deep subsoil drainage including detailed excavation, clean draining filter sand wrapped in Bidim A24 geofabric and 100 dia socked subsoil pipe	1,639.00	m	58.00	95,062.00
37	Flushing points to last	11.00	No	135.00	1,485.00
38	Subtotal				<u>96,547.0</u>
	STORMWATER DRAINAGE				
	Detailed Excavation				
39	Allowance for detailed excavation to stormwater pipework Pipework	634.00	m3	65.00	41,210.00
40	Allow for new / extension to existing 450 dia Reinforced concrete stormwater pipe including excavation, supply, bed, lay, joint and backfill complete Pits	497.00	m	220.00	109,340.00
41	1800 long kerb lintel with pit insert including excavation complete Filtration Systems	4.00	No	5,000.00	20,000.00
42	'Ecosol' 4450 high flow gross pollutant trap [NB: Provisional Allowance] Detention Basin	1.00	No	70,000.00	70,000.00

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
5.0	ST	AGE 5 [29.10 Ha] - 6 No. Lots				(Continued)
		Allowance for stormwater detention basin [NB: Provisional Allowance] Subtotal	1.00	Item	500,000.00	500,000.00 <i>740,550.00</i>
		POTABLE WATER RETICULATION				
		Main Reticulations				
	45	Allow for 150 dia DICL water main pipe	588.00	m	235.00	138,180.00
	46	Allowance for road crossings	24.00	m	150.00	3,600.00
		Split Services				
	47	Allow for 32 dia polyethylene PN16 pipe off 150 DICL water main Thrust Blocks	40.00	m	85.00	3,400.00
	48	600 long x 300 wide x 250 high mass concrete	6.00	No	240.00	1,440.00
	49	thrust block [NB: Assumed] Subtotal				<u>146,620.00</u>
		SEWER RETICULATION				
		Gravity Sewer Reticulation				
	50	Allow for 150 dia. uPVC SN8 sewer pipe including trench excavation and backfill complete	677.00	m :	100.00	67,700.00
	51	Allow for maintenance shaft [NB: Provisional	7.00	No	1,500.00	10,500.00
	52	Quantity] Dead end	2.00	No	1,300.00	2,600.00
	53	Allowance for connection tee joint including capping for future works [NB: Provisional; no details provided]	6.00	No	500.00	3,000.00
	54	Subtotal				<u>83,800.00</u>
		ELECTRICAL & COMMUNICATIONS RETICULATION Electrical Reticulation				
		LV Works				
	55	Allow for LV cables and conduit including	1,198.00	m	260.00	311,480.00
	56	excavation and backfilling complete Allowance to connect to power supply [NB: Provisional Allowance] HV Works	1.00	Item	5,000.00	5,000.00
	57	Allow for HV cables and conduit including	1,188.00	m	800.00	950,400.00
	58	excavation and backfilling complete Allowance to connect to power supply [NB: Provisional Allowance] Pillars	1.00	Item	15,000.00	15,000.00
	59	Allow for distribution pillar	6.00	No	2,000.00	12,000.00
		Communications Reticulation				

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
5.0 S	TAGE 5 [29.10 Ha] - 6 No. Lots				(Continued)
	Conduits				
60	Allow for P100 NBN conduits	2,073.00	m	70.00	145,110.00
61	NBN communication cables	2,073.00	m		EXCL
	<u>Pits</u>				
62	Allow for distribution / local network pit [NB:	2.00	No	1,800.00	3,600.00
63	Provisional Quantity] Subtotal				<u>1,442,590.00</u>
	SIGNAGE & LINE MARKING				
	Signage				
64	Road Name Blade	1.00	No	400.00	400.00
65	No parking/ stopping sign	6.00	No	400.00	2,400.00
66	Give Way sign	2.00	No	400.00	800.00
67	Allowance for regulatory signs and sightboards as required :[N.B: Provisional Allowance] Line Marking	1.00	Item	5,000.00	5,000.00
68	E1 line marking to new pavement	1,030.00	m	5.00	5,150.00
69	L1 ditto	586.00	m	5.00	2,930.00
70	TB ditto	29.00	m	5.00	145.00
71	Subtotal				<u>16,825.00</u>
	SEDIMENT & EROSION CONTROL				
72	Silt fence	153.00	m	12.00	1,836.00
73	Subtotal				<u>1,836.0</u>
	<u>LANDSCAPING</u>				
	Seeding				
74	Seeding to disturbed areas	282,012.00	m2	0.50	141,006.00
75	Spread mulch to last	282,012.00	m2	2.00	564,024.00
76	Refer to Bulk Earthworks Trade for respreading of existing topsoil Turf		Note		
77	Allowance for 100 thick topsoil to new turf	5,326.00	m2	7.00	37,282.00
78	areas Allowance for turf to all road reserve areas	5,326.00	m2	15.00	79,890.00
	Street Trees				
79	Trim and cultivate subgrade	33.00	m2	10.00	330.00
80	300 thick topsoil	33.00	m2	24.00	792.00

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
5.0) ST	TAGE 5 [29.10 Ha] - 6 No. Lots				(Continued)
	81	Allowance for 75L street trees [NB: Allowed	33.00	No	750.00	24,750.00
	82	for a street tree every 50m] Allowance for timber edging to last	33.00	No	50.00	1,650.00
	83	50 x 50 hardwood stakes to trees	33.00	No	5.00	165.00
		Miscellaneous				
	84	Landscape maintenance	12.00	Months	2,400.00	28,800.00
	85	Subtotal				<u>878,689.00</u>
	86	PRELIMINARIES AND MARGIN	1.00	Item	1,165,538.50	1,165,538.50
	87	GST EXCLUSIVE SUBTOTAL				<u>1,165,538.50</u>
	88	CONSULTANTS FEES	1.00	Item	1,031,638.00	1,031,638.00
	89	AUTHORITY FEES & CHARGES	1.00	Item		EXCL
	90	GST EXCLUSIVE TOTAL - STAGE 5				<u>11,910,000.00</u>
	91	\$/Lot	1.00	Item	1,985,000.00	
	92	\$/m2 of Site Area	1.00	Item	42.23	
					Total:	11,910,000.00
6.0	0 S	TAGE 6 [28.89 Ha] - 6 No. Lots				
6.0	0 S	TAGE 6 [28.89 Ha] - 6 No. Lots <u>GENERAL</u>				
6.0			1.00	Item	100,000.00	100,000.00
6.0	1	GENERAL		Item Weeks	100,000.00	100,000.00 100,000.00
6.0	1	GENERAL Site Establishment	10.00			
6.0	1 2 3	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB:	10.00 8.00	Weeks	10,000.00	100,000.00
6.0	1 2 3 4	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional	10.00 8.00 1.00	Weeks Days	10,000.00	100,000.00 14,400.00
6.0	1 2 3 4 5	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance]	10.00 8.00 1.00	Weeks Days Item	10,000.00 1,800.00 50,000.00	100,000.00 14,400.00 50,000.00
6.0	1 2 3 4 5	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance]	10.00 8.00 1.00 1.00	Weeks Days Item Item	10,000.00 1,800.00 50,000.00 50,000.00	100,000.00 14,400.00 50,000.00 50,000.00 100,000.00
6.0	1 2 3 4 5 6	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance]	10.00 8.00 1.00 1.00	Weeks Days Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00	100,000.00 14,400.00 50,000.00 50,000.00 100,000.00 60,000.00
6.0	1 2 3 4 5 6	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance]	10.00 8.00 1.00 1.00	Weeks Days Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00	100,000.00 14,400.00 50,000.00 50,000.00 100,000.00 60,000.00
6.0	1 2 3 4 5 6	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal	10.00 8.00 1.00 1.00	Weeks Days Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00	100,000.00 14,400.00 50,000.00 50,000.00 100,000.00 60,000.00
6.0	1 2 3 4 5 6 7 8	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal CLEARING & DEMOLITION Site Clearance Clear site including grubbing and mulching as	10.00 8.00 1.00 1.00 1.00	Weeks Days Item Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00	100,000.00 14,400.00 50,000.00 50,000.00 100,000.00 60,000.00
6.0	1 2 3 4 5 6 7 8	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal CLEARING & DEMOLITION Site Clearance	10.00 8.00 1.00 1.00 1.00	Weeks Days Item Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00 60,000.00	100,000.00 14,400.00 50,000.00 50,000.00 100,000.00 60,000.00
6.0	1 2 3 4 5 6 7 8	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal CLEARING & DEMOLITION Site Clearance Clear site including grubbing and mulching as required	10.00 8.00 1.00 1.00 1.00	Weeks Days Item Item Item Item	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00 60,000.00	100,000.00 14,400.00 50,000.00 50,000.00 100,000.00 60,000.00 474,400.00
6.0	1 2 3 4 5 6 7 8	GENERAL Site Establishment Supervision, management, amenities, etc Survey and setout of works by surveyor Geotechnical testing and certification [NB: Provisional Allowance] Location of services [NB: Provisional Allowance] Protection of services [NB: Provisional Allowance] Traffic control [NB: Provisional Allowance] Subtotal CLEARING & DEMOLITION Site Clearance Clear site including grubbing and mulching as required Allowance to remove significant trees	10.00 8.00 1.00 1.00 1.00	Weeks Days Item Item Item Item No	10,000.00 1,800.00 50,000.00 50,000.00 100,000.00 60,000.00	100,000.00 14,400.00 50,000.00 50,000.00 100,000.00 60,000.00 474,400.00

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ESTIMATE DETAILS

6.0 STAGE 6 [28.89 Ha] - 6 No. Lots (Continued) 12 Removal and disposal of all rubbish within the development area including removal of existing fence as required :[NB: Provisional Allowance] 13 Subtotal 483.332.50 BULK EARTHWORKS Topsoil 14 Strip and stockpile 150mm of topsoil complete 45,834.00 m3 15.00 687,510.00 15 Replace topsoil to disturbed areas 150mm 45,834.00 m3 12.00 550,008.00 thick 16 Remove off site remaining spoil material 45,834.00 m3 12.00 550,008.00 thick 17 Cut to required level and push to fill 14,021.00 m3 10.00 140,210.00 18 Rip and recompact rock 29,964.00 m3 10.00 29,664.00 19 Crush ripped rock [NB: Allowed 10%] 2,997.00 m3 15.00 44,955.00 Trimming 20 Trim subgrade to roads 4,402.00 m2 10.00 787.00 21 Trim subgrade to footpaths 787.00 m2 10.00 787.00 22 Trim subgrade to regrade areas 300,367.00 m2 10.00 300,367.00 23 Subtotal 2,027,879.00 ROADWORKS Road Pavement MCO1 Road 24 440mm subbase 4,402.00 m2 48.50 213,497.00 25 100mm basecourse 4,402.00 m2 48.50 213,497.00 26 50mm Asphaltic concrete (AC14) 4,402.00 m2 28.00 123,255.00 27 7mm Primer Seal 4,402.00 m2 40.00 17,608.00 28 Subtotal 402,783.00 CONCRETE WORKS Kerbs 29 Allow for 150 high barrier SA kerb 629.00 m 140.00 88,060.00 Footpaths 30 2500 wide reinforced concrete footpath 787.00 m2 115.00 90,505.00 31 Subtotal 172,565.00	Ref	Description	Quantity	Unit	Rate	Amount
development area including removal of existing fence as required : [NB: Provisional Allowance] 13 Subtotal 483,332.50 BULK EARTHWORKS Topsoil 14 Strip and stockpile 150mm of topsoil complete 45,834.00 m3 15.00 687,510.00 15 Replace topsoil to disturbed areas 150mm 45,834.00 m3 12.00 550,008.00 thick 16 Remove off site remaining spoil material 45,834.00 m3 EXCL Cut 17 Cut to required level and push to fill 14,021.00 m3 10.00 140,210.00 18 Rip and recompact rock 29,964.00 m3 10.00 299,640.00 19 Crush ripped rock [NB: Allowed 10%] 2,997.00 m3 15.00 44,955.00 Trimming 20 Trim subgrade to roads 4,402.00 m2 1.00 787.00 21 Trim subgrade to footpaths 787.00 m2 1.00 787.00 22 Trim subgrade to regrade areas 300,367.00 m2 1.00 300,367.00 23 Subtotal 2,027,879.00 ROADWORKS Road Pavement MCO1 Road 24 440mm subbase 4,402.00 m2 48.50 213,497.00 25 100mm basecourse 4,402.00 m2 48.50 213,497.00 26 50mm Asphaltic concrete (AC14) 4,402.00 m2 28.00 123,256.00 27 7mm Primer Seal 4,402.00 m2 48.00 123,256.00 28 Subtotal 402,783.00 CONCRETE WORKS Kerbs 29 Allow for 150 high barrier SA kerb 629.00 m 140.00 88,060.00 Footpaths 30 2500 wide reinforced concrete footpath 787.00 m2 115.00 90,505.00 31 Subtotal 178,565.00	6.0	STAGE 6 [28.89 Ha] - 6 No. Lots				(Continued)
Topsoil 14 Strip and stockpile 150mm of topsoil complete 45,834.00 m3 15.00 687,510.00 15 Replace topsoil to disturbed areas 150mm 45,834.00 m3 12.00 550,008.00 thick Remove off site remaining spoil material 45,834.00 m3 EXCL Cut 17 Cut to required level and push to fill 14,021.00 m3 10.00 140,210.00 18 Rip and recompact rock 29,964.00 m3 10.00 299,640.00 19 Crush ripped rock [NB: Allowed 10%] 2,997.00 m3 15.00 44,955.00 Trimming 20 Trim subgrade to roads 4,402.00 m2 1.00 4,402.00 21 Trim subgrade to footpaths 787.00 m2 1.00 787.00 22 Trim subgrade to regrade areas 300,367.00 m2 1.00 300,367.00 ROADWORKS Road Pavement MC01 Road 24 440mm subbase 4,402.00 m2 48.50 213,497.00 25 100mm basecourse 4,402.00 m2 11.00 48,422.00 26 50mm Asphaltic concrete (AC14) 4,402.00 m2 28.00 123,256.00 27 7mm Primer Seal 4,402.00 m2 4.00 17,608.00 28 Subtotal 4,402.00 m2 4.00 17,608.00 CONCRETE WORKS Kerbs 29 Allow for 150 high barrier SA kerb 629.00 m 140.00 88,060.00 Footpaths 30 2500 wide reinforced concrete footpath 787.00 m2 115.00 90,505.00 SUBSOIL DRAINAGE		development area including removal of existing fence as required :[NB: Provisional Allowance]	1.00	Item	25,000.00	,
14 Strip and stockpile 150mm of topsoil complete 45,834.00 m3 15.00 687,510.00 15 Replace topsoil to disturbed areas 150mm thick 45,834.00 m3 12.00 550,008.00 thick chick 16 Remove off site remaining spoil material 45,834.00 m3 12.00 550,008.00 thick chick chick 17 Cut to required level and push to fill 14,021.00 m3 10.00 140,210.00 18 Rip and recompact rock 29,964.00 m3 10.00 299,640.00 19 Crush ripped rock [NB: Allowed 10%] 2,997.00 m3 15.00 44,955.00 Trim subgrade to roads 4,402.00 m2 1.00 4,402.00 21 Trim subgrade to footpaths 787.00 m2 1.00 787.00 22 Trim subgrade to regrade areas 300,367.00 m2 1.00 300,367.00 23 Subtotal 2,027,879.00 2,027,879.00 2,027,879.00 ROADWORKS Road Pavement MC01 Road 4,402.00 m2 11.00 48,422.00 25 100mm basecourse 4,402.00 m2 28.00 123,497.00 26 50mm Asphaltic concrete (AC14) 4,402.00 m2 4.00 17,608.00 27 7mm Primer Seal 4,40		BULK EARTHWORKS				
15 Replace topsoil to disturbed areas 150mm 45,834.00 m3 12.00 550,008.00 thick 16 Remove off site remaining spoil material 45,834.00 m3 EXCL Cut 17 Cut to required level and push to fill 14,021.00 m3 10.00 140,210.00 18 Rip and recompact rock 29,964.00 m3 10.00 299,640.00 19 Crush ripped rock [NB: Allowed 10%] 2,997.00 m3 15.00 44,955.00 Trimming 20 Trim subgrade to roads 4,402.00 m2 1.00 787.00 21 Trim subgrade to footpaths 787.00 m2 1.00 300,367.00 22 Trim subgrade to regrade areas 300,367.00 m2 1.00 300,367.00 ROADWORKS Road Pavement MC01 Road 24 440mm subbase 4,402.00 m2 48.50 213,497.00 25 100mm basecourse 4,402.00 m2 48.50 213,497.00 26 50mm Asphaltic concrete (AC14) 4,402.00 m2 28.00 123,256.00 27 7mm Primer Seal 4,402.00 m2 28.00 123,256.00 28 Subtotal 4,402.00 m2 40.00 17,608.00 CONCRETE WORKS Kerbs 29 Allow for 150 high barrier SA kerb 629.00 m 140.00 88,060.00 Footpaths 30 2500 wide reinforced concrete footpath 787.00 m2 115.00 90,505.00 31 Subtotal 787.50 M2 115.00 90,505.00		Topsoil				
## Part	1	1 Strip and stockpile 150mm of topsoil complete	45,834.00	m3	15.00	687,510.00
EXCL Cut 17 Cut to required level and push to fill 14,021.00 m3 10.00 140,210.00 18 Rip and recompact rock 29,964.00 m3 10.00 299,640.00 19 Crush ripped rock [NB: Allowed 10%] 2,997.00 m3 15.00 44,955.00 Trimming 20 Trim subgrade to roads 4,402.00 m2 1.00 4,402.00 21 Trim subgrade to footpaths 787.00 m2 1.00 787.00 ROADWORKS Road Pavement MC01 Road 24 440mm subbase 4,402.00 m2 48.50 213,497.00 25 100mm basecourse 4,402.00 m2 48.50 213,497.00 25 5 100mm Asphaltic concrete (AC14) 4,402.00 m2 48.50 213,497.00 26 5 Somm Asphaltic concrete (AC14) 4,402.00 m2 4.00 17,608.00 27 7mm Primer Seal 4,402.00 m2 4.00 17,608.00 CONCRETE WORKS Kerbs 29 Allow for 150 high barrier SA ker	1	·	45,834.00	m3	12.00	550,008.00
17 Cut to required level and push to fill 14,021.00 m3 10.00 140,210.00 18 Rip and recompact rock 29,964.00 m3 10.00 299,640.00 19 Crush ripped rock [NB: Allowed 10%] 2,997.00 m3 15.00 44,955.00 Trimming 20 Trim subgrade to roads 4,402.00 m2 1.00 4,402.00 21 Trim subgrade to footpaths 787.00 m2 1.00 787.00 22 Trim subgrade to regrade areas 300,367.00 m2 1.00 300,367.00 23 Subtotal 2,027,879.00 ROADWORKS Road Pavement MCO1 Road 24 440mm subbase 4,402.00 m2 48.50 213,497.00 25 100mm basecourse 4,402.00 m2 11.00 48,422.00 26 50mm Asphaltic concrete (AC14) 4,402.00 m2 28.00 123,256.00 27 7mm Primer Seal 4,402.00 m2 4.00 17,608.00 CONCRETE WORKS Kerbs 29 Allow for 150 high barrier SA kerb 629.00 m 140.00 88,060.00 Footpaths 30 2500 wide reinforced concrete footpath 7	1		45,834.00	m3		EXCL
18 Rip and recompact rock 29,964.00 m3 10.00 299,640.00 19 Crush ripped rock [NB: Allowed 10%] 2,997.00 m3 15.00 44,955.00 Trimming 20 Trim subgrade to roads 4,402.00 m2 1.00 4,402.00 21 Trim subgrade to footpaths 787.00 m2 1.00 300,367.00 22 Trim subgrade to regrade areas 300,367.00 m2 1.00 300,367.00 23 Subtotal 2,027,879.00 ROADWORKS Road Pavement MCO1 Road 24 440mm subbase 4,402.00 m2 48.50 213,497.00 25 100mm basecourse 4,402.00 m2 11.00 48,422.00 26 50mm Asphaltic concrete (AC14) 4,402.00 m2 28.00 123,256.00 27 7mm Primer Seal 4,402.00 m2 4.00 17,608.00 CONCRETE WORKS Kerbs 29 Allow for 150 high barrier SA kerb 629.00 m 140.00 88,060.00 Footpaths 30 2500 wide reinforced concrete footpath 787.00 m2 115.00 90,505.00						

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ESTIMATE DETAILS

Ref		Description	Quantity	Unit	Rate	Amount
6.0	SI	TAGE 6 [28.89 Ha] - 6 No. Lots				(Continued)
		300 wide x approx. 750 deep subsoil drainage including detailed excavation, clean draining filter sand wrapped in Bidim A24 geofabric and 100 dia socked subsoil pipe	629.00		58.00	36,482.00
		Flushing points to last	5.00	No	135.00	675.00 <i>37,157.00</i>
	34	Subtotal				37,137.00
		STORMWATER DRAINAGE				
		Detailed Excavation			65.00	E0 E70 00
	35	Allowance for detailed excavation to stormwater pipework Pits	778.00	m3	65.00	50,570.00
	36	1800 long kerb lintel with pit insert including excavation complete Pipework	5.00	No	5,000.00	25,000.00
	37	Allow for new / extension to existing 450 dia Reinforced concrete stormwater pipe including excavation, supply, bed, lay, joint and backfill complete Detention Basin	610.00	m	220.00	134,200.00
	38	Allowance for stormwater detention basin [NB:	1.00	Item	500,000.00	500,000.00
	39	Provisional Allowance] Subtotal				<u>709,770.00</u>
		POTABLE WATER RETICULATION				
		Main Reticulations				
	40	Allow for 150 dia DICL water main pipe	648.00	m	235.00	152,280.00
	41	Allowance for road crossings	24.00	m	150.00	3,600.00
		Split Services				
	42	Allow for 32 dia polyethylene PN16 pipe off 150 DICL water main <u>Thrust Blocks</u>	40.00	m	85.00	3,400.00
	43	600 long x 300 wide x 250 high mass concrete	6.00	No	240.00	1,440.00
	44	thrust block [NB: Assumed] Subtotal				160,720.00
		SEWER RETICULATION				
		Gravity Sewer Reticulation				
	45	Allow for 150 dia. uPVC SN8 sewer pipe including trench excavation and backfill	652.00	m	100.00	65,200.00
	46	complete Allow for maintenance shaft [NB: Provisional	7.00	No	1,500.00	10,500.00
	47	Quantity] Dead end	1.00	No	1,300.00	1,300.00

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
6.0	STAGE 6 [28.89 Ha] - 6 No. Lots				(Continued)
	Allowance for connection tee joint including capping for future works [NB: Provisional; no details provided] Subtotal	6.00	No	500.00	3,000.00 <u>80,000.00</u>
	ELECTRICAL & COMMUNICATIONS RETICULATION Electrical Reticulation				
	LV Works				
5	Allow for LV cables and conduit including excavation and backfilling complete	798.00	m	260.00	207,480.0
5	Allowance to connect to power supply [NB: Provisional Allowance] HV Works	1.00	Item	5,000.00	5,000.00
5	2 Allow for HV cables and conduit including	800.00	m	800.00	640,000.00
5	excavation and backfilling complete Allowance to connect to power supply [NB: Provisional Allowance] Pillars	1.00	Item	15,000.00	15,000.00
5	4 Allow for distribution pillar	6.00	No	2,000.00	12,000.00
	Communications Reticulation				
	<u>Conduits</u>				
5	5 Allow for P100 NBN conduits	1,612.00	m	70.00	112,840.00
5	6 NBN communication cables	1,612.00	m		EXCL
	<u>Pits</u>				
	7 Allow for distribution / local network pit [NB: Provisional Quantity]8 Subtotal	2.00	No	1,800.00	3,600.00 <u>995,920.0</u>
	SIGNAGE & LINE MARKING				
	Signage				
5	9 Road Name Blade	1.00	No	400.00	400.00
6	No parking/ stopping sign	2.00	No	400.00	800.00
6	1 No through road sign	1.00	No	400.00	400.00
6	2 Allowance for regulatory signs and sightboards as required :[N.B: Provisional Allowance] Line Marking	1.00	Item	5,000.00	5,000.00
6	3 E1 line marking to new pavement	1,066.00	m	5.00	5,330.00
6	4 L1 ditto	430.00	m	5.00	2,150.00
6	5 Subtotal				<u>14,080.00</u>
	SEDIMENT & EROSION CONTROL				

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ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
6.0 S	TAGE 6 [28.89 Ha] - 6 No. Lots				(Continued)
66	Silt fence	162.00	m	12.00	1,944.00
67	Subtotal				<u>1,944.00</u>
	LANDSCAPING				
	Seeding				
68	Seeding to disturbed areas	305,555.00	m2	0.50	152,777.50
69	Spread mulch to last	305,555.00	m2	2.00	611,110.00
70	Refer to Bulk Earthworks Trade for respreading of existing topsoil Turf		Note		
71	Allowance for 100 thick topsoil to new turf	2,044.00	m2	7.00	14,308.00
72	areas Allowance for turf to all road reserve areas	2,044.00	m2	15.00	30,660.00
	Street Trees				
73	Trim and cultivate subgrade	13.00	m2	10.00	130.00
74	300 thick topsoil	13.00	m2	24.00	312.00
75	Allowance for 75L street trees [NB: Allowed	13.00	No	750.00	9,750.00
76	for a street tree every 50m] Allowance for timber edging to last	13.00	No	50.00	650.00
77	50 x 50 hardwood stakes to trees	13.00	No	5.00	65.00
	Miscellaneous				
78	Landscape maintenance	12.00	Months	2,400.00	28,800.00
79	Subtotal				<u>848,562.50</u>
80	PRELIMINARIES AND MARGIN	1.00	Item	769,813.00	769,813.00
81	GST EXCLUSIVE SUBTOTAL				<u>7,184,926.00</u>
82	2 CONSULTANTS FEES	1.00	Item	680,074.00	680,074.0
83	AUTHORITY FEES & CHARGES	1.00	Item		EXCL
84	GST EXCLUSIVE TOTAL - STAGE 6				<u>7,865,000.00</u>
85	5 \$/Lot	1.00	Item	1,310,833.33	
86	\$/m2 of Site Area	1.00	Item	25.74	
				Total :	7,865,000.00

7.0 GST EXCLUSIVE TOTAL

Total :

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