

Broken Hill Murray Pipeline
Preliminary Cost Estimate
OD 813 (ID 765mm) x 8mm Steel "Sintakote" Pipeline
System capacity = 36 ML/d

Note: All rates are Year 2014 and GST exclusive.

No	Item	Unit	Quantity	Rate	Amount	Total
1	OD 813 MSCL Transfer Pipeline					\$279,728,000
1.1	OD813 x 8mm, Mild Steel Cement Lined (MSCL) pipe	m	270,000	\$ 992	\$ 267,745,500	
1.2	DN100 Air valves (including hydrant isolator and concrete pit)	Each	338	\$ 7,214	\$ 2,434,725	
1.3	DN150 Scour valves	Each	338	\$ 5,850	\$ 1,974,375	
1.4	DN750 Isolation valves	Each	56	\$ 63,800	\$ 3,572,800	
1.5	Surge tanks, pressure vessels, other surge mitigation requirements (allowance)	Item	1	\$ 1,500,000	\$ 1,500,000	
1.6	Crossings - 1 rail single track + 2 bridges (allowance)	Item	1	\$ 2,500,000	\$ 2,500,000	
2	River Lift Pumping Station - Murray River Lock 9 Weirpool, Fort Courage					\$3,400,000
2.1	55 kW Submersible lift pumps (2 duty, 1 standby)	Sets	3	\$ 150,000	\$ 450,000	
2.2	Pipework and valves (includes switchboard and installation)	Sets	3	\$ 90,000	\$ 270,000	
2.3	River intake headwall (allowance)	Item	1	\$ 300,000	\$ 300,000	
2.4	Wet Well Pumping Station, 4.2 m dia x 6 m deep	Each	1	\$ 500,000	\$ 500,000	
2.5	Intake screen	Each	1	\$ 150,000	\$ 150,000	
2.6	Electrical works (allowance)	Item	1	\$ 365,000	\$ 365,000	
2.7	High Voltage Power Supply (allowance, 50% of site cost)	Item	1	\$ 1,200,000	\$ 1,200,000	
2.8	Fencing and gate (allowance)	Item	1	\$ 15,000	\$ 15,000	
2.9	Access road (allowance)	Item	1	\$ 150,000	\$ 150,000	
3	Pumping Station No. 1 - Adjacent to Murray River, Fort Courage					\$5,005,000
3.1	Split case pumping units, 450 kW each (2 duty, 1 standby)	Sets	3	\$ 350,000	\$ 1,050,000	
3.2	Pipework and valves (includes switchboard and installation)	Sets	3	\$ 180,000	\$ 540,000	
3.3	250 kL Screening and balancing reservoir (allowance)	Item	1	\$ 300,000	\$ 300,000	
3.4	Lifting system/Gantry crane	Each	1	\$ 120,000	\$ 120,000	
3.5	Slab and brick building for pumps & LV switchgear	Each	1	\$ 650,000	\$ 650,000	
3.6	Electrical works (allowance)	Each	1	\$ 930,000	\$ 930,000	
3.7	High Voltage Power Supply (allowance, 50% of site cost)	Item	1	\$ 1,200,000	\$ 1,200,000	
3.8	Fencing and gate (allowance)	Item	1	\$ 15,000	\$ 15,000	
3.9	Access road (allowance)	Item	1	\$ 200,000	\$ 200,000	
4	Pumping Station No. 2 - Chainage 101km					\$15,345,000
4.1	Split case pumping units, 450 kW each (2 duty, 1 standby)	Sets	3	\$ 350,000	\$ 1,050,000	
4.2	Pipework and valves (includes switchboard and installation)	Sets	3	\$ 180,000	\$ 540,000	
4.3	500 kL Balancing reservoir (allowance)	Item	1	\$ 500,000	\$ 500,000	
4.4	Lifting system/Gantry crane	Each	1	\$ 120,000	\$ 120,000	
4.5	Slab and brick building for pumps & LV switchgear	Each	1	\$ 650,000	\$ 650,000	
4.6	Electrical works (allowance)	Each	1	\$ 970,000	\$ 970,000	
4.7	High Voltage Power Supply (allowance)	Item	1	\$ 11,300,000	\$ 11,300,000	
4.8	Fencing and gate (allowance)	Item	1	\$ 15,000	\$ 15,000	
4.9	Access road (allowance)	Item	1	\$ 200,000	\$ 200,000	
5	Pumping Station No. 3 - Chainage 205km					\$14,505,000
5.1	Split case pumping units, 750 kW each (2 duty, 1 standby)	Sets	3	\$ 500,000	\$ 1,500,000	
5.2	Pipework and valves (includes switchboard and installation)	Sets	3	\$ 200,000	\$ 600,000	
5.3	500 kL Balancing reservoir (allowance)	Item	1	\$ 500,000	\$ 500,000	
5.4	Lifting system/Gantry crane	Each	1	\$ 140,000	\$ 140,000	
5.5	Slab and brick building for pump installation	Each	1	\$ 650,000	\$ 650,000	
5.6	Electrical works (allowance)	Each	1	\$ 1,200,000	\$ 1,200,000	
5.7	High Voltage Power Supply (allowance)	Item	1	\$ 9,700,000	\$ 9,700,000	
5.8	Fencing and gate (allowance)	Item	1	\$ 15,000	\$ 15,000	
5.9	Access road (allowance)	Item	1	\$ 200,000	\$ 200,000	
6	Telemetry Works (Entire System)					\$700,000
6.1	Telemetry works (allowance)	Item	1	\$ 700,000	\$ 700,000	
	DIRECT CONSTRUCTION COST - SUB TOTAL					\$318,683,000
7	Contingencies					
	Construction contingencies (% of sub total)	Item		20.0%		\$63,737,000
	TOTAL COST					\$382,420,000