

**Notes for the person reading the sample:**

- This is the result of an original study in June 2002 and then reworked and presented in February 2006.
- Wherever possible, the identity of the client has been concealed. But all costs are actual. The report is not modified.
- The overall report is irrelevant today. It is presented merely to indicate our attention to detail.
- Many parameters used at that time are irrelevant today, so do not use the calculations except as a rough guideline.
- Ignore the formatting style – the report is almost one and a half decade old.

Projections of Performance & Profitability

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Sales	62,772	67,168	15,693	15,693	15,693	15,693	16,792	16,792	16,792	16,792
Other Income	152	152	38	38	38	38	38	38	38	38
Gross Revenues	-	62,924	15,731	15,731	15,731	15,731	16,830	16,830	16,830	16,830
Blasting	3,226	3,420	807	807	807	805	855	855	855	855
Salaries	3,131	3,319	783	783	783	783	830	830	830	830
Repairs & Maintenance	4,500	4,770	1,125	1,125	1,125	1,125	1,193	1,193	1,193	1,193
Diesel	10,709	11,352	2,677	2,677	2,677	2,677	2,838	2,838	2,838	2,838
Transport	6,949	7,366	1,737	1,737	1,737	1,737	1,842	1,842	1,842	1,842
Port Charges	15,580	16,515	3,895	3,895	3,895	3,895	4,129	4,129	4,129	4,129
Administration	6,965	7,383	1,741	1,741	1,741	1,741	1,846	1,846	1,846	1,846
Financial Expenses	1,337	1,033	364	343	325	305	287	267	249	230
Depreciation	4,618	3,694	1,156	1,156	1,153	1,153	924	924	923	923
Gross Expenses	-	57,015	14,286	14,265	14,244	14,222	14,742	14,722	14,703	14,684
Net Profit / (Net Loss)	-	5,909	1,446	1,467	1,488	1,510	2,088	2,108	2,127	2,146
Profit Before Depreciation (Cash)	-	10,527	2,602	2,623	2,641	2,663	3,012	3,032	3,050	3,069

Projections of Performance & Profitability (per ton)

All amounts in Dhs per ton (Averaged Over Total Production)

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Sales	23.32	24.95	23.32	23.32	23.32	23.32	24.95	24.95	24.95	24.95
Other Income	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Gross Revenues	- 23.38	25.01	23.38	23.38	23.38	23.38	25.01	25.01	25.01	25.01
Blasting	1.20	1.27	1.20	1.20	1.20	1.20	1.27	1.27	1.27	1.27
Salaries	1.16	1.23	1.16	1.16	1.16	1.16	1.23	1.23	1.23	1.23
Repairs & Maintenance	1.67	1.77	1.67	1.67	1.67	1.67	1.77	1.77	1.77	1.77
Diesel	3.98	4.22	3.98	3.98	3.98	3.98	4.22	4.22	4.22	4.22
Transport	2.58	2.74	2.58	2.58	2.58	2.58	2.74	2.74	2.74	2.74
Port Charges	5.79	6.14	5.79	5.79	5.79	5.79	6.14	6.14	6.14	6.14
Administration	2.59	2.74	2.59	2.59	2.59	2.59	2.74	2.74	2.74	2.74
Financial Expenses	0.50	0.38	0.54	0.51	0.48	0.45	0.43	0.40	0.37	0.34
Depreciation	1.72	1.37	1.72	1.72	1.71	1.71	1.37	1.37	1.37	1.37
Gross Expenses	- 21.19	21.86	21.23	21.20	21.16	21.13	21.91	21.88	21.85	21.82
Net Profit / (Net Loss)	- 2.19	3.15	2.15	2.18	2.22	2.25	3.10	3.13	3.16	3.19
Profit Before Depreciation (Cash)	- 3.91	4.52	3.87	3.90	3.93	3.96	4.47	4.50	4.53	4.56

All values distributed over a gross production as below of 224,310 tons per month.

Analysis of above costs in normal industry costing parlance:

Cash Cost	19.47	20.49	(Total cost excluding depreciation)
Ex Crusher Cost	12.11	12.62	(Total Cost excluding Dhs 2.50 for Transport, Dhs 1.50 Royalty & Dhs 5.00 Port Charges)
Production (Operations) Cost	9.73	9.86	(Blasting + Salaries + Repairs & Maintenance + Diesel + Depreciation)

## Projected Situation of Assets &amp; Liabilities (Balance Sheets)

All amounts in Dhs '000

Particulars	End 2005	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Fixed Assets (WDV)	23,085	18,467	14,773	21,929	20,773	19,620	18,467	17,543	16,619	15,696	14,773
Net Current Assets	(5,487)	5,833	13,808	(828)	1,373	3,592	5,833	5,923	8,533	11,160	13,808
<b>Total Assets</b>	<b>17,598</b>	<b>24,300</b>	<b>28,581</b>	<b>21,102</b>	<b>22,146</b>	<b>23,212</b>	<b>24,300</b>	<b>23,466</b>	<b>25,152</b>	<b>26,856</b>	<b>28,581</b>
Owned Funds	9,522	17,931	23,899	13,468	14,934	16,422	17,931	17,519	19,627	21,753	23,899
Long Term Liabilities	5,056	3,369	1,682	4,634	4,212	3,790	3,369	2,947	2,525	2,103	1,682
Working Capital Finance	3,020	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
<b>Total Liabilities</b>	<b>17,598</b>	<b>24,300</b>	<b>28,581</b>	<b>21,102</b>	<b>22,146</b>	<b>23,212</b>	<b>24,300</b>	<b>23,466</b>	<b>25,152</b>	<b>26,856</b>	<b>28,581</b>
Current Assets	-	-	-	-	-	-	-	-	-	-	-
Stock	3,232	3,919	3,974	3,919	3,919	3,919	3,919	3,974	3,974	3,974	3,974
Debtors	330	11,024	11,686	11,024	11,024	11,024	11,022	11,686	11,686	11,686	11,686
Fixed Deposits	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058
Cash & Bank Balances	19	(2,941)	4,979	(9,602)	(7,401)	(5,183)	(2,941)	(2,906)	(297)	2,331	4,979
<b>Total Current Assets</b>	<b>8,639</b>	<b>17,060</b>	<b>25,697</b>	<b>10,400</b>	<b>12,600</b>	<b>14,819</b>	<b>17,058</b>	<b>17,812</b>	<b>20,422</b>	<b>23,049</b>	<b>25,697</b>
Current Liabilities											
Creditors	13,923	11,024	11,686	11,024	11,024	11,024	11,022	11,686	11,686	11,686	11,686
Other Payables	203	203	203	203	203	203	203	203	203	203	203
<b>Total Current Liabilities</b>	<b>14,126</b>	<b>11,227</b>	<b>11,889</b>	<b>11,227</b>	<b>11,227</b>	<b>11,227</b>	<b>11,225</b>	<b>11,889</b>	<b>11,889</b>	<b>11,889</b>	<b>11,889</b>
Share Capital	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Carried Forward Profits / (Losses)	(4,172)	1,737	10,205	(2,727)	(1,260)	228	1,737	3,825	5,933	8,059	10,205
Balances in Current Accounts	3,694	6,194	3,694	6,194	6,194	6,194	6,194	3,694	3,694	3,694	3,694
<b>Total Owned Funds</b>	<b>9,522</b>	<b>17,931</b>	<b>23,899</b>	<b>13,468</b>	<b>14,934</b>	<b>16,422</b>	<b>17,931</b>	<b>17,519</b>	<b>19,627</b>	<b>21,753</b>	<b>23,899</b>

## Projected Funds Flow Statement

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007	
Cash Profits	10,527	12,162	2,602	2,623	2,641	2,663	3,012	3,032	3,050	3,069	
Decrease in Net Working Capital	-	-	-	-	-	-	-	-	-	-	
Transactions in Current Account	2,500	(2,500)	2,500	-	-	-	(2,500)	-	-	-	
Additional Borrowings	-	-	-	-	-	-	-	-	-	-	
Sale of Fixed Assets	-	-	-	-	-	-	-	-	-	-	
Any Other Transaction	-	-	-	-	-	-	-	-	-	-	
<b>Total Sources of Funds</b>	<b>-</b>	<b>13,027</b>	<b>9,662</b>	<b>5,102</b>	<b>2,623</b>	<b>2,641</b>	<b>2,663</b>	<b>512</b>	<b>3,032</b>	<b>3,050</b>	<b>3,069</b>
Increase in Net Working Capital	14,280	55	14,280	-	-	-	55	-	-	-	
Repayment of Loan	1,687	1,687	422	422	422	421	422	422	422	421	
Repayment of Working Capital Loan	20	-	20	-	-	-	-	-	-	-	
Purchase of Fixed Assets	-	-	-	-	-	-	-	-	-	-	
Any Other Transaction	-	-	-	-	-	-	-	-	-	-	
<b>Total Application of Funds</b>	<b>-</b>	<b>15,987</b>	<b>1,742</b>	<b>14,722</b>	<b>422</b>	<b>422</b>	<b>421</b>	<b>477</b>	<b>422</b>	<b>422</b>	<b>421</b>
Opening Balance of Funds	19	(2,941)	19	(9,602)	(7,401)	(5,183)	(2,941)	(2,906)	(297)	2,331	
Gross Funds Inflow	13,027	9,662	5,102	2,623	2,641	2,663	512	3,032	3,050	3,069	
Gross Funds Outflow	(15,987)	(1,742)	(14,722)	(422)	(422)	(421)	(477)	(422)	(422)	(421)	
Closing Balance of Funds	19	(2,941)	4,979	(9,602)	(7,401)	(5,183)	(2,941)	(297)	2,331	4,979	

Note that interim differences in the year are because of segregation of annual data into quarterly linear figures.

Calculation of Working Capital Requirement

All amounts in Dhs '000

Particulars	End 2005	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
<b>Current Assets</b>											
Stock	3,232	3,919	3,974	3,919	3,919	3,919	3,919	3,974	3,974	3,974	3,974
Debtors	330	11,024	11,686	11,024	11,024	11,024	11,022	11,686	11,686	11,686	11,686
Fixed Deposits	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058
Cash & Bank Balances	19	(2,941)	4,979	(9,602)	(7,401)	(5,183)	(2,941)	(2,906)	(297)	2,331	4,979
<b>Total Current Assets</b>	<b>8,639</b>	<b>17,060</b>	<b>25,697</b>	<b>10,400</b>	<b>12,600</b>	<b>14,819</b>	<b>17,058</b>	<b>17,812</b>	<b>20,422</b>	<b>23,049</b>	<b>25,697</b>
<b>Current Liabilities</b>											
Creditors	13,923	11,024	11,686	11,024	11,024	11,024	11,022	11,686	11,686	11,686	11,686
Other Payables	203	203	203	203	203	203	203	203	203	203	203
<b>Total Current Liabilities</b>	<b>14,126</b>	<b>11,227</b>	<b>11,889</b>	<b>11,227</b>	<b>11,227</b>	<b>11,227</b>	<b>11,225</b>	<b>11,889</b>	<b>11,889</b>	<b>11,889</b>	<b>11,889</b>
<b>Net Working Capital (excl cash)</b>	<b>(5,506)</b>	<b>8,774</b>	<b>8,829</b>	<b>8,774</b>	<b>8,774</b>	<b>8,774</b>	<b>8,774</b>	<b>8,829</b>	<b>8,829</b>	<b>8,829</b>	<b>8,829</b>
Finance from Bank	3,020	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Balance as Owner's Contribution	(8,507)	2,833	10,808	(3,828)	(1,627)	592	2,833	2,923	5,533	8,160	10,808
<b>Bases of Calculation:</b>											
Cost of Sales (Production & Distribution)		44,095	46,742	11,024	11,024	11,024	11,022	11,686	11,686	11,686	11,686
Base Stock		3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Stock at 1/4 months of cost of sale		919	974	919	919	919	919	974	974	974	974
<b>Total Stock</b>		<b>3,919</b>	<b>3,974</b>	<b>3,919</b>	<b>3,919</b>	<b>3,919</b>	<b>3,919</b>	<b>3,974</b>	<b>3,974</b>	<b>3,974</b>	<b>3,974</b>
Debtors at 3 months of cost of sale		11,024	11,686	11,024	11,024	11,024	11,022	11,686	11,686	11,686	11,686
Creditors @ 3 months of cost of sale		11,024	11,686	11,024	11,024	11,024	11,022	11,686	11,686	11,686	11,686

## Calculations and Assumptions

### Sales

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Monthly	20,924	22,388	5,231	5,231	5,231	5,231	5,597	5,597	5,597	5,597
QLY / YLY	62,772	67,168	15,693	15,693	15,693	15,693	16,792	16,792	16,792	16,792

Note that it is assumed that the market will push up the price of aggregate by 7.00% after 1 year, due to demand and normal inflation.

On a basic cost of Ex Crusher taken at Dhs 14.00, this reflects a net rate increase of abt Dhs 0.98 or say Dh 1.00 per ton.

### Other Income

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Fixed Deposits with Bank	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058	5,058
Interest @ 3.00% pa	152	152	38	38	38	38	38	38	38	38

Note that interest will be calculated on opening balance for the year.

### Blasting Expenses

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Blasting as calculated below	3,226	3,420	807	807	807	805	855	855	855	855

Expenses for quarrying are calculated in the basic monthly working. Quarrying cost includes Drilling, Blasting, Diesel for Equipments & Maintenance of the same, which comes under 'Material Movement to the Primary Hopper'. Crushing involves Power Generation and Maintenance on Plant. Here, we will consider only blasting cost. These are taken separately as this constitutes a major controllable cost.

The monthly blasting cost comes to 268,832

We assume an annual increase on account of inflation @ 6.00%

As prices are changed at the end of the year by suppliers, we are not taking a quarterly step of about 1.50% but a simple annual increase.

Therefore the expenses for 2006 would be 3,226

While the expenses for 2007 would be 3,420

## Other Production Expenses

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Salaries	3,131	3,319	783	783	783	783	830	830	830	830
Repairs & Maintenance	4,500	4,770	1,125	1,125	1,125	1,125	1,193	1,193	1,193	1,193
Diesel	10,709	11,352	2,677	2,677	2,677	2,677	2,838	2,838	2,838	2,838
Transport	6,949	7,366	1,737	1,737	1,737	1,737	1,842	1,842	1,842	1,842
Port Charges	15,580	16,515	3,895	3,895	3,895	3,895	4,129	4,129	4,129	4,129
	40,869	43,322	10,217	10,217	10,217	10,217	10,831	10,831	10,831	10,831

As above, all production expenses apart from Blasting will come under Quarrying & Crushing. As sale is at Port of Fghijkl, all expenses incurred till that point,

including transportation and port charges will need to be considered in this. Therefore, actual cost of sale will be reflected truly in accounts. This includes the following:

<u>Cost Accounting Head</u>	<u>Monthly</u>	<u>Annual for 2006</u>	<u>Annual for 2007</u>
Salaries	261	3,131	3,319
Repairs & Maintenance	375	4,500	4,770
Diesel	892	10,709	11,352
Transport	579	6,949	7,366
Port Charges	1,298	15,580	16,515
Total per month / year	3,406	40,869	43,322
Total per annum for 2006		40,869	
Total per annum for 2007 after considering inflation at 6.00%		43,321	

## Administration Expenses

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
As calculated below	6,965	7,383	1,741	1,741	1,741	1,741	1,846	1,846	1,846	1,846
Administration cost per month as per costing sheet & weighted average of past trend					580,432					
Total per annum for 2006					6,965					
Total per annum for 2007 after considering inflation at 6.00%					7,383					

## Interest &amp; Balance in Financial Assistance

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Vehicle Loans Opening Balance	36	29	36	34	32	30	29	27	25	23
Repayment as per statement	7	7	2	2	2	1	2	2	2	1
Charge assumed as per statement	5	5	2	1	1	1	2	1	1	1
Charge Payment	5	5	2	1	1	1	2	1	1	1
Closing Balance	36	29	34	32	30	29	27	25	23	22
Term Assistance Opening Balance	5,020	3,340	5,020	4,600	4,180	3,760	3,340	2,920	2,500	2,080
Repayment	1,680	1,680	420	420	420	420	420	420	420	420
Charge @ 18% Qly Reducing	790	488	226	207	188	169	150	131	113	94
Charge Payment	790	488	226	207	188	169	150	131	113	94
Closing Balance	5,020	3,340	4,600	4,180	3,760	3,340	2,920	2,500	2,080	1,660
Working Capital Finance Opening Balance	3,020	3,000	3,020	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Repayment	20	-	20	-	-	-	-	-	-	-
Charge @ 18%	542	540	136	135	136	135	135	135	135	135
Charge Payment	542	540	136	135	136	135	135	135	135	135
Closing Balance	3,020	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Total Finance Opening Balance	8,076	6,369	8,076	7,634	7,212	6,790	6,369	5,947	5,525	5,103
Repayment	1,707	1,687	442	422	422	421	422	422	422	421
Charge as calculated above	1,337	1,033	364	343	325	305	287	267	249	230
Charge Payment	1,337	1,033	364	343	325	305	287	267	249	230
Closing Balance	6,369	4,682	7,634	7,212	6,790	6,369	5,947	5,525	5,103	4,682

## Depreciation &amp; Fixed Assets Schedule

All amounts in Dhs '000

Particulars		FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Crusher Plants Gross Block		19,688	19,688	19,688	19,688	19,688	19,688	19,688	19,688	19,688	19,688
Accumulated Depreciation		4,127	5,627	5,627	6,330	7,033	7,736	8,439	9,002	9,565	10,127
Current Depreciation	20%	1,500	2,812	703	703	703	703	563	563	562	562
Closing WDV		14,061	11,249	13,358	12,655	11,952	11,249	10,686	10,123	9,561	8,999
Mobile Machineries Gross Block		9,496	9,496	9,496	9,496	9,496	9,496	9,496	9,496	9,496	9,496
Accumulated Depreciation		4,348	4,848	4,848	5,081	5,314	5,546	5,778	5,964	6,150	6,336
Current Depreciation	20%	500	930	233	233	232	232	186	186	186	186
Closing WDV		4,648	3,718	4,415	4,182	3,950	3,718	3,532	3,346	3,160	2,974
Gensets & Vehicles Gross Block		4,945	4,945	4,945	4,945	4,945	4,945	4,945	4,945	4,945	4,945
Accumulated Depreciation		1,347	1,697	1,697	1,860	2,023	2,185	2,347	2,477	2,607	2,737
Current Depreciation	20%	350	650	163	163	162	162	130	130	130	130
Closing WDV		3,248	2,598	3,085	2,922	2,760	2,598	2,468	2,338	2,208	2,078
Furniture & Camp Gross Block		1,411	1,411	1,411	1,411	1,411	1,411	1,411	1,411	1,411	1,411
Accumulated Depreciation		233	283	283	340	397	453	509	554	599	644
Current Depreciation	20%	50	226	57	57	56	56	45	45	45	45
Closing WDV		1,128	902	1,071	1,014	958	902	857	812	767	722
Total Gross Block		35,540	35,540	35,540	35,540	35,540	35,540	35,540	35,540	35,540	35,540
Accumulated Depreciation		10,055	12,455	12,455	13,611	14,767	15,920	17,073	17,997	18,921	19,844
Current Depreciation	As above	2,400	4,618	1,156	1,156	1,153	1,153	924	924	923	923
Closing WDV		23,085	18,467	21,929	20,773	19,620	18,467	17,543	16,619	15,696	14,773

- Notes:
- \* Depreciation is calculated by WDV Method in this calculation. Any purchase / sale during the projected period is not considered.
  - \* Accumulated Depreciation comprises depreciation charged till 30.06.2005.
  - \* Depreciation between 30.06.2005 to 31.12.2005 is charged ad hoc for this calculation, as it does not alter the situation significantly.

Financial & Ratio Analysis

All amounts in Dhs '000

Particulars	FY 2006	FY 2007	Q1, 2006	Q2, 2006	Q3, 2006	Q4, 2006	Q1, 2007	Q2, 2007	Q3, 2007	Q4, 2007
Net Profit (to Sales) Ratio	9.41%	12.61%	9.21%	9.34%	9.48%	9.62%	12.43%	12.55%	12.67%	12.78%
Cash Profit (to Sales) Ratio	16.77%	18.11%	16.58%	16.71%	16.83%	16.97%	17.94%	18.05%	18.16%	18.28%
Net Profit to Total Assets Ratio	24.32%	29.63%	6.85%	6.62%	6.41%	6.21%	8.90%	8.38%	7.92%	7.51%
Debt to Equity Ratio	35.52%	19.59%	56.68%	48.29%	41.35%	35.52%	33.95%	28.15%	23.46%	19.59%
Proprietary Funds Ratio	73.79%	83.62%	63.82%	67.43%	70.75%	73.79%	74.66%	78.03%	81.00%	83.62%
Current Ratio (times)	1.20	1.73	0.73	0.89	1.04	1.20	1.20	1.37	1.55	1.73
Acid Test Ratio (times)	1.17	1.83	0.58	0.77	0.97	1.17	1.16	1.38	1.60	1.83
Stock Holding Period Debtors' Period Creditors' Period	} } }	These are not calculated as the basis of working is taken on time basis. So, these will be fixed.								
Operating Expenses to Sales Ratio	10.13%	10.03%	10.13%	10.13%	10.13%	10.12%	10.03%	10.03%	10.03%	10.03%
Financial Expenses to Sales Ratio	2.13%	1.54%	2.32%	2.19%	2.07%	1.94%	1.71%	1.59%	1.48%	1.37%

## Working Notes:

Particulars			Achievable Quantity	Achievable Value
<u>Working Note 1: Sales</u>				
Sales Quantity				
Rate per ton	24.00	Dhs, for Aggregate.	202,500	4,860,000
Rate per ton	17.00	Dhs, for Crushed sand.	21,810	370,770
Rate per ton	0.00	Dhs, for Washed Sand.	69,790	-
Total Sales			<u>5,230,770</u>	<u>5,230,770</u>

Sale of Roadbase and Boulders is not considered in this calculation. Similarly, washed sand sales are not considered. Therefore, any processing cost for either of the above is also not taken into account. However, in various stages of calculation, physical quantities are mentioned.

<u>Working Note 2: Quarrying Expenses</u>			Achievable	Variable	Fixed
Blasting Cost			268,832	268,832	
Salaries			155,022		155,022
Repairs			250,000	175,000	75,000
Diesel			627,475	501,980	125,495
Depreciation			520,833		520,833
Total Cost			<u>1,822,162</u>	<u>945,812</u>	<u>876,350</u>

<u>Working Note 3: Crushing Expenses</u>					
Salaries			45,642		45,642
Repairs			125,000	87,500	37,500
Diesel			264,965	211,972	52,993
Depreciation			439,133		439,133
Total			<u>874,740</u>	<u>299,472</u>	<u>575,268</u>

<u>Working Note 4A: Transporting Expenses</u>			Achievable	Variable	Fixed
Particulars					
Salaries			18,310		18,310
Rent of Vehicles			560,775		560,775
Total			<u>579,085</u>	<u>-</u>	<u>579,085</u>

<u>Working Note 4B: Shipping Expenses</u>					
Salaries			1,061		1,061
Port Charges			1,297,283	1,289,783	7,500
Total			<u>1,298,344</u>	<u>1,289,783</u>	<u>8,561</u>

<u>Working Note 5: Administrative Expenses</u>					
Salaries			40,865		40,865
Royalty @ 1.50 per ton			441,150	441,150	
Sponsor @ 400,000 pa			33,333		33,333
Other Costs, as detailed later below		12,250	61,250	12,250	49,000
Depreciation			3,834		3,834
Total		12,250	<u>580,432</u>	<u>453,400</u>	<u>127,032</u>

## Working Note 6: Salaries

As per the supporting notes, salaries are expected to be as follows. Figures of monthly salaries are adjusted to include value of allowances and other benefits also. It includes value of overtime payments also.

Salaries & Wages	245,800
Labour Welfare	15,100
Total pm	<u>260,900</u>
Total Manpower	107
Average Emoluments	2,450

## Distribution of Manpower

Section		Equiv Persons	Salary Allocation (Gross)	Labour Welfare Allocations	Total
Quarry		59	146,050	8,972	155,022
Crusher	Normal	15	25,500	1,567	27,067
	Maintenance	10	17,500	1,075	18,575
Transport	Personnel	9	17,250	1,060	18,310
	Shipping	1	1,000	61	1,061
Administration		13	38,500	2,365	40,865
Total		<u>107</u>	<u>245,800</u>	<u>15,100</u>	<u>260,900</u>

<u>Section</u>	<u>Equivalent Persons</u>	<u>Designation</u>	<u>Monthly Sal</u>	<u>Total Salary</u>
Quarry Section:	4	Drillers	2,500	10,000
	2	Helpers	1,000	2,000
	1	Blasting Engineer	8,000	8,000
	20	Quarry Truck Drivers	2,500	50,000
	6	Shovel Operators	2,500	15,000
	8	Excavator Operators	2,800	22,400
	3	Bulldozer Operators	2,800	8,400
	1	Water Tanker Operator	2,000	2,000
	1	Equipment Maint Incharge	4,000	4,000
	6	Mechanics	2,500	15,000
	4	Assistant Mechanics	1,000	4,000
	0.5	Auto Electrician (50%)	2,500	1,250
	2	Contingent	2,000	4,000
	Sub Total	<u>59</u>		<u>146,050</u>

Note that drilling & driving crew will be used on blasting days as blasting crew. We save on 8 people in this process.

Crusher Normal:	0.5	Mechanical Engr (50%)	4,000	2,000
	0.5	Electrical Engineer (50%)	3,000	1,500
	4	Plant Operators	2,500	10,000
	6	Helpers	1,000	6,000
	2	Control Helpers	1,000	2,000
	2	Contingent	2,000	4,000
	Sub Total	<u>15</u>		<u>25,500</u>

Crusher Maintenance:	0.5	Mechanical Engr (50%)	4,000	2,000
	0.5	Electrical Engineer (50%)	3,000	1,500
	4	Plant Fitter	2,000	8,000
	4	Helpers	1,000	4,000
	1	Contingent	2,000	2,000
Sub Total	<u>10</u>		<u>17,500</u>	

Transport Personnel:	-	Trailer Drivers	2,750	-
	-	6 Wheel Operators	2,500	-
	4	Shovel Operators	2,500	10,000
	1	Water Tanker Operator	2,250	2,250
	2	Weighbridge Operator	1,000	2,000
	-	Transport Incharge (50%)	3,000	-
	1	Port & Operating Assistants	1,000	1,000
	1	Contingent	2,000	2,000
Sub Total	<u>9</u>		<u>17,250</u>	

Shipping:	-	Transport Incharge (50%)	3,000	-
	1	Port & Operating Assistants	1,000	1,000
Sub Total	<u>1</u>		<u>1,000</u>	

Administration:	1	Finance Head	8,000	8,000
	1	Chief Accountant	3,500	3,500
	1	Purchase Head	5,000	5,000
	1	Purchase Assistant	2,500	2,500
	1	Receptionist / etc	1,500	1,500
	1	Office Assistant	1,000	1,000
	1	PRO	5,000	5,000
	4	Light Drivers	2,000	8,000
	2	Contingent	2,000	4,000
	Sub Total	<u>13</u>		<u>38,500</u>

Working Note 7: Repairs & Maintenance

Quarry Equipment	250,000	175,000	75,000
Crusher	125,000	87,500	37,500
Trucks	-	-	-
Total Expenses	<u>375,000</u>	<u>262,500</u>	<u>112,500</u>

Working Note 8: Diesel & Fuel

Diesel consumption can be precisely worked out from details available within this calculation for equipment running as well as truck movements. As per this calculation, the cost of diesel is worked out at approx 111,555 gallons pm at 8.00 Dhs per gallon.

Minimum level can be achieved at abt 83,666 gallons while achievable level will take 111,555 gallons.

Equivalent Equip Hrs per day = 18 Genset Hrs per day = 18

<u>Equipments</u>	<u>Nos</u>	<u>Equiv Running</u>	<u>Glns / Hr</u>	<u>Parameters</u>	<u>Glns / Day</u>
Excavators	4	3	2.40	130 glns / day / Excav	389
Rock Body Trucks	10	9	1.20	194 glns / day / Truck	1,750
Bulldozers	2	1	1.80	32 glns / day / Bldzr	32
Shovels	8	7	0.90	113 glns / day / Shovel	794
Drill Machines	2	2	2.40	86 glns / day / Drill	173
Generators	4	4.0	4.60	331 glns / day / Generator	1,325
Trucks (Merc)	-	-	-	40 glns / day / Truck	-
Trucks (MAN)	-	-	-	km / gln - km / day	-
Sundry Equipments					-
<b>Total</b>					<b>4,462</b>

Consumption Parameters

<u>Equipment</u>	<u>Consumption</u>	<u>Month</u>	<u>Hours / day</u>	<u>Days / month</u>	<u>Average</u>	
Excavators	1,845.00	June 02	12	21	7.32	PC 750
Rock Body Trucks	697.50	June 02	18	11	3.52	No 2
Bulldozers	191.00	July 02	12	3	5.31	Rationalised
Shovels	1,282.50	June 02	18	26	2.74	Rationalised
Drill Machines	592.98	June 02	12	7	7.06	Rationalised
Generators	7,628.95	Aug 02	18	31	13.67	Rationalised

<u>Particulars</u>	<u>Achievable</u>	<u>Variable</u>	<u>Fixed</u>
Cost of Diesel	892,440	713,952	178,488
Allocated as below:			
Quarry Equipment	627,475	501,980	125,495
Crusher	264,965	211,972	52,993
Trucks (Transport)	-	-	-

Working Note 9: Port Charges

Expected Shipment (tons)	-	224,310	
Cost at Dhs 5.75 per ton, up to Port		1,289,783	1,289,783
Port Stockpile Lease pa	90,000	7,500	7,500
<b>Total</b>	<b>7,500</b>	<b>1,297,283</b>	<b>1,289,783</b>

Cost from Port would be Dhs 5 per ton + Dhs 0.75 for rent & shoveling. Dhs 5 to be borne by customer, Dhs 0.75 as Stockpile charges and management will be retained for calculation.

Working Note 10: Other Miscellaneous Administrative Expenses

Components of Administrative expenses would include:

Telephone expenses at various locations	6,000
Rent of Office	2,350
Rent of Accommodations	20,000
Vehicle Expenses	7,500
Insurance of Site	2,000 (Ad hoc figure, actual not known)
Insurance of Equipments	4,000
Laboratory Tests	1,000
Office & Other Expenses	1,000
Bank Charges	1,000
Legal, Audit, etc.	1,000
Electricity	2,000
Printing & Stationery	650
Directors & Management Travelling	3,000
Consultants	1,000
Traffic Regulations	750
Donations & Publicity	3,000
Miscellaneous	5,000
<b>Total</b>	<b>61,250</b>

## Production Schedule

### Particulars

Achievable

No of days in month 25

### **Primary Crusher**

Processing capacity, tons per hour (See note below)				815
Capacity Utilisation, with installed capacity of expected	1,000	tons per hour		81.45%
No of hours per day				18
Daily Processing of Feed Size Material		[A+B+C+D]	100.00%	14,661
Wastage @ 15% dust, etc		<b>A</b>	15.00%	2,199
Daily Production		c/f	85.00%	12,462
Production per month in tons				311,550
Input per month in tons				366,525

### **Secondary Crusher**

Wastage @ 35% (0-5mm), daily		c/f	29.75%	4,362
Output of Aggregate (10mm + 20mm), daily		<b>B</b>	55.25%	8,100
Sand production per month				109,050
Basic Aggregate per month				202,500
Basic Aggregate per hour				450

0-5mm moved for sales 'as it is' at about 20% daily			5.95%	872
Balance 0-5mm transferred to the washing plant daily			23.80%	3,490
Washing Plant Processing Monthly				87,240

### **Washing Plant** (Presently not in existence, but calculation of physical quantities made, for future reference)

0- <sup>1</sup> / <sub>2</sub> mm @ 20% daily		<b>C</b>	4.76%	698
Output of 0-5mmW per day		<b>D</b>	19.04%	2,792
Considered for this calculation				2,792
Secondary Aggregate per month				69,790

### Saleable Total Aggregate taken at:

-20+5mm				8,100
0-5mm				872
0-5mmW				2,792
Total Per Day				11,764
Per Month				294,100
Considered Saleable Per Month for this Calculation (aggregate & sand; not washed sand)				224,310

Note that we have adjusted the input to primary crusher, i.e., 'Primary Crusher Processing Capacity' to achieve 'Output of Basic Aggregate per hour' at 1,000 tons per hour.

### Analysis of Production figures (in Tons)

<u>Particulars</u>	<u>Basis for calculation</u>	<u>Absolute A</u>	<u>Absolute B</u>	<u>Per Month</u>	<u>Per Day</u>	<u>Per Hour</u>
Blasted Material			100.00%	407,250	16,290	905
Wastage in Quarry	10%		10.00%	40,725	1,629	91
Input to Primary	90%	100.00%	90.00%	366,525	14,661	815
Wastage in Primary	15%	15.00%	13.50%	54,975	2,199	122
Output from Primary	85%	85.00%	76.50%	311,550	12,462	692
Input to Secondary	Full as above	85.00%	76.50%	311,550	12,462	692
Wastage in Secondary (0-5mm)	35%	29.75%	26.78%	109,050	4,362	242
Output from Secondary (10mm+20mm)	65%	55.25%	49.72%	202,500	8,100	450
Sales of 0-5mm as it is	20%	4.76%	4.28%	17,450	698	39
Input to Washing Plant	80%	29.75%	26.78%	109,050	4,362	242
Wastage from Washing (0- <sup>1</sup> / <sub>2</sub> mm)	20%	4.76%	4.28%	17,450	698	39
Output from Washing (0-5mmW)	80%	19.04%	17.14%	69,790	2,792	155
Total Wastages		NA	27.78%	113,150	4,526	251
Total Production (0-5mm(W) & 5-20mm)		79.05%	71.15%	289,740	11,590	644
Wastages of Overall Processes		NA	27.78%	113,150	4,526	251
Basic Production (-20mm+5mm)		55.25%	49.72%	202,500	8,100	450

Note that Absolute A is ratio of further stages with input to primary while Absolute B is ratio with blasting quantities. Basis for calculation is taken with each previous stage. Therefore, cumulative percentages will be available in the Absolute columns.

## Blasting Schedule

Specific Gravity of our material 2.90

Daily processing of blasted material, as above				14,661
Per month				366,525
Wastage @ 10% boulders, dust, etc.		10.00%		40,725
Blasting needed per month (tons)				407,250
Blasting needed per month (cu m)				140,431

Explosives needed per ton of blasting, as below (kgs)				0.0899
Explosives qty (kgs) required per month				36,628
Explosives needed per cu.m. of blasting, as below				0.26
Explosives qty (kgs) required per month				36,628
@ 3.5 tons per blast, no of blasts needed (rounded up)				11
No of Blasting days required per month (calculated)				5.5
No of Blasting days required per month (rounded off to actual)				6.0
Volume blasted per blast (average)				12,766
Qty blasted per blast (tons)				37,023

### Costing:

Cost of Detonators per hole		10		
Cost of Cordex per metre	4			
Metres per hole	9			
No of Holes per blast day	213			
Cost of Detonators per blast day		2,130		
Cost of Cordex per blast day		7,881		
Cost of Detonators & Cordex for 1 blast		10,011		
Cost per kg of explosives		1.43		

For total explosives used 52,378

Explosives, 5.50 @ 4.50 + marginal amount for Slurry per kg + Dh 1 for Licence fee for explosives.

**Amount** (including explosives fee & drilling machine consumables) **201,454**

Delivery chgs @Dhs 1,250 per blast, reel, etc. at total Dhs 2,500 per blast.

Amount 15,000

Total Cost per Month 268,832

Total Blasted material per month 407,250

Cost per ton of blasted material 0.66

Aggregate quantity per month (10 + 20mm) 202,500

Cost per ton of crushed aggregate 1.33

Aggregate quantity per month (2to5 + 10 + 20mm) 294,100

Cost per ton of total aggregate 0.91

Analysis based on December 2005 Bill from Technical Drilling & Blasting

Blast Measurement & Explosives Order	7,500			
Delivery Charges	7,500			
Charges for Explosives & Accessories Supply	313,938	for total	Anfo 30,500	Powergel 4,500
Total for 5 blasts	<u>328,938</u>		kgs	kgs
Therefore, cost of explosives per kg of explosives	9.40			
Cost per ton of blasted material	0.81			
Cost per ton of crushed aggregate	1.62			

## Drilling Schedule

Burden	3.50	m		
Spacing	3.00	m		
Average depth of hole	12	m		
Stemming depth per hole	2.75	m		
Charge depth of hole	9.25	m		
Quantity of explosives per metre	3.55	kgs		
Quantity of explosives per hole	33	kgs		
Maximum quantity of explosives	7,000	kgs		
Holes Required per blast, approx	213	nos		
Average depth of hole	12	m		
Avg length of holes per blast	2,556	m		
Volume blasted per blast	26,838	cu m	say	26,800
Specific Gravity of our material	2.90			
Qty blasted per blast, tons	77,830	tons	say	77,800
Avg stone per metre drilled	30	tons		
Explosives per ton	0.1183	kgs		(Avg stone per metre / qty of expl per metre)
Explosives per ton	0.0899	kgs		(Qty blasted per blast / max qty of explosives)
Explosives per cu m	0.2608	kgs		
Blasting needed per month (tons) As above				407,250
Drilling required per month				13,575
Capacity of our drilling machine:				
Metres per hour				-
Hours per day (See note 1)				18
Metres per day				-
Metres per month				-
Shortfall of drilling				13,575
Capacity of our drilling machine:				
Metres per hour				50
Hours per day (See note 1)				18
Metres per day				900
Metres per month				22,500
Shortfall of drilling				-
Rate of TUVW, per metre	16.50		inclusive of mobilisation, Dhs 1,500 per trip and 25% extra for horizontal holes.	
Cost of drilling by TUVW,	17		, taken for convenience	
Drilling cost (Hired drills)				-

## Quarry Limiting Factor: Rock Body Trucks

No of Trucks	10		
Haulage Capacity (tons) per truck		35	30
Time required for 1 round trip in minutes		15	20
Trips per hour		4	3.00
Haulage per hour per truck		140	90
Working hours per day (Ref Note 1)		24	18
Haulage per truck per day		3,360	1,620
Haulage per day, all trucks		33,600	16,200
Haulage per month		873,600	405,000
Haulage of material required for feeding		-	366,525
Excess capacity over requirements		873,600	38,475
Shortfall in capacity over requirements		-	-
Requirement satisfaction level		#DIV/0!	110.50%
Blasted Material per month		-	407,250
Feeding into Primary per month		-	366,525