Costs for s	olar pumping pro	ject		
Materials		incl GST		
	Fence			
		18x used bridge panels for fencing	\$2,340	
		Used 32nb pipe for ground mount \$2.50/m	\$140	
		1.5" pipe for fencing	\$250	
		7m3 Concrete (Includes Pontoon Anchor)	\$1,869	
		108 M20x150mm Anchor bolts, nuts and washers	\$477	
		70 M12x80 nuts bolts and washers	\$110	
		Chemical injection	\$200	
				\$5,386
	Spray Crete			
		Cement	\$150	
		Sand	\$180	
	Constant Advant			\$330
	Ground Mount	Hardwood 4x2" 24@4m \$2/lm	\$192	
			\$192 \$288	
		Roof sheeting 96lm@\$3/m	\$30	
		Roofing screws x754 Flashing 30lm and screws	\$418	
		12x Ground Screws	\$418 \$240	
			\$240 \$227	
		M12 Threaded rod bracing, nuts and washers Reinforcing	\$227 \$120	
		Reinforcing		\$1,515
	Array and Rails			71,313
	, , , , , , ,	12 225W panels and Rails	\$500	
		3kw of rails	, \$50	
		24x270W solar Panels and rails	\$1,800	
		6x250W solar Panels	\$300	
		Solar rail parts	\$384	
		Bird spikes	\$202	
				\$3,237
	Pump, Inverter 8			
		Solar pump and inverter	\$6,865	
		2 lengths 40mm conduit and bend	\$40	
		Gal Spray	\$17	
		Electrical cable, conduit and plugs	\$1,172	
		Shielded Drive Cable	\$22	
		Braided Cable	\$20	
		Cable glands and electrical fittings	\$86	
		J Box and terminal strips	\$76	
		Cable and connectors	\$52	
		Surge arrestors	\$110	
		24V Surge arrestors	\$596	40.5=5
				\$9,056

Pipe and Fittings			
,	Pipe fittings	\$68	
	Pipe fittings, gauges, flow switch, pressure switch	\$1,130	
	Pressure tank and fittings	\$446	
			\$1,644
Pontoon	16' catamaran	\$100	
	14' catamaran	\$100 \$150	
	3 Pontoon floats and ramp	\$250	
	Pontoon repairs	\$230 \$40	
	Scrap Aluminium for pontoon jetty	\$490	
	Reinforcement	\$490 \$75	
		\$150	
	Stainless pipe for pontoon piers	•	
	Concrete for pontoons	\$495 \$521	
	Concreting labour	•	
	Plastic rod to make pontoon bungs	\$26	
	Stainless threaded rod for pontoons Stainless Bolts for Pontoons	\$19 \$159	
		•	
	Mig gas and tips	\$117	
	Aluminium angle	\$64	
	Stainless bracing wire fittings Stainless Turnbuckles	\$138	
		\$83	
	Stainless screws	\$205	
	Fibreglass and timber decking Stainless screws	\$200 \$274	
	Stailless sciews		\$3,556
Flying Fox			, -,
	Steel wire for creek catenary	\$162	
	Stainless hooks and wire	\$27	
	2 100x10 gal angle posts for creek catenary	\$30	
	Boat winch for catenary	\$40	
	2nd hand boat winch	\$5	
	Stainless shackles and rope grips	\$45	
	Expanding foam for floats	\$35	
	Stainless Shackles	\$17	
	Stainless shackles and rope grips	\$45	
	Stainless rope grips	\$20	
	Polyester Rope	\$65	
	PVC pipe for 2nd Stillage tube	\$22	
			\$514
Equipment hire	Project Materials Cost		\$25,238
Equipment fille	7hrs Hydraulic auger	\$250	
	32m concrete boom pump	\$530	
	1 hr crane truck hire	\$100	
			\$880
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Labour		
Owners labour not included	83hrs at \$33/hr	\$2,739
Estimate 400hrs	Electrical Mega test	\$132
		\$2,871
	TOTAL PROJECT COST	\$28,989