



KEMBLA GRANGE RESOURCE RECOVERY  
FACILITY  
50 WYLIE ROAD, KEMBLA GRANGE  
CAPITAL INVESTMENT VALUE ESTIMATE

*Newcastle :: Sydney :: Melbourne*  
*8 August 2018*



8 August 2018

Jackson Environment and Planning Pty Ltd  
Suite 102, Level 1, 25 Berry Street  
**NORTH SYDNEY NSW 2060**

**ATTENTION: MARK JACKSON**

Dear Mark,

**RE: KEMBLA GRANGE RESOURCE RECOVERY FACILITY  
50 WYLIE ROAD, KEMBLA GRANGE  
CAPITAL INVESTMENT VALUE ESTIMATE**

---

As per your request dated 2 August 2018, Muller Partnership has prepared a Capital Investment Value Estimate for the abovementioned project totalling **\$4,880,000 Excl. GST** and enclose our report.

*The purpose of this assessment is to determine the current construction cost value of the proposed development for information only and is not to be used for project budgeting, finance, insurance, sale, mortgage or any other purposes.*

Muller Partnership are able to provide quotations separately for any of the above services if required.

Should you have any queries or require any further information please do not hesitate to contact the undersigned.

Yours faithfully

**MULLER PARTNERSHIP**



**CAMERON BEARD –Director**

CB:CB – 18259 Kemplra Grange Resource Recovery Facility - Capital Investment Value

**Disclaimer**

Muller Partnership have prepared this report in part on the basis of information supplied to it in the ordinary course of business by Mark Jackson from Jackson Environment and Planning Pty Ltd.

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 the Jackson Environment and Planning Pty Ltd 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 Jackson Environment and Planning Pty Ltd, 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 Jackson Environment and Planning Pty Ltd 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	By	Review	Approved
1	8/08/2018	Capital Investment Value Estimate	JD/TH	CB	CB

## CONTENTS

1.0	EXECUTIVE SUMMARY .....	5
2.0	SCHEDULE OF INFORMATION .....	6
3.0	ASSUMPTIONS.....	7
4.0	EXCLUSIONS .....	8
	APPENDIX A – CAPITAL INVESTMENT VALUE ESTIMATE .....	9

### **Glossary of Key Terms**

<i>Preliminaries &amp; Margin</i>	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, craneage, site cleaning, OH&S management, QA, etc.
-----------------------------------	--

## 1.0 EXECUTIVE SUMMARY

### **Project Description**

The project involves the upgrade of the existing Resource Recovery Facility located at 50 Wylie Road, Kembla Grange to include additional rainwater reuse tanks (5 No), firewater tanks (2 No. x 150KL) outdoor picking station and indoor crushing plant.

New works generally consist of site preparation, bulk / detail earthworks, concrete substructure, steel framed, colorbond clad buildings, concrete bay walls, new firewater tanks and associated pumps, new rainwater reuse tanks and operating plant and equipment.

## 2.0 SCHEDULE OF INFORMATION

The information used in compiling our Capital Investment Value Estimate includes the following:

- Jackson Environment & Planning Pty Ltd's Environmental Impact Statement Draft Report dated 1 August 2018;
- Site layout drawing prepared by Dewcape dated 17/07/18;
- Cook + Roe Structural Engineers Pick Station Slab Plans and Steelwork Stair plan details;
- Sparks + Partners Consulting Engineers Fire service upgrade drawings dated 21/08/17;
- Correspondence with Mr. Mark Jackson of Jackson Environment and Planning Pty Ltd in relation to scope (numerous);

All rates used within our Capital Investment Value Estimate have been gathered from our in-house 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

The following assumptions have been made in the preparation of the attached Capital Investment Value Estimate:-

#### Generally

1. The works will be competitively tendered to a suitable number of qualified contractors under a fixed lump sum contract;
2. Assumed works to construction site are to be complete in normal working hours;
3. Assumed builder will have clear access to the work area;
4. Assumed existing service connections are sufficient (NB: Unless noted otherwise in our foregoing estimate);
5. Assumed no hazardous material to be removed from site;

#### Specifically

6. All hazardous materials and excess spoil is to be stockpiled and remain on site;
7. No tree removal has been allowed;
8. No driveway or circulation works have been allowed;
9. No allowance for new site signage has been allowed;
10. All electrical services have been assumed to include extent of lighting and connection requirements;
11. No retaining walls have been allowed (NB: Site assumed level);
12. Assumed 3000 long x 2000 high movable precast panels are adequate for bay walls;
13. No fencing has been allowed;
14. Supply of equipment has been adopted as per Jackson Environment & Planning advice;

## 4.0 EXCLUSIONS

Within the following Capital Investment Value Estimate the acronym 'EXCL' means work that has not been included in our estimate. We specifically note the following exclusions from the estimated cost:

### General

1. Land costs and legal fees [NB: Unless noted otherwise];
2. Holding costs and interest charges;
3. GST;
4. Escalation;
5. Removal of contaminated / hazardous materials;
6. Authority's fees and charges;
7. Design & Consultant costs (Pre Construction costs);
8. Soil remediation;
9. Delay costs;
10. Cost of finance;

### Project Specific Exclusions

11. Demolition of existing sheds/buildings on site;
12. Site Fencing;
13. Spoil removal off site;
14. Dewatering;
15. Waste bins/Receptacles;
16. Linemarking to internal roads/carparks;
17. Services Relocations/ replacements [NB: Unless otherwise noted];
18. Out of hours work;
19. Retaining walls;
20. Internal road upgrades;



## APPENDIX A – CAPITAL INVESTMENT VALUE ESTIMATE

**Kembla Grange Resource Recovery Facility**  
**50 Wylie Road, Kembla Grange**  
**Capital Investment Value Estimate**

**MAIN COST SUMMARY**

<i>Ref</i>	<i>Description</i>	<i>%</i>	<i>Cost/ m2</i>	<i>Sub Total</i>	<i>Total</i>
1.0	RAINWATER STORAGE TANK INSTALLATION	1.23	25.39	59,830	59,830
2.0	FIREWATER TANKS & PUMP HOUSE	6.23	129.09	304,125	304,125
3.0	OUTDOOR PICKING STATION	11.51	238.31	561,455	561,455
4.0	INDOOR CRUSHING PLANT	16.24	336.48	792,750	792,750
5.0	SITWORKS & LANDSCAPING	1.02	21.22	50,000	50,000
6.0	WORKS OUTSIDE BOUNDARY				
7.0	PRELIMINARIES AND MARGIN	4.34	89.92	211,839	211,840
8.0	<b>SUBTOTAL [EXCL GST]</b>				<u>1,980,000</u>
9.0	PLANT & EQUIPMENT	59.43	1,230.90	2,900,000	<u>2,900,000</u>
10.0	<b>TOTAL [EXCL GST]</b>				<u>4,880,000</u>
		<b>100.00</b>	<b>2,071.31</b>	<b>4,879,999</b>	<b>4,880,000</b>

**GFA: 2,356 m2.**

**Kembla Grange Resource Recovery Facility**  
**50 Wylie Road, Kembla Grange**  
**Capital Investment Value Estimate**

## ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
<b>1.0 RAINWATER STORAGE TANK INSTALLATION</b>					
<u><b>Site Preparation</b></u>					
1	Allowance for site clearing works to proposed rainwater reuse tank area	195.00	m2	5.00	975.00
2	Bulk earthworks to achieve required levels	59.00	m3	65.00	3,835.00
<u><b>Substructure</b></u>					
3	150mm thick reinforced concrete [40MPa] slab on ground comprising SL82 top & bottom mesh, laid on 50mm sand blinding complete [NB: Assumed - No Details Provided]	195.00	m2	92.00	17,940.00
<u><b>Tanks &amp; Connections</b></u>					
4	Supply & install 14KL rainwater reuse tank	1.00	No	2,580.00	2,580.00
5	Ditto 46.5KL ditto	4.00	No	6,750.00	27,000.00
6	Allowance for plumbing connections to last	5.00	No	1,500.00	7,500.00
				<b>Total :</b>	<b>59,830.00</b>
<b>2.0 FIREWATER TANKS &amp; PUMP HOUSE</b>					
<u><b>Site Preparation</b></u>					
1	Allowance for site clearing works to proposed firewater tank area	250.00	m2	5.00	1,250.00
2	Bulk earthworks to achieve required levels	75.00	m3	65.00	4,875.00
<u><b>Substructure</b></u>					
3	150mm thick reinforced concrete [40MPa] slab on ground comprising SL82 top & bottom mesh, laid on 50mm sand blinding complete [NB: Assumed - No Details Provided]	250.00	m2	92.00	23,000.00
<u><b>Tanks &amp; Connections</b></u>					
4	Supply & install 150KL firewater tank	2.00	No	27,500.00	55,000.00
5	Allowance for plumbing connections to last	2.00	No	5,000.00	10,000.00
<u><b>Pumps &amp; Equipment</b></u>					
6	Allowance for pumps and equipment for firewater system	1.00	Item	175,000.00	175,000.00
7	Allowance for storage shed to last	1.00	Item	35,000.00	35,000.00
				<b>Total :</b>	<b>304,125.00</b>
<b>3.0 OUTDOOR PICKING STATION</b>					
<u><b>Site Preparation</b></u>					
1	Allowance for site clearing works to proposed firewater tank area	971.00	m2	5.00	4,855.00
2	Bulk earthworks to achieve required levels	292.00	m3	65.00	18,980.00
<u><b>Substructure</b></u>					

**Kembla Grange Resource Recovery Facility**  
**50 Wylie Road, Kembla Grange**  
**Capital Investment Value Estimate**

## ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
<b>3.0 OUTDOOR PICKING STATION</b>					(Continued)
3	150mm thick reinforced concrete [40MPa] slab on ground comprising SL82 top & bottom mesh, laid on 50mm sand blinding complete [NB: Assumed - No Details Provided] <u>Stairs</u>	700.00	m2	92.00	64,400.00
4	Structural steel staircase <u>Upper Floors</u>	1.00	No	6,500.00	6,500.00
5	Suspended concrete picking station slab	156.00	m2	320.00	49,920.00
6	Handrails to last <u>Roof</u>	64.00	m	450.00	28,800.00
7	Allowance for structural steel framing complete	700.00	m2	150.00	105,000.00
8	Colorbond cladding and roof plumbing to last <u>Walls</u>	700.00	m2	85.00	59,500.00
9	Allowance for 960 wide overall x 3000 long x 2000 high movable precast bay panels [NB: Provisional] <u>Electrical Services</u>	20.00	No	3,900.00	78,000.00
10	Allowance for electrical services complete <u>Misc Works</u>	700.00	m2	65.00	45,500.00
11	Allowance for an air conditioned enclosed pick room	1.00	Item	100,000.00	100,000.00
				<b>Total :</b>	<b>561,455.00</b>

## 4.0 INDOOR CRUSHING PLANT

### Site Preparation

1	Allowance for site clearing works to proposed indoor crushing plant	1,500.00	m2	5.00	7,500.00
2	Bulk earthworks to achieve required levels	450.00	m3	65.00	29,250.00

### Substructure

3	150mm thick reinforced concrete [40MPa] slab on ground comprising SL82 top & bottom mesh, laid on 50mm sand blinding complete [NB: Assumed - No Details Provided] <u>Roof</u>	1,500.00	m2	92.00	138,000.00
---	--	----------	----	-------	------------

4	Allowance for structural steel framing complete	1,500.00	m2	150.00	225,000.00
5	Colorbond cladding and roof plumbing to last	1,500.00	m2	85.00	127,500.00

### External Walls & Doors

6	Colorbond cladding fixed to battens complete	960.00	m2	80.00	76,800.00
7	Extra over allowance for roller doors	6.00	No	3,500.00	21,000.00

**Kembla Grange Resource Recovery Facility**  
**50 Wylie Road, Kembla Grange**  
**Capital Investment Value Estimate**

## ESTIMATE DETAILS

Ref	Description	Quantity	Unit	Rate	Amount
<b>4.0 INDOOR CRUSHING PLANT</b>					(Continued)
8	Allowance for 960 wide overall x 3000 long x 2000 high movable precast bay panels [NB: Provisional] <u>Electrical Services</u>	18.00	No	3,900.00	70,200.00
9	Allowance for electrical services complete	1,500.00	m2	65.00	97,500.00
				<b>Total :</b>	<b>792,750.00</b>
<b>5.0 SITEWORKS &amp; LANDSCAPING</b>					
1	Allowance for siteworks and landscaping [Provisional]	1.00	Item	50,000.00	50,000.00
				<b>Total :</b>	<b>50,000.00</b>
<b>6.0 WORKS OUTSIDE BOUNDARY</b>					
1	Allowance for works outside site boundary	1.00	Item		<b>EXCL</b>
				<b>Total :</b>	
<b>7.0 PRELIMINARIES AND MARGIN</b>					
				<b>Total :</b>	
<b>8.0 SUBTOTAL [EXCL GST]</b>					
1					
				<b>Total :</b>	
<b>9.0 PLANT &amp; EQUIPMENT</b>					
<u>Outdoor Picking Station</u>					
1	Terex Screen [NB: Adopted values as per Jackson Environment & Planning advice]	1.00	Item	350,000.00	350,000.00
2	Conveyors (x 2) [Ditto]	1.00	Item	120,000.00	120,000.00
3	Air blower (for plastics separation) [Ditto]	1.00	Item	100,000.00	100,000.00
4	De-stoning screen (for separating >80mm aggregate from plastics) [Ditto]	1.00	Item	160,000.00	160,000.00
5	Diesel generator [Ditto]	1.00	Item	80,000.00	80,000.00
<u>Crushing Plant</u>					
6	225 tonne per hour Horizontal impactor crusher [Ditto]	1.00	Item	580,000.00	580,000.00
7	Deck horizontal screen [Ditto]	1.00	Item	300,000.00	300,000.00
8	2 x Electro magnets on stands [Ditto]	1.00	Item	220,000.00	220,000.00

**Kembla Grange Resource Recovery Facility**  
**50 Wylie Road, Kembla Grange**  
**Capital Investment Value Estimate**

## ESTIMATE DETAILS

<i>Ref</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Amount</i>
<b>9.0 PLANT &amp; EQUIPMENT</b>					(Continued)
<b>9</b>	2 x 20kw Blowers mounted on conveyors [Ditto]	1.00	Item	170,000.00	170,000.00
<b>10</b>	Apron feeder with protection wall [Ditto]	1.00	Item	250,000.00	250,000.00
<b>11</b>	8 Conveyors [Ditto]	1.00	Item	490,000.00	490,000.00
<b>12</b>	14m radial stacker [Ditto]	1.00	Item	80,000.00	80,000.00
				<b>Total :</b>	<b>2,900,000.00</b>

### 10.0 TOTAL [EXCL GST]

				<b>Total :</b>	
--	--	--	--	----------------	--