

12935 - Kendal 30 Year ADF - Cost Estimate

Item No.	Item	No.	Length (m)	Area m ²	Depth	Volume m ³	Ton (t)	Rate	Amount
1	Site Clearance								
1.1	Lined footprint area			4 047 000				R 5.00	R 20 235 000.00
1.2	Dirty Water Channels			35 624				R 5.00	R 178 119.90
1.3	Pollution Control Dam			125 492				R 5.00	R 627 460.00
1.4	Clean Water Dams			88 262				R 5.00	R 441 310.00
1.5	Ring Road		9000	63 000				R 5.00	R 315 000.00
1.6	e-dump			29 500				R 5.00	R 147 500.00
1.7	Conveyor system		2500	132 500				R 5.00	R 662 500.00
1.8	Conveyor Road Crossing			33 500				R 5.00	R 167 500.00
	<i>Sub-total</i>								<i>R 22 774 389.90</i>
2	Earthworks								
2.1	Excavation for Footprint Liner			4 047 000	0.5	2 023 500		R 45.00	R 91 057 500.00
2.2	Construction of starter walls for Footprint lined area					200 000		R 65.00	R 13 000 000.00
2.3	Excavation for PCD Floor					726 966		R 45.00	R 32 713 470.00
2.4	Excavation for PCD Liner			125 492	0.3	37 648		R 45.00	R 1 694 142.00
2.5	Excavation for Subsurface drainage				0.6	0		R 45.00	R 0.00
2.6	Construction of PCD wall					360 522		R 65.00	R 23 433 930.00
2.7	Excavation for Dirty water channels					9 518		R 45.00	R 428 305.32
2.8	Excavation for Clean water channels					12 212		R 45.00	R 549 543.06
2.9	Construction of Diversion and separation berms					5 000		R 65.00	R 325 000.00
2.10	Box-cut for Ring roads		9000	63 000	0.6	37 800		R 45.00	R 1 701 000.00
2.11	Excavation for e-dump			29 500	1.5	44 250		R 45.00	R 1 991 250.00
2.12	Excavation for Conveyor system		2500	100 000	0.3	30 000		R 45.00	R 1 350 000.00
2.13	Excavation for Conveyor Road Crossing			33 500	4	134 000		R 45.00	R 6 030 000.00
	<i>Sub-total</i>								<i>R 174 274 140.38</i>
3	Liner System								
3.1	Subsoil Drainage								
3.1.1	19 mm Stone		29697	0.73		21 676		R 300.00	R 6 502 696.92
3.1.2	160 mm Diameter drainage pipe		29697					R 120.00	R 3 563 640.00
3.1.3	Geotextile		29697	103 940				R 45.00	R 4 677 277.50
	<i>Sub-total 1</i>								<i>R 14 743 614.42</i>
3.2	Liner								
3.2.1	Compact in-situ material (150 mm thk)			4 047 000	0.15	607 050		R 200.00	R 121 410 000.00
3.2.2	Compact in-situ material (150 mm thk)			4 047 000	0.15	607 050		R 250.00	R 151 762 500.00
3.2.3	2 mm double texture HDPE			4 047 000				R 60.00	R 242 820 000.00
3.2.4	Cusped Drain			4 047 000				R 50.00	R 202 350 000.00
3.2.5	Geotextile			4 047 000				R 60.00	R 242 820 000.00
	<i>Sub-total 2</i>								<i>R 961 162 500.00</i>
	<i>Sub-total</i>								<i>R 975 906 114.42</i>
4	Structural Concrete								
4.1	PCD Silt Trap Concrete					2 250		R 1 500.00	R 3 375 000.00
4.2	PCD Silt Trap Rebar						344	R 11 000.00	R 3 786 750.00
4.3	Channels Concrete					4 346		R 1 500.00	R 6 518 989.20
4.4	Channels Mesh			43 460				R 200.00	R 8 691 985.60
4.5	E-dump Concrete		760	29 024		7 598		R 1 500.00	R 11 397 000.00
4.6	E-dump Rebar						1140	R 11 000.00	R 12 536 700.00
4.7	Conveyor Crossings Culvert Bases			33 500	0.3	10 050		R 1 500.00	R 15 075 000.00
	Conveyor Crossings Culvert Bases Rebar						1508	R 11 000.00	R 16 582 500.00
	<i>Sub-total</i>								<i>R 77 963 924.80</i>
5	Pumps & Pipework								
5.1	Irrigation								
5.1.1	Pumps and associated pipework (Pump station)	4		600				R 20 000.00	R 24 080 000.00
5.1.2	Irrigation pipeline with irrigation sprayers		2000					R 300.00	R 600 000.00
5.2	Dust Suppression								
5.2.1	Pumps and associated pipework (Pump station)	10		600				R 20 000.00	R 60 200 000.00
5.2.2	Dust suppression pipeline with dust suppression sprayers		6550					R 300.00	R 1 965 000.00
	<i>Sub-total</i>								<i>R 86 845 000.00</i>
6	Ring Roads								
6.1	Rip and recompact in-situ		9000	63 000				R 10.00	R 630 000.00
6.2	G9 lower sub-grade		9000	63 000	0.15	9 450		R 200.00	R 1 890 000.00
6.3	G7 upper sub-grade		9000	63 000	0.15	9 450		R 250.00	R 2 362 500.00
6.4	C4 sub-base		9000	63 000	0.15	9 450		R 300.00	R 2 835 000.00
6.5	G2 base		9000	63 000	0.15	9 450		R 350.00	R 3 307 500.00
	<i>Sub-total</i>								<i>R 11 025 000.00</i>
7	Transnet Pipeline								
7.1	Deviation of pipeline		3.3		18			R 1 181 670.00	R 70 191 198.00
7.2	Fuel Costs		1.3	0.166		216		R 15.00	R 3 240 709.90
	<i>Sub-total</i>								<i>R 73 431 907.90</i>
8	Road Diversion								
8.1	Rip and recompact in-situ		3565	24 955				R 10.00	R 249 550.00
8.2	G9 lower sub-grade		3565	24 955	0.15	3 743		R 200.00	R 748 650.00
8.3	G7 upper sub-grade		3565	24 955	0.15	3 743		R 250.00	R 935 812.50
8.4	C2 sub-base		3565	24 955	0.15	3 743		R 300.00	R 1 122 975.00
8.5	G1 base		3565	24 955	0.15	3 743		R 350.00	R 1 310 137.50
	<i>Sub-total</i>								<i>R 4 367 125.00</i>
9	Conveyor System								
9.1	G7 material (200 mm)		2500	50 000	0.2	10 000		R 250.00	R 2 500 000.00
9.2	Wearing course (100 mm)		2500	50 000	0.1	5 000		R 350.00	R 1 750 000.00
9.3	Backfill G7		2500	25 000	0.1	2 500		R 250.00	R 625 000.00
9.4	Stormwater Channels		2500	12 500	0.15	1 875		R 1 500.00	R 2 812 500.00
9.5	Berms		2500	10 000	1	10 000		R 350.00	R 3 500 000.00
9.6	Mesh for stromwater channels		2500	12 500				R 200.00	R 2 500 000.00
9.7	Conveyor		2500					R 5 000.00	R 12 500 000.00
	<i>Sub-total</i>								<i>R 26 187 500.00</i>
10	Conveyor Crossings								
10.1	Portal Culverts	100						R 2 500.00	R 250 000.00
	<i>Sub-total</i>								<i>R 250 000.00</i>
11	Stormwater Management on Facility								
11.1	Stomwater Pipes		5000					R 2 500.00	R 12 500 000.00
11.2	Stormwater Berms		5000					R 1 500.00	R 7 500 000.00
	<i>Sub-total</i>								<i>R 20 000 000.00</i>
12	Transfer Houses								
12.1	Buildings			15 000				R 1 000.00	R 15 000 000.00
	<i>Sub-total</i>								<i>R 15 000 000.00</i>

