

## Quantity Surveying Infrastructure Cost Estimates

### Topics that will be discussed are as follows:

- \* Context for Costs
- \* Types of Cost Estimates
- \* Costs included in Contribution Plan Estimates
- \* Types of Infrastructure that Need Costing
- \* Greenfield and Brownfield Developments
- \* Indexation / Escalation
- \* Lessons Learnt



### **Context for Costs**

Cost estimates are required for works schedules. Critical to get costs right to ensure council have sufficient funds to deliver infrastructure

Critical infrastructure generally 'black and white' and they only include essential works and there is not much room to value management or reduce costs once the designs are completed. Therefore, it is important to get costs right in the first instance to ensure infrastructure can be delivered.

Estimates are prepared using actually data and benchmarking.

### TYPES OF COST ESTIMATES

<u>Strategic</u> – length of roads, areas and type of park, volume size of basin, usable area of community facility;

<u>Concept</u> – road cross sections developed, intersection treatments identified, parks indicate paths, playgrounds, volume of basins indicated and area of raingarden show, and rooms indicated on community facilities;

<u>Detailed Design</u> – roads are mostly detailed so earthworks can be measured, parks have full layouts, basins and raingardens are detailed;

<u>Construction</u> – full detailed design and documentation so work can be measured based on tender documentation.

Generally, CP's have a long-life period of 10-20 years so it is important they are periodically updated CP when design iterations progress or cost data needs to be updated to ensure the rates are current.

### **COSTS INCLUDED IN ESTIMATES**

- \* Construction
- \* Long Service Levy
- \* Design and Professional Fees
- \* Project Management
- \* Approval Costs
- \* Contingency
- \* Escalation (if applicable and not adjusted with indexation)

### Types of Infrastructure that Need Costing & Difference Between **Brownfield & Greenfield Developments**

- \* Transport Incl. Roads, Intersection Treatments, Bridges/Culvert Crossings, Cycleways/Shared Paths
- \* Open Space
- \* Stormwater, Basins, Raingardens, Swales / Channels
- \* Community Facilities

### Indexation / Escalation

	ABS - CPI Aus		ABS - CPI Syd		ABS - 30 Building Aust		ABS - 30 Building NSW		ABS - 3101 Road and Bridge Aust		ABS - 3101 Road and Bridge NSW		ABS - 3020 Non- Resi Build Aust		ABS - 3020 Non- Resi Build NSW		TfNSW Road TCI (excluding property)	TfNSW Road TCI (including property)		Rawlinsons BPI Sydney		AIQS BPI Sydney	
Oct-06				87.2								81.7											
2010			10.89%	96.7							14.44%	93.5											
2015		108.4	0.00%	96.7		107.8		112.1		107.9	17.43%	109.8		104.2		106.6					110.9	July	274.0
2016	1.48%	110.0	14.68%	110.9	1.86%	109.8	3.48%	116.0	-0.65%	107.2	0.73%	110.6	1.92%	106.2	3.94%	110.8				3.30%	114.6	4.01%	285.0
2017	1.91%	112.1	2.16%	113.3	2.46%	112.5	3.88%	120.5	2.89%	110.3	1.54%	112.3	1.60%	107.9	3.70%	114.9				3.20%	118.2	1.75%	290.0
2018	1.78%	114.1	1.68%	115.2	2.31%	115.1	3.82%	125.1	4.99%	115.8	4.19%	117.0	2.41%	110.5	3.48%	118.9				1.51%	120.0	4.48%	303.0
2019	1.84%	116.2	1.65%	117.1	0.78%	116.0	1.04%	126.4	1.12%	117.1	1.11%	118.3	1.45%	112.1	2.19%	121.5				1.99%	122.4	4.29%	316.0
2020	0.86%	117.2	0.77%	118.0	0.78%	116.9	-0.79%	125.4	-0.26%	116.8	1.10%	119.6	0.00%	112.1	-1.48%	119.7				4.32%	127.7	5.06%	332.0
2021	3.50%	121.3	3.05%	121.6	7.78%	126.0	8.05%	135.5	4.37%	121.9	3.18%	123.4	6.42%	119.3	8.02%	129.3				5.11%	134.2	1.51%	337.0
Jun-22	3.96%	126.1	3.37%	125.7	6.83%	134.6	6.27%	144.0	5.82%	129.0	5.51%	130.2	4.78%	125.0	4.95%	135.7				5.30%	141.3	5.93%	357.0
Jun-23	6.03%	133.7	6.60%	134.0	6.46%	143.3	7.85%	155.3	6.20%	137.0	5.91%	137.9	6.08%	132.6	7.15%	145.4	7.00%	6.70%		5.55%	149.2	5.88%	378.0
Mar-24	2.77%	137.4	2.76%	137.7	4.88%	150.3	4.19%	161.8	3.80%	142.2	4.93%	144.7	5.66%	140.1	5.09%	152.8	4.70%	5.10%		3.62%	154.6	4.50%	395.0
2025																	4.10%	4.70%				4.05%	411.0
2026																	3.70%	4.40%					
2027																	3.30%	4.10%					
Forecast																							

# Thank you



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