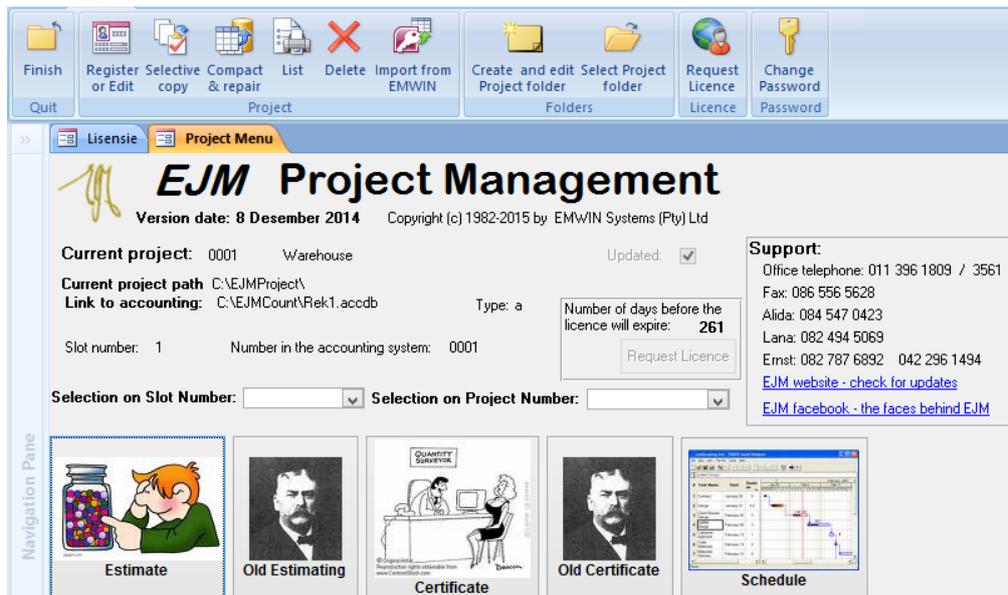


EJMProject overview

The EJMPProject program has a similar look-and-feel as Microsoft Office products.

- It has a ribbon that changes according to the task at hand: Estimating, Certificates, Planning/Schedule
- Reports can be sent by e-mail as PDF attachments.
- Underlying data can be exported to Excel



Estimate overview

It is a resource-based system. The estimate is done in terms of resources. For example: plant, labour, material, subcontractors.

- **Creating the Tender**
The Bill of Quantities can be imported from various sources such as WINQS, Bill and Excel. Customize the worksheet by re-arranging and re-sizing columns. Pricing can be done to any level of detail.
- **Analysing the Estimate**
There are various reports to help you analyse the estimate. By analysing the estimate you can make decisions regarding the profitability of doing the project; where the estimate can be adapted for a better chance of being awarded the tender.
- **Pricing the Bill**
MasterBill, resources and variables can be used to price the Bill of Quantities. One can use Local and Global variables. The use of variables to price the estimate lends a greater flexibility towards the estimates. For instance: if the cement's price suddenly changes, it is easy to adapt the estimate accordingly.

- **MasterBill**

The MasterBill is a collection of items, similar to items in a Bill of Quantities.

It can be seen as a standard list of recipes that the estimator builds up and carry over from estimate to estimate.

The concept behind it is to save time – build up assemblies that are re-used (e.g. excavation team, one brick wall) – and use these assemblies to rapidly price a new Bill of Quantities.

Creating the Project

- Any existing project can be used as a template for a new project.
- The new project inherits the underlying data (Resources, MasterBill, Cost centres, etcetera) from the template.
- Normally the last project, but a similar project to the one to be created, can be used.

Project Registration and Edit

Register and Edit Projects

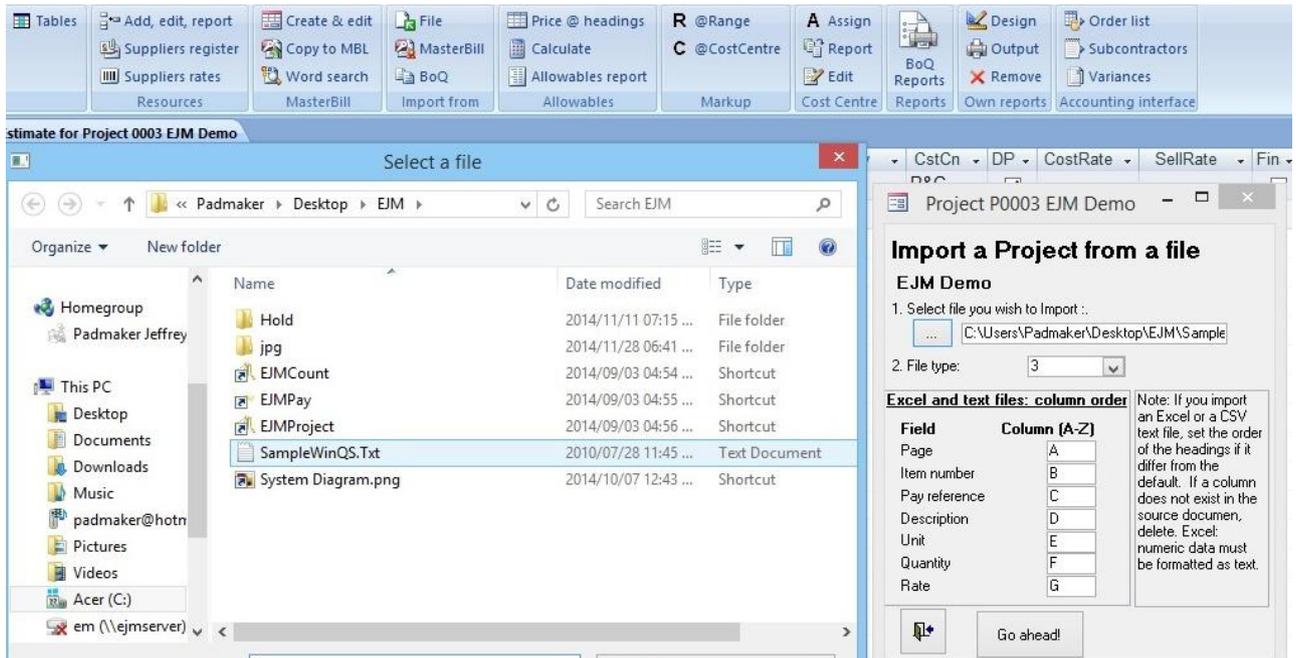
Slot	1	Architect	V3 Engineers (Pty) Ltd	Defect liability period	0
Number	0001	Client's company	SANRAL	Insurance- 3rd Party	0.00
Company name	EMWIN Systems (Pty) Ltd	Client address 1	Box 1001	Insurance- SpecRisk	0.00
Project Name	Warehouse	Client address 2	Pretoria	Insurance- LatSup	0.00
Nr. in Account sys.	0001	Client address 3	0001	Insurance MaxExcess	0.00
Address Line1	36 Dr BB Keet	Client person	Dr. H Wolff	Escal description	
Address Line2	Noorsekloof	Client phone	021 912 3000 hwolff@kv:	Escal Coef	NIR
Address Line3	Jeffreys Bay	Client VAT number	4422298671	Materials on Site	0.00
Postal Code	6330	Status		MOS % payable	30
Country	South Africa	GPS		PaymentPeriod	0
ResponsiblePerson	Byron Mace	EstimatedValue	0.00	MeetingSchedule	
Phone Number	042 296 1494	CommenceDate	2014/10/01	HandOver	
Fax Number		ContractPeriod	6	Path to project	C:\EJMProject\
Cell number	082 787 6892	Surety		Cost currency symbol	R
E_mail	byron@ejm.co.za	Retention note		Sell currency symbol	R
Vat number	4040313671	Retention type		Cost-> sell factor	1.0000
VAT percentage	14.00	Retention value	0.00		

Select source folder:

1	C:\EJMProject\	Local	My Company
2	S:\EJMLibraries\	Server	

Select project to edit:
0001

Importing a Bill of Quantities



- If the QS or consulting engineer sent the Bill in a recognisable file format such as Excel or CSV, you can select and import it. After importing it, you have to identify the headings.
- For files in Excel or CSV format, you identify the columns that must be imported.
- If the file was created by WinQS (text file) or Bill, the import is straight forward as the layout is known.
- The Bill can also be typed in, sections copied from another project or created from the MasterBill.

Resources

The Resource Library consists of 3 levels:

- The first (major) level numbered 1 to 9 reflect the major cost groups such as Plant, Labour, Material, Subcontractor
- Every major level can have up to 26 sub-divisions (A to Z). Use it for example to differentiate between unskilled and skilled labour, the different types of materials
- Resources (third level) are entered under the sub divisions.
The date indicates the last rate update

Code	Description	Unit	Default Rate	Rate's
2A	PLANT/ MAJOR			
Cat320	Cat 320 excavator	hr	392.00	2014
Cat910	Cat 910 loader	hr	290.00	2014
JCB	Tractor loader backhoe CAT422F	hr	244.00	2014
Tipper	Tipper 5M3 (wet)	hr	250.00	2014
3A	LABOUR / UNSKILLD			
LeaderConc	GANG LEADER-CONCRETE	HR	30.00	2014
LeaderExc	GANG LEADER-EXC/FILL	HR	30.00	2014
LeaderFmwk	GANG LEAD-FMWK-HORIZ	HR	30.00	2014
WorkerBrick	GEN WRKR-BRICKWORK	HR	17.00	2014
WorkerCeil	GEN WRKR-CEILINGS	HR	17.00	2014
WorkerConc	GENERAL WORKER-CONCR	HR	17.00	2014
3B	LABOUR / SKILLED			
ArtisanCeil	ARTISAN-CEILINGS	HR	70.00	2014
ArtisanFwk	ARTISAN-FMWK-VERTI	HR	70.00	2014
ArtisanRoof	ARTISAN-ROOFING	HR	70.00	2014

MasterBill

Level	PayClause	Item	Description	CostCntr	Unit	Rate	Jump
B	1		Excavator	EXC			
B000	2		Plant clusters	EXC			
B001	5		Cat910	EXC	Hr	402.50	
B002	5		250CFM Compressor	EXC	Day	1 095.77	
B003	5		JCB Tractor, loader, backhoe	EXC	Hr	339.63	
B004	5		Gallion grader	EXC	Hr	844.75	
B005	5		Cat 320 excavator	EXC	Hr	515.75	
B1	2		Mass excavation	P&G			
B1001a	5		Clear site from vegetation, rubbish, shrubs roots etcetera.	EXC	M2	2.33	
B1007a	5		Excavate in earth bulk not exceeding 2m deep and cart away	EXC	M3	40.40	
B6003a	5		Earth fill from excavation and compacted to 95% MOD AASHO	EXC	M3	32.19	
C	1		Concretor	CONC			
C2000	5		Concrete mix and place team (1 team leaer + 11 men)	CONC	Day	1 868.04	
C3001a	5		20MPA Concrete in mass fill under foundations.	CONC	M3	949.11	
C3004a	5		20MPA Concrete in wall footings.	CONC	M3	949.11	
C3005a	5		20MPA Concrete in surface trenches.	CONC	M3	949.11	
D3011a	5		25MPA Readymix concrete in plinths.	CONC	M3	1 211.86	
D3012a	5		25MPA Readymix concrete in column stanchion bases.	CONC	M3	1 318.61	
H	1		Brickwork	P&G			
H1001	5		1:5 Cement mortar	BWORK	M3	741.65	
H1012a	5		One brick wall in foundations	BWORK	M2	327.83	
H2008a	5		Half brick wall in super structure	BWORK	M2	163.92	
H2015a	5		One brick wall in super structure.	BWORK	M2	327.83	

Sand and cement are combined to form mortar. Such combinations are given a code. (H1001)

H1001 1:5 Cement mortar				M3	Item:
Resource	Unit	Rate	Quantity formula	Quantity	Amount
OPC Pockets	PCT	85.00	6.29	6.29	534.65
BuildSand	M3	150.00	1.38	1.38	207.00
*		0.00		0.00	0.00

Worksheet total: 741.65

This combination for mortar can then be used in more complex combinations such as pricing a brick wall (H1012a)

H1012a One brick wall in foundations				M2	Item:
Resource	Unit	Rate	Quantity formula	Quantity	Amount
StockBrick	000	1200.00	104 * 1.05 * 5% waste	0.11	131.04
H1001	M3	40.79	0.05 * 1.1	0.06	2.24
S-Brick	000	1500.00	0.104	0.10	156.00
*		0.00		0.00	0.00

Worksheet total: 289.28

These combinations are called MasterBills, and can be used to rapidly price a Bill of Quantities. Every MasterBill item can also be assigned to a cost centre/ trade.

Pricing the Bill of Quantities

After importing the Bill, pricing using the MasterBill consists of selecting the appropriate MasterBill item.

Seq	Item	Pg	Ne	MBLCP	Clau	Description	Ur	BillQty	CstCr	DP	CostRate	SellRate	M/up	Fina	LabSell	MatSell
1.00	1	1				Warehouse			EXC							
2.00	Bill 1	1				Earthworks			EXC							
3.00	5	1.1	1		B1001a	Clear site from vegetation, rubbish, shrub, roots etceter	M2	5 000.00	EXC		2.33	2.68	15.08		0.60	2.08
4.00	5	1.2	1		B1007a	Excavate in earth in bulk not exceeding 2M deep	M3	1 500.00	EXC		40.40	46.46	14.99		2.79	43.67
7.00	5	1.5	1		B5004a	Extra over excavation in rock (compressor)	M3	100.00	EXC		197.78	227.44	15.00		136.62	90.82
8.00	5	1.6	1		B6003a	Earth fill from excavation and compacted to 95% MOD	M3	800.00	BFILL		32.19	37.02	15.01		1.68	35.34
9.00	2	Bill2	2		B	Excavator		0.00								
10.00	3	2.1	2		B000	Plant clusters		0.00								
12.00	5	2.1.2	2		B001	Cat910	Day	402.50								
13.00	5	2.1.3	2		B002	250CFM Compressor	Hr	1095.77			949.11	1 091.47	15.00		65.10	1 026.38
14.00	3	2.2	2		B003	JCB Tractor, loader, backhoe	Hr	339.63			949.11	1 091.47	15.00		65.10	1 026.38
14.00	3	2.2	2		B004	Gallion grader	Hr	844.75								
15.00	5	2.2.1	2		B005	Cat 320 excavator	Hr	515.75								
17.00	5	2.2.3	2		B1	Mass excavation		0.00			1 318.61	1 516.40	15.00		429.65	1 086.75
17.00	5	2.2.3	2		B1001a	Clear site from vegetation, rubbish, shrubs roots	M2	2.33			1 100.67	1 265.77	15.00		179.02	1 086.75
18.00	5	2.2.4	2		B1007a	Excavate in earth bulk not exceeding 2m deep and c	M3	40.40			9 000.00	10 350.00	15.00		10 350.00	
22.00	2	Bill 4	3		B6003a	Earth fill from excavation and compacted to 95% MO	M3	32.19								
23.00	5	4.1	3		C	Concretor		0.00								
23.00	5	4.1	3		C2000	Concrete mix and place team (1 team leaser + 11 men	Day	1868.04			327.83	377.01	15.00		179.40	197.61
24.00	5	4.2	3		C3001a	20MPA Concrete in mass fill under foundations.	M3	949.11			163.92	188.50	15.00		89.70	98.80
24.00	5	4.2	3		C3004a	20MPA Concrete in wall footings.	M3	949.11			327.83	377.01	15.00		179.40	197.61
25.00	5	4.3	3		C3005a	20MPA Concrete in surface trenches	M3	949.11								

On selection, the pricing of the MasterBill item is copied to the item in the Bill.
 Double-click on the cost rate to edit the rate build-up. (It will not affect the original MasterBill)

Global var. Note				Value/ formula	Value	Local var. Note				Value/ formula	Value
▶	GHRDay	Hours in day	9		9.000	▶	Lprod	Production	500		500.000
*	G....		0		0.000	*	L....		0		0.000

Earth fill from excavation and compacted to 95% MOD-AASHO										Item: 1.6	Page:	ID	8	
Billed quantity:		800.000 M3		Unit	Rate - Quantity formula-				Quantity	Amount				
▶	B001	▼	Cat910	Hr	402.50 [GHRDay]				9.00	3622.50				
	Tipper	▼	Tipper 5M3 (wet)	hr	250.00 1 * [GHRDay]				9.00	2250.00				
	B004	▼	Gallion grader	Hr	844.75 [GHRDay]				9.00	7602.75				
	Bomag	▼	Bomag roller plus tow unit	hr	210.00 [GHRDay]				9.00	1890.00				
	LeaderExc	▼	GANG LEADER-EXC/FILL	HR	30.00 [GHRDay]				9.00	270.00				
	WorkerExc	▼	GEN WORKER-EXC/FILL	HR	17.00 3 * [GHRDay]				27.00	459.00				
*		▼			0.00				0.00	0.00				

										Total:	16 094.25
										500	32.19
										Item total:	25 750.80

New resource	Classification	Code	Description	Unit	Default Rate																										
1A					0.00																										
<table border="1"> <thead> <tr> <th>Click to calculate</th> <th>P and G</th> <th>PLANT</th> <th>LABOUR</th> <th>MATERIAL</th> <th>SUBCONTR</th> <th>MISCELAN</th> <th>PLANT & W/S</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td>0.000</td> <td>30.731</td> <td>1.458</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> </tbody> </table>												Click to calculate	P and G	PLANT	LABOUR	MATERIAL	SUBCONTR	MISCELAN	PLANT & W/S				0.000	30.731	1.458	0.000	0.000	0.000	0.000	0.000	0.000
Click to calculate	P and G	PLANT	LABOUR	MATERIAL	SUBCONTR	MISCELAN	PLANT & W/S																								
	0.000	30.731	1.458	0.000	0.000	0.000	0.000	0.000	0.000																						

Here we also make use of Global and Local variables.

- A global variable such as GHRDay applies to the whole project. In the summer, a working day can be 9 hours and changed to 8 hours in winter.
- A local variable such as LProd applies to this item. In this example, we build up a compaction team with a total cost of R16 094.25. This team can do 500M3/day. The team's daily cost will remain the same but the unit cost will vary according to the production (local variable)

Resources required on this project

After you priced the Bill, the program will calculate the resources required.

S	Code	EJM code	Description	Quantity	Unit	Rate	DefE
2A	250CFM	250CFM	COMPRESSOR 250CFM(D)	0.45	Mnth	5000.00	
2A	Bomag	Bomag	Bomag roller plus tow unit	14.40	Hr	210.00	
2A	Cat320	Cat320	Cat 320 excavator	45.00	Hr	392.00	
2A	Cat910	Cat910	Cat 910 loader	36.90	Hr	290.00	
2A	Gallion	Gallion	Cat 120K grader	14.40	Hr	631.00	
2A	Tipper	Tipper	Tipper 5M3 (wet)	149.40	Hr	250.00	
2G	Diesel	Diesel	DIESEL	1637.60	Hr	11.25	
3A	LeaderConc	LeaderConc	GANG LEADER-CONCRETE	181.64	Hr	20.56	
3A	LeaderExc	LeaderExc	GANG LEADER-EXC/FILL	171.90	Hr	30.00	
3A	WorkerConc	WorkerConc	GENERAL WORKER-CONCR	1998.00	Hr	17.00	
3A	WorkerExc	WorkerExc	GEN WORKER-EXC/FILL	830.70	Hr	17.00	
4C	20MPA_RM	20MPA_RM	20MPA READYMIX-OPC	64.05	M3	850.00	
4C	25MPA_RM	25MPA_RM	25MPA Ready mix concrete	157.50	M3	900.00	
4H	BuildSand	BuildSand	BUILDING SAND	79.14	M3	150.00	
4H	OPCPocket	OPCPocket	OPC CEMENT-POCKETS	360.72	Pct	85.00	
4H	StockBrick	StockBrick	STOCK BRICKS	70.71	000	1200.00	
5A	S-Brick	S-Brick	STOCK BRICKWK-LABOUR	67.34	000	1500.00	
5A	S-Plast	S-Plast	LO PLAST-VERT/BRKWK	1050.00	M2	25.00	
5B	S-20HTS	S-20HTS	HTS 20MM (SCBD&FIX)	1.00	Ton	9000.00	

Edit the cost rates as they apply to the project.
On clicking **Update**, the rates will be applied to the items.

Resource	Unit	Quantity	BaseRate	Factor	Rate	Amount
2 PLANT						
250CFM COMPRESSOR 250CFM(D)	Mnth	0.5	5 000.00	5 000.00		2 272.73
Bomag Bomag roller plus tow unit	Hr	14.4	210.00	210.00		3 024.00
Cat320 Cat 320 excavator	Hr	45.0	392.00	392.00		17 640.00
Cat910 Cat 910 loader	Hr	36.9	290.00	290.00		10 701.00
Gallion Cat 120K grader	Hr	14.4	631.00	631.00		9 086.40
Tipper Tipper 5M3 (wet)	Hr	149.4	250.00	250.00		37 350.00
Diesel DIESEL	Hr	1 637.6	11.25	11.25		18 423.00
Total PLANT						
3 LABOUR						
LeaderConc GANG LEADER-CONCRETE	Hr	181.6	20.56	20.56		3 734.44
LeaderExc GANG LEADER-EXC/FILL	Hr	171.9	30.00	30.00		5 157.00
WorkerConc GENERAL WORKER-CONCR	Hr	1 998.0				17.00
WorkerExc GEN WORKER-EXC/FILL	Hr	830.7	17.00	17.00		14 121.90
Total LABOUR						
4 MATERIAL						
4C CONCRETE						
20MPA_R 20MPA READYMIX-OPC	M3	64.1	850.00	850.00		54 442.50
25MPA_R 25MPA Ready mix concrete	M3	157.5	900.00	900.00		141 750.00
Sub-total:						196 192.50
4H BRICKWK						
BuildSand BUILDING SAND	M3	79.1	150.00	150.00		11 870.93
OPCPocket OPC CEMENT-POCKETS	Pct	360.7	85.00	85.00		30 660.84
StockBrick STOCK BRICKS	000	70.7	1 200.00	1 200.00		84 848.40
Sub-total:						127 380.17

Total: MATERIAL
323 572.67

5 SUBCONTRACTOR

Rapid priced:

S-Brick	STOCK BRICKWK-LABOUR		000	67.3	1 500.00	1 500.00
101 010.00						
S-Plast	LO PLAST-VERT/BRKWK	M2	1 050.0	25.00	25.00	26 250.00
S-20HTS	HTS 20MM (SCBD&FIX)	Ton	1.0	9 000.00	9 000.00	9 000.00

Total: SUBCONTRACTOR

211 260.00

Grand Total:

690 309.14

Mark up

Mark ups can be applied to a range of items and resource categories.
 A composite mark up can be applied to an item.

Enter Markup over item range

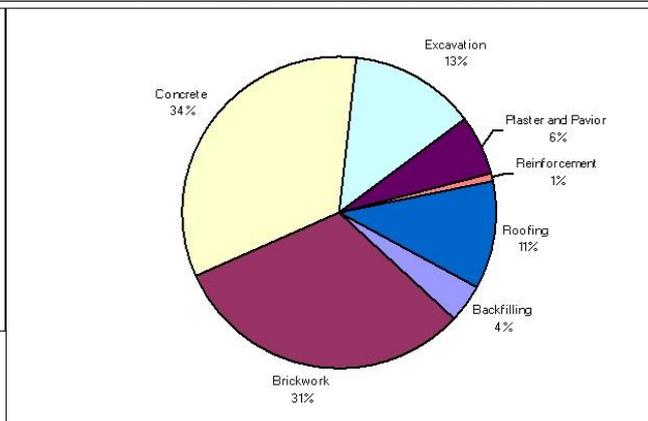
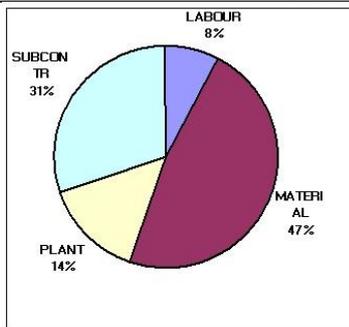
Overhead (type 6): Overhead percentage: 0.0000
 BoQ Items (type 5):

----- Enter markup percentages over the major cost headings -----

FromSeq	ToSeq	P and G	PLANT	LABOUR	MATERI	SUBCON	MISCEL	PLANT	Save
1	99999	15	15	15	15	15	15	15	15

Cost Centre analysis

Cost centre	Sell	Cost	Profit	PLANT	LABOUR	MATERIAL	SUBCONTR	Markup %	
Cost%									
EXC Excavation	105 834	92 025	13 809	73 913	18 113	0	0	15.01%	13.33%
BFILL Backfilling	29 616	25751	3 8650	24 584	1 166	0	0	15.01%	3.73%
CONC Concrete	268 977	233 893	35 084	0	37 700	196 193	0	15.00%	33.88%
REIN Reinforcement	10 350	9 000	1 350	0	0	0	0	9 000	15.00%
BWO Brickwork	244 113	212 270	31 843	0	0	0	111 260	101 010	15.00%
PLAS Plaster and Pavior	48 720	42 370	6 350	0	0	16 120	26 250	14.99%	6.14%
ROOF Roofing	86 250	75 000	11 250	0	0	00	75 000	15.00%	10.86%
Grand Total:	793 860	690 309	103 551	98 497	56 979	323 573	211 260		
			15.00%	14.27%	8.25%	46.87%	30.60%		



Bill of Quantity reports

1	Cost rates of items
2	Cost rate extension
3	Cost rate extension synopsis
4	Cost Bill
5	Cost Bill extension
6	Cost Bill (Electric)
7	Cost Bill synopsis
8	Cost from high to low
9	Price makeup
10	Sell Bill (totals Level 2)
11	Sell Bill (totals Level 3)
12	Sell Bill (Electric)
13	Sell Bill synopsis
14	Sell Bill synopsis - Level 1
15	Sell bill from high to low
16	Allowables input sheet
17	Page Totals
18	Sell bill per page
19	Sell Bill with page breaks
20	Items with zero sell rates
21	Electrical Sell Bill with page breaks
22	BoQ filtered by Cost Centre

Cost Rates of Bill of Quantity

<i>Seq.</i>	<i>Pge</i>	<i>Item</i>	<i>Description</i>	<i>Unit</i>	<i>BillQty</i>	<i>SellRate</i>	<i>CostRate</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
								<i>P and G</i>	<i>PLANT</i>	<i>LABOUR</i>	<i>MAT</i>	<i>SUBCON</i>
		<i>1.1</i>	<i>Warehouse</i>									
3.0	1	1.1	Clear site from vegetation, rubbish, shrub, roots etcetera	M2	5000.0	2.68	2.33		1.8	.5		
4.0	1	1.2	Excavate in earth in bulk not exceeding 2M deep	M3	1500.0	46.46	40.40		38.0	2.4		
7.0	1	1.5	Extra over excavation in rock	M3	100.0	227.44	197.78		79.0	118.8		
8.0	1	1.6	Earth fill from excavation and compacted to 95% MOD-AASHO	M3	800.0	37.02	32.19		30.7	1.5		
12.0	2	2.1.2	20MPA Concrete in blinding layer under bases. 20mm diameter	M3	5.0	1091.47	949.11			56.6	892.5	

Price make-up

Seq.	Page	Item Description	Unit	Quantity	Rate	Amount	
Bill 1 Earthworks							
3.0	1	1.1	Clear site from vegetation, rubbish, shrub, roots	M2	5000.0	2.68	13
400.00			etcetera				
4.0	1	1.2	Excavate in earth in bulk not exceeding 2M	M3	1500.0	46.46	69
690.00							
7.0	1	1.5	Extra over excavation in rock (compressor)	M3	100.0	227.44	22
744.00							
8.0	1	1.6	Earth fill from excavation and compacted to	M3	800.0	37.02	29
616.00			95% MOD-AASHO				
Total: Bill 1 Earthworks						135 450.00	
Bill2 Concrete & reinforcing							
<i>2.1 Mass concrete</i>							
12.0	2	2.1.2	20MPA Concrete in blinding layer under bases.	M3	5.0	1 091.47	5
457.35							
13.0	2	2.1.3	20MPA Concrete in surface trenches	M3	56.0	1 091.47	61 122.32
<i>2.2 Reinforced concrete</i>							
15.0	2	2.2.1	25MPA Concrete in column stanchion bases.	M3	50.0	1 516.40	75
820.00							
17.0	2	2.2.3	25MPA Concrete in slabs	M3	100.0	1 265.77	126 577.00
18.0	2	2.2.4	High tensile reinforcement (Y) in bars of 20mm	TON	1.0	10 350.00	10
350.00			diameter				
Total: Bill2 Concrete & reinforcing						279 326.67	
Bill 4 Brickwork							
23.0	3	4.1	One brick wall in foundations	M2	175.0	377.01	65 976.75
24.0	3	4.2	Half brick wall in super structure	M2	105.0	188.50	19 792.50
25.0	3	4.3	One brick wall in super structure including wall	M2	420.0	377.01	158
344.20			ties				
Total: Bill 4 Brickwork						244 113.45	
Bill 5 Plaster and roofing							
27.0	3	5.1	External plaster	M2	420.0	46.40	19 488.00
28.0	3	5.2	Internal plaster	M2	630.0	46.40	29 232.00
29.0	3	5.3	Roof complete	sum	1.0	86 250.00	86 250.00
Total: Bill 5 Plaster and roofing						134 970.00	
Total for Bill						793 860.12	
VAT at 14.00 %						111 140.42	
Total for Project						905 000.54	

1.5	7	10	Extra over excavation in rock (compressor)			M3	197.777
Variable	Note	Value string	Value	<i>Production</i>	10		
Lprod	Production	10	10.000				
<i>Resource</i>	<i>ResDescription</i>	<i>Unit</i>	<i>Rate</i>	<i>--Qty formula bar--</i>	<i>Quantity</i>	<i>Amount</i>	
B002	250CFM Compressor	Day	1 095.773	1	1.000	1 095.773	
WorkerExc	GEN WORKER-EXC/FILL	HR	17.000	4 * [GHrDay]	36.000	612.000	
LeaderExc	GANG LEADER-EXC/FILL	HR	30.000	1* [GHrDay]	9.000	270.000	
1.6	8	15	Earth fill from excavation and compacted to 95% MOD-AASHO			M3	32.189
Variable	Note	Value string	Value	<i>Production</i>	500		
Lprod	Production	500	500.000				
<i>Resource</i>	<i>ResDescription</i>	<i>Unit</i>	<i>Rate</i>	<i>--Qty formula bar--</i>	<i>Quantity</i>	<i>Amount</i>	
B001	Cat910	Hr	402.500	[GHrDay]	9.000	3 622.500	
Tipper	Tipper 5M3 (wet)	hr	250.000	1 * [GHrDay]	9.000	2 250.000	
B004	Gallion grader	Hr	844.750	[GHrDay]	9.000	7 602.750	
Bomag	Bomag roller plus tow unit	hr	210.000	[GHrDay]	9.000	1 890.000	
LeaderExc	GANG LEADER-EXC/FILL	HR	30.000	[GHrDay]	9.000	270.000	
WorkerExc	GEN WORKER-EXC/FILL	HR	17.000	3 * [GHrDay]	27.000	459.000	

Cost Bill from high to low

<i>Item Description</i>	<i>Unit</i>	<i>Qty</i>	<i>CostRate</i>	<i>Rate*Qty</i>	<i>P and G</i>	<i>PLANT</i>	<i>LABOUR</i>	<i>MATERIAL</i>	<i>SUBC</i>
4.3 One brick wall in super structure including wall ties	M2	420.0	327.83	137 689				172	
2.2.3 25MPA Concrete in slabs	M3	100.0	1 100.67	110 067			156	945	
5.3 Roof complete	sum	1.0	75 000.00	75 000					7
2.2.1 25MPA Concrete in column stanchion bases.	M3	50.0	1 318.61	65 930			374	945	
1.2 Excavate in earth in bulk not exceeding 2M deep	M3	1 500.0	40.40	60 604		38	2		

Certificates overview

With the Certificate you can certify the amount of work already done on the project. Either by quantity or percentage

- The Certificate system is interlinked with the Estimating system. Once you have created the Bill (either by importing or typing it), you can do a Certificate.
- There is a facility to do your measurements on screen by double-clicking on Cumulative Quantity. You can also use various in-built functions. Refer to the screen.
- You can also enter as a percentage completed per item or over a range of items or per work group / cost centre.
- The system also allows for variable retention, Materials on Site, Escalation and a cover page.
- Because of the link to the Estimate, one can print a report of Allowables based on the month or cumulative progress. There is also a provision for an internal quantity, should the actual progress differ from the claimed quantity.

Recording progress

The screenshot shows the EJMProject software interface. The main window is titled 'Certificate' and displays a table of items for 'Project 0001 Warehouse'. The table has columns for Sequer, Level, Page, Item, Description, Unit, BillQty, FinalEstQty, CumQty, SellRate, Final, PrevCumQty, MonthQty, CumPercent, and InternalQty. A dialog box titled 'Certified Quantity calculation' is open, showing a 'Billed quantity' of 1500.000 M3 and a 'Functions' section with a dropdown menu set to 'Circle' and a 'radius' input field.

Sequer	Level	Page	Item	Description	Unit	BillQty	FinalEstQty	CumQty	SellRate	Final	PrevCumQty	MonthQty	CumPercent	InternalQty
1.000	1	1		Warehouse	1					<input type="checkbox"/>				
2.000	2	1	Bill 1	Earthworks	1					<input type="checkbox"/>				
3.000	5	1	1.1	Clear site from vegetation, rubbish, shrub, roots	M2	5 000.0	200.0	4 500.000	2.68	<input checked="" type="checkbox"/>	4 500.000		90.00	4 500.
4.000	5	1	1.2	Excavate in earth in bulk not exceeding 2M deep	M3	1 500.0		1 300.000	46.46	<input checked="" type="checkbox"/>	900.000	400.000	86.67	900.
7.000	5	1	1.5	Extra over excavation in rock (compressor)	M3	100.0		102.000	227.44	<input checked="" type="checkbox"/>	102.000		102.00	98.
8.000	5	1	1.6	Earth fill from excavation and compacted to 95%	M3	800.0		750.000	37.02	<input checked="" type="checkbox"/>	500.000	250.000	93.75	
9.000	2	2	Bill2	Concrete & reinforcing	1									
10.000	3	2	2.1	Mass concrete	1									
12.000	5	2	2.1.2	20MPA Concrete in blinding layer under bases	M3									4.
13.000	5	2	2.1.3	20MPA Concrete in surface trenches	M3									54.
14.000	3	2	2.2	Reinforced concrete	1									
15.000	5	2	2.2.1	25MPA Concrete in column stanchion bases.	M3									49.
17.000	5	2	2.2.3	25MPA Concrete in slabs	M3									
18.000	5	2	2.2.4	High tensile reinforcement (Y) in bars of 20mm	TON									0.
22.000	2	3	Bill 4	Brickwork	1									
23.000	5	3	4.1	One brick wall in foundations	M2									140.

Progress can be recorded as:

- Cumulative
- Month
- Percentage
- Worksheet; by double-clicking on the CumQty cell of the item

Retention rules

Retention rules		
Work to upper limit	Basic retention	% Retention
1 000 000.00	0.00	10.00
10 000 000.00	100 000.00	0.00
0.00	0.00	0.00

In this example, 10% retention to a maximum of R100 000

Payment certificates

There are various lay-outs:

1	Current, previous, total
2	Bill, month, cumulative
3	As above, suppress 0
4	Synopsis
5	Site measurement
6	Like 3 but no %
7	SANRAL layout
8	Internal certificate
9	Estimated final certificate

Seq.	Page	Item	Description	Unit	Rate	----- Billed -----		----- Month-----		----- Cumulative-----		
						Quantity	Amount	Quantity	Amount	Quantity	Amount	Cum%
Warehouse												
Earthworks												
3.0	1	1.1	Clear site from vegetation, rubbish, shrub, roots etcetera	M2	2.68	5000.0	13 400.00			4500.00	12 060.00	90.00%
4.0	1	1.2	Excavate in earth in bulk not exceeding 2M deep	M3	46.46	1500.0	69 690.00	400.00	18 584.00	1300.00	60 398.00	88.67%
7.0	1	1.5	Extra over excavation in rock (compressor)	M3	227.44	100.0	22 744.00			102.00	23 198.88	102.00%
8.0	1	1.6	Earth fill from excavation and compacted to 95% MDD-AASHO	M3	37.02	800.0	29 616.00	250.00	9 255.00	750.00	27 765.00	93.75%
Concrete & reinforcing												
12.0	2	2.1.2	20MPA Concrete in blinding layer under bases.	M3	1 091.47	5.0	5 457.35	0.90	982.32	4.90	5 348.20	98.00%
13.0	2	2.1.3	20MPA Concrete in surface trenches	M3	1 091.47	56.0	61 122.32	4.88	5 326.37	54.88	59 899.87	98.00%
15.0	2	2.2.1	25MPA Concrete in column/stanchion bases.	M3	1 516.40	50.0	75 820.00	9.00	13 647.60	49.00	74 303.60	98.00%
18.0	2	2.2.4	High tensile reinforcement (Y) in bars of 20mm diameter	TON	10 350.00	1.0	10 350.00	0.48	4 968.00	0.98	10 143.00	98.00%
Brickwork												
23.0	3	4.1	One brick wall in foundations	M2	377.01	175.0	65 976.75	140.00	52 781.40	140.00	52 781.40	80.00%
24.0	3	4.2	Half brick wall in super structure	M2	188.50	105.0	19 792.50	94.50	17 813.25	94.50	17 813.25	90.00%
25.0	3	4.3	One brick wall in super structure including wall ties	M2	377.01	420.0	158 344.20	336.00	126 675.36	336.00	126 675.36	80.00%

Materials on site

Materials on site						
Class	Resource	Description	Unit	Base rate	Current rate	Quantity
4C	OPCBulk	OPC CEMENT-BULK	50Kg	80.00	80.00	200.000
4C	RiverSand	RIVER SAND-WASHED	M3	180.00	180.00	0.000
4C	SlagBak	Slagment - bag	50Kg	70.00	70.00	150.000
4C	Stone	19MM CRUSHED STONE	TON	150.00	150.00	0.000
4E	F3Sundry	F3 SUNDRY FORMWORK	M2	60.00	60.00	0.000
4E	Ferrule	ASB, FERRULE TUBE	M	9.00	9.00	0.000
4E	GUM	TRIM GUM BEARERS	M	40.00	40.00	0.000
4E	MouldOil	MOULD RELEASE OIL	210	2 500.00	2 500.00	0.000
4E	Nail100	100MM WIRE NAILS	KG	33.00	33.00	0.000
4E	Nail125	125MM WIRE NAILS	KG	33.00	33.00	0.000
4E	Nail150	150MM WIRE NAILS	KG	33.00	33.00	0.000
4E	RMS10	RMS 10MM (SCB&DEL)	TON	9 000.00	9 000.00	0.000
4E	SAPine	SA PINE ROUGH	M3	4 500.00	4 500.00	0.000
4E	Spacer	PLASTIC SPACERS-FMWK	000	650.00	650.00	0.000
4H	BuildSand	BUILDING SAND	M3	150.00	150.00	0.000
4H	HiltiCharge	HILTI CHARGES	EA	0.58	0.58	0.000
4H	HiltiNail	32MM S12 HILTI NAILS	EA	1.29	1.29	0.000
4H	HoopIron	1.6X38MM HOOP IRON	M	5.89	5.89	0.000
4H	OPCPocket	OPC CEMENT-POCKETS	Pct	85.00	85.00	100.000
4H	StockBrick	STOCK BRICKS	000	1 200.00	1 200.00	20.000
4H	StockHard	HARD BURNT STOCK BKS	000	1 500.00	1 500.00	0.000
4H	WallTie	3MM CRIMPED WALL TIE	20	8.87	8.87	0.000
4O	CementPlast	CEMENT-PLASTERING	PCT	85.00	85.00	0.000
4O	SandPlast1	PLASTER SAND	M3	180.00	180.00	0.000
4O	SandPlast2	RIVER SAND-PLASTER	M3	82.28	82.28	0.000
4S	Cloth	CHEESE CLOTH	RDL	25.66	25.66	0.000
4C	MaskingTape	MASKING TAPE	RDL	10.97	10.97	0.000
MOS @ Base Rate:						59 000.00

Materials on Site

Resource	Description	Unit	Current rate	Base rate	Quantity	Amount@B/rate
OPCBulk	OPC CEMENT-BULK	50Kg	80.00	80.00	200.00	16 000.00
OPCPocket	OPC CEMENT-POCKETS	Pct	85.00	85.00	100.00	8 500.00
SlagBak	Slagment - bag	50Kg	70.00	70.00	150.00	10 500.00
StockBrick	STOCK BRICKS	000	1 200.00	1 200.00	20.00	24 000.00
Total MOS at Base Rate:						59 000.00

Cover page/ pro-forma certificate

 Build Demo Warehouse - certified progress Unit B3 Route 21 Corporate Park, Prospect Clos 1625	Telephone: 012 345 1524 Fax:																																																				
	TO: Pick & Pay Holdings Ltd P.O. Box 1 Hilex 1613	VAT Registration No 4539286471 CERTIFICATE NUMBER: 2																																																			
VAT registration number:																																																					
NOTE: VAT invoice to be issued as soon as details of certified amounts are received.																																																					
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Quotation

- The Estimate can also be converted to a quotation.
- Rich-text editor for description field.

License Project Menu Certificate for Project 0001 Warehouse Quote create and print

Quotation 1 Current system: Build Demo C:\EJMCount\Rek1.accdb

Select quote to work on:

Client: Pick & Pay Holdings Ltd P&PH
 Address: P.O. Box 1
 Hilex
 Attention: Raymond Ackerman
 Description: Alterations to warehouse
 Note:

Revenue account: PrjRev Project revenue
 Project in accounting system: 0001
 Select Tax: 2 VatOut Output VAT 14.00 %
 (C)urrent or (P)revious year C Period: 12
 Date from: 2013/02/01 to 2013/02/28
 Invoice Date: 2013/02/18 Date Ordered: 2013/02/18
 Person, note: Ernst

Item	Description	Unit	Rate	Quantity	Amount
	Warehouse			0.00	0.00
Bill 1	Earthworks		0.00	0.000	0.00
1.1	Clear site from vegetation, rubbish, shrub, roots etcetera	M2	2.68	5000.000	13 400.00
1.2	Excavate in earth in bulk not exceeding 2M deep	M3	46.46	1500.000	69 690.00
1.5	Extra over excavation in rock (compressor)	M3	227.44	100.000	22 744.00
1.6	Earth fill from excavation and compacted to 95% MOD-AASHO	M3	37.02	800.000	29 616.00
Bill2	Concrete & reinforcing		0.00	0.000	0.00
2.1	Mass concrete		0.00	0.000	0.00
2.1.2	20MPA Concrete in blinding layer under bases.	M3	1 091.47	5.000	5 457.35
2.1.3	20MPA Concrete in surface trenches	M3	1 091.47	56.000	61 122.32
2.2	Reinforced concrete		0.00	0.000	0.00
2.2.1	25MPA Concrete in column stanchion bases.	M3	1 516.40	50.000	75 820.00
2.2.3	25MPA Concrete in slabs	M3	1 265.77	100.000	126 577.00
2.2.4	High tensile reinforcement (Y1) in bars of 20mm diameter	TON	10 350.00	1.000	10 350.00
	Sub total:				793 860.12
	VAT:			0.00	
	Total invoice:				793 860.12



Build Demo
 VAT Registration No. 4539288471
 Unit B3 Route 21
 Corporate Park, Prospect Clois
 43 RegencyPark
 1613

Quotation

Quote number: 1
 Phone: 012 345 1524
 Fax:
 E-mail: ernst@emwin.co.za

TO: Raymond Ackerman
 Pick & Pay Holdings Ltd
 P.O. Box 1
 Hilex
 1613 Account: P&PH

VAT registration number:
 Telephone: 011 976 5000
 FAX: 011 976 4403

QUOTATION DATE	OUR REFERENCE	DELIVER BY
18 Februarie 2013	Ernst	18-Feb-13

Item	Description	Unit	Quantity	Rate	Amount
	Warehouse				
Bill 1	Earthworks				
1.1	Clear site from vegetation, rubbish, shrub, roots etcetera	M2	5 000.00	2.68	13 400.00
1.2	Excavate in earth in bulk not exceeding 2M deep	M3	1 500.00	46.46	69 690.00
1.5	Extra over excavation in rock (compressor)	M3	100.00	227.44	22 744.00
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Bill2	Concrete & reinforcing				
2.1	Mass concrete				
2.1.2	20MPA Concrete in blinding layer under bases.	M3	5.00	1 091.47	5 457.35
2.1.3	20MPA Concrete in surface trenches	M3	56.00	1 091.47	61 122.32
2.2	Reinforced concrete				
2.2.1	25MPA Concrete in column stanchion bases.	M3	50.00	1 516.40	75 820.00
2.2.3	25MPA Concrete in slabs	M3	100.00	1 265.77	126 577.00
	Sub total				404 426.67
	VAT:				56619.73
	Total:				461 046.40

Variance reports

The Variance Reports can be seen as the pinnacle of the EJM system.

It is on the Estimate ribbon of **EJMProject**, but reads the costing transactions that come from the accounting system, in conjunction with **Tool & Equipment** and **EJMPayroll**.

The link between the Estimate and Certificate determines the Allowables.

Variance Report: Allowables based on Cumulatives quantity Cost transactions from 2015/01/01 to 2015/02/28										
			<i>Allowable</i>			<i>Actual</i>			<i>Variance</i>	
			<i>Quantity</i>	<i>Rate</i>	<i>Amount</i>	<i>Quantity</i>	<i>Rate</i>	<i>Amount</i>	<i>Quantity</i>	<i>Amount</i>
2	PLANT									
	250CFM COMPRESSOR250CFM(D)	Mnth	0.5	5 000.00	2 318.18	1.0	5 000.00	5 000.00	-0.5	-2 681.82
	Bomag Bomag roller plus tow unit	Hr	13.5	210.00	2 835.00				13.5	2 835.00
	Cat320 Cat320 excavator	Hr	39.0	392.00	15 288.00	35.0	392.00	13 720.00	4.0	1 568.00
	Cat910 Cat910 loader	Hr	33.8	290.00	9 787.50	40.0	290.00	11 600.00	-6.3	-1 812.50
	Gallion Cat120K grader	Hr	13.5	631.00	8 518.50	13.0	650.00	8 450.00	0.5	68.50
	Tipper Tipper5M3 (wet)	Hr	130.5	250.00	32 625.00	125.0	230.00	28 750.00	5.5	3 875.00
	Diesel DIESEL	Hr	1 533.0	11.25	17 246.25	1 500.0	11.67	17 500.00	33.0	-253.75
	Total for 2 PLANT				88 618.43			85 020.00		3 598.43
3	LABOUR									
	LeaderConc LEADER-CONCRETE	Hr	104.5	20.56	2 148.59	130.0	20.20	2 625.60	-25.5	-477.01
	LeaderExc LEADER-EXC/FILL	Hr	164.6	30.00	4 936.50	170.0	27.83	4 730.25	-5.4	206.25
	WorkerCo GENERAL WORKER-CONCR	Hr	1 149.5	17.00	19 542.18	1 150.0	16.76	19 268.48	-0.5	273.70
	WorkerExc GEN WORKER-EXC/FILL	Hr	809.6	17.00	13 762.35	760.0	16.46	12 508.48	49.6	1 253.87
	Total for 3 LABOUR				40 389.62			39 132.81		1 256.81
4	MATERIAL									
	20MPA_R 20MPA READYMIX-OPC	M3	62.8	850.00	53 353.65	58.0	850.00	49 300.00	4.8	4 053.65
	25MPA_R 25MPA Ready mix concrete	M3	51.5	900.00	46 305.00	50.0	900.00	45 000.00	1.5	1 305.00
	BuildSand BUILDING SAND	M3	63.7	150.00	9 556.52	65.0	150.00	9 750.00	-1.3	-193.48
	OPCPocket OPC CEMENT-POCKETS	Pct	290.4	85.00	24 683.05	290.0	85.00	24 650.00	0.4	33.05
	StockBrick STOCK BRICKS	000	57.1	1 200.00	68 566.68	55.0	1 200.00	66 000.00	2.1	2 566.68
	Total for 4 MATERIAL				202 464.90			194 700.00		7 764.90
5	SUBCONTRACTOR									
	S-Brick STOCK BRICKWK-LABOUR	000	54.4	1 500.00	81 627.00	55.0	1 515.63	83 359.68	-0.6	-1 732.68
	S-Plast LO PLAST-VERT/BRKWK	M2	840.0	25.00	21 000.00	850.0	25.00	21 250.00	-10.0	-250.00
	Roof Roof complete per sub contract	sum	0.8	75 000.00	60 000.00	1.0	60 000.00	60 000.00	-0.2	
	S-20HTS HTS 20MM (SCBD&FIX)	Ton	1.0	9 000.00	8 820.00	1.0	9 000.00	9 000.00		-180.00
	Total for 5 SUBCONTRACTOR				171 447.00			173 609.68		-2 162.68
	Total for the Project				502 919.96			492 462.49		10 457.47

Cost centre Variance for project 0001 Warehouse

Allowables based on Cumulative quantities Cost transactions from 2015/01/01 to 2015/02/28

<i>Cost centre</i>	<i>Description</i>	<i>Allowable</i>	<i>Cost ledger</i>	<i>Variance</i>		
<i>%Act/All</i>	<i>%Var/All</i>					
BFILL	Backfilling	24 141.38	25 880.00	-1 738.63	107.2	-7.2
BWORK	Brickwork	171 537.44	183 759.68	-12 222.24	107.1	-7.1
CONC	Concrete	121 349.42	116 194.08	5 155.34	95.8	4.2
EXC	Excavation	83 175.91	76 378.73	6 797.18	91.8	8.2
PLAST	Plaster and Pavior	33 895.81	21 250.00	12 645.81	62.7	37.3
REINF	Reinforcement	8 820.00	9 000.00	-180.00	102.0	-2.0
ROOF	Roofing	60 000.00	60 000.00	0.00	100.0	0.0
Total:		502 919.96	492 462.49	10 457.47	97.9	2.1

Detail Cost Centre Variance Report for Project 0001 Warehouse

Allowables based on Cumulatives quantity Cost transactions from 2015/01/01 to 2015/02/28

<i>Cost centre</i>	<i>PLANT</i>		<i>LABOUR</i>		<i>MATERIAL</i>		<i>SUBCONT</i>		<i>Total</i>		<i>Variance</i>	<i>%</i>
	<i>Allow</i>	<i>Cost</i>	<i>Allow</i>	<i>Cost</i>	<i>Allow</i>	<i>Cost</i>	<i>Allow</i>	<i>Cost</i>	<i>Allow</i>	<i>Cost</i>		
BFILL Backfilling	23 048	25 880	1 094	0	0	0	0	0	24 142	25 880	-1 738	
BWORK Brickwork	0	0	0	89 910	100 400	81 627	83 360	171 537	183 760	-12 223	-7	
CONC Concrete	0	0	21 691	21 894	99 658	94 300	0	0	121 349	116 194	5 155	4
EXC Excavation	65 571	59 140	17 606	17 239	0	0	0	83 177	76 379	6 798	8	
PLAST Plaster and Pavior	0	0	0	12 895	0	21 000	21 250	33 895	21 250	12 645	37	
REINF Reinforcement	0	0	0	0	0	8 820	9 000	8 820	9 000	-180	-2	
ROOF Roofing	0	0	0	0	0	60 000	60 000	60 000	60 000	0	0	
Total:	88 619	85 020	40 391	39 133	202 463	194 700	171 447	173 610	502 920	492 463	10 457	2

Resource Variance: Period and Life to Date

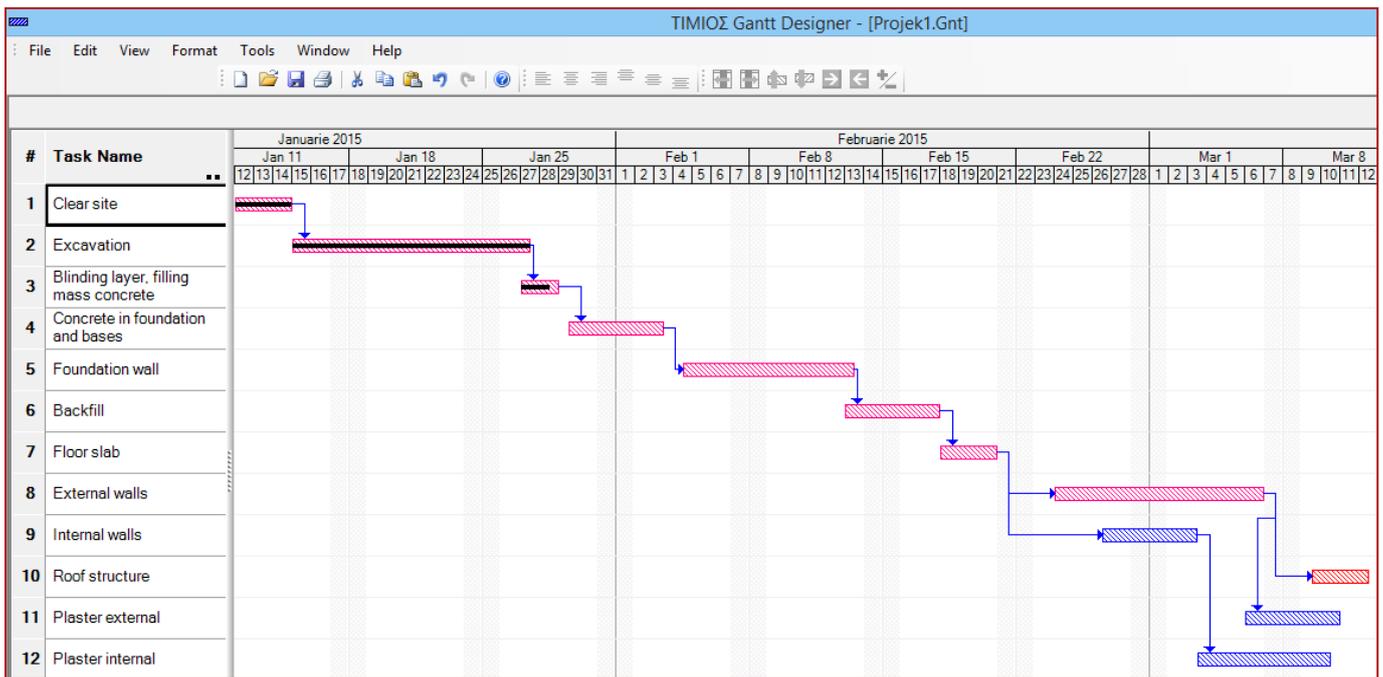
Period from 2015/01/01 to 2015/02/28				From Major category: 1 to 9												
Contract to date Allowables based on Cumulative quantity																
Resource	Unit	ActualRate	Allow Rate	CURRENT MONTH						CONTRACT TO DATE						
				UNITS			COST			UNITS			COST			
				Actual	Allow	Variance	Actual	Allow	Variance	Actual	Allow	Variance	Actual	Allow	Variance	
2 PLANT																
250CFM	COM PRESSOR 250CFM (D)	Mnth	5 000.00	5 000.00	1	0	#Error	5 000	0	#Error	1	0	-116%	5 000	2 318	-116%
Bomag	Bomag roller plus tow unit	Hr	#Error	210.00	0	5	100%	0	945	100%	0	14	100%	0	2 335	100%
Cat320	Cat 320 excavator	Hr	392.00	392.00	35	12	-192%	13 720	4 704	-192%	35	39	10%	13 720	15 288	10%
Cat910	Cat 910 loader	Hr	290.00	290.00	40	5	-789%	11 600	1 305	-789%	40	34	-19%	11 600	9 788	-19%
Diesel	DIESEL	Hr	11.87	11.25	1 500	283	-471%	17 500	2 953	-493%	1 500	1 533	2%	17 500	17 246	-1%
Gallon	Cat 120K grader	Hr	650.00	631.00	13	5	-189%	8 450	2 840	-198%	13	14	4%	8 450	8 519	1%
Tipper	Tipper SM3 (we)	Hr	230.00	250.00	125	41	-209%	28 750	10 125	-184%	125	131	4%	28 750	32 625	12%
Total 2 PLANT								55 020	22 572					55 020	55 515	3 895
3 LABOUR																
LeaderCon	GANG LEADER-CONCRETE	Hr	20.20	20.56	130	18	-631%	2 626	365	-618%	130	105	-24%	2 626	2 149	-22%
LeaderExc	GANG LEADER-EXC/FILL	Hr	27.83	30.00	170	17	-930%	4 730	495	-856%	170	165	-3%	4 730	4 937	4%
WorkerCo	GENERAL WORKER-CONCR	Hr	16.76	17.00	1 150	196	-488%	19 268	3 324	-480%	1 150	1 150	0%	19 268	19 542	1%
WorkerExc	GEN WORKER-EXC/FILL	Hr	16.46	17.00	760	50	-1436%	12 508	842	-1386%	760	810	6%	12 508	13 782	9%
Total 3 LABOUR								39 133	6 026					39 133	40 390	1 257
4 MATERIAL																
20MPA_R	20MPA READY MIX-OPC	M3	850.00	850.00	58	6	-856%	49 300	5 159	-856%	58	63	8%	49 300	53 354	8%
25MPA_R	25MPA Ready mix concrete	M3	900.00	900.00	50	9	-429%	45 000	8 505	-429%	50	51	3%	45 000	46 305	3%
BuildSand	BUILDING SAND	M3	150.00	150.00	65	64	-2%	9 750	9 557	-2%	65	64	-2%	9 750	9 557	-2%
OPCPocke	OPC CEMENT-POCKETS	Ptd	35.00	35.00	290	290	0%	24 650	24 683	0%	290	290	0%	24 650	24 683	0%
StockBrick	STOCK BRICKS	000	1 200.00	1 200.00	55	57	4%	66 000	68 567	4%	55	57	4%	66 000	68 567	4%
Total 4 MATERIAL								194 700	116 470					194 700	202 456	7 756
5 SUBCONTR																
Roof	Roof complete per sub contract	sum	60 000.00	75 000.00	1	1	-25%	60 000	60 000	0%	1	1	-25%	60 000	60 000	0%
S-20HTS	HTS 20MM (SCBD&FDQ)	Ton	9 000.00	9 000.00	1	0	-108%	9 000	4 320	-108%	1	1	-2%	9 000	8 820	-2%
S-Brick	STOCK BRICKWK-LABOUR	000	1 515.63	1 500.00	55	54	-1%	83 360	81 627	-2%	55	54	-1%	83 360	81 627	-2%
S-Plast	LO PLAST-VERT/BRKWK	M2	25.00	25.00	850	840	-1%	21 250	21 000	-1%	850	840	-1%	21 250	21 000	-1%
Total 5 SUBCONTR								173 810	156 947					173 810	171 447	-2 163
Grand Total								492 462	311 315	-181 148				492 462	502 920	10 457
Revenue:								578 363						578 363		
Profit/Loss								85 900						85 900		

Scheduling and cashflow overview

Time is money. And with the schedule you can plan when and which part of the project will be completed; and when resources will be needed.

- Creating the Schedule and linking it to the Bill of Quantities**
 One can also enter the progress as a percentage and a deadline.
 On the date routines, you can specify the length of the calendar and work week (5, 6 or 7 days).
 You can also specify holidays and other non-working days.
 Link the Bill to the Schedule. A Bill of Quantity item can be allocated to more than one Bar. (e.g. concrete in slabs will be casted in three stages).
- Cashflow**
 As the Barchart is linked to the Estimate, it is possible to do a Cash flow.
 The dark blue line is the nett cash position of the contract, taking into account the cumulative expense, retention and drawings.
- Resources needed over a time span**
 The schedule links with the Estimate, this make it possible to determine the resources needed for a range of items within a time interval.

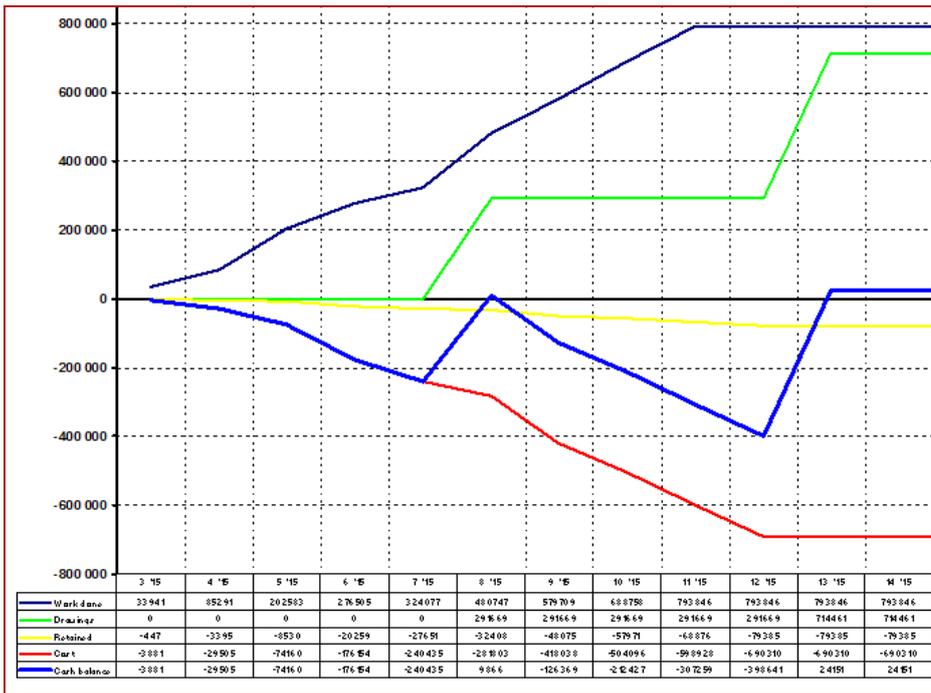
Create the bar chart



Link the estimate and the barchart

	From BoQ	To BoQ	Link to Bar	Percent	Bar description
	3.00	3.00	0001	100.00	Clear site
	4.00	7.00	0002	100.00	Excavation
	12.00	12.00	0003	100.00	Blinding layer, filling mass concrete
	13.00	15.00	0004	100.00	Concrete in foundation and bases
	23.00	23.00	0001		Clear site 3.00
	8.00	8.00	0002		Excavation 9.00
	17.00	18.00	0003		Blinding layer, filling mass 2.00
	24.00	25.00	0004		Concrete in foundation a 3.00
	24.00	25.00	0005		Foundation wall 7.00
	24.00	25.00	0006		Backfill 3.00
	29.00	29.00	0007		Floor slab 3.00
	27.00	27.00	0008		External walls 9.00
	28.00	28.00	0009		Internal walls 3.00
*			0010		Roof structure 3.00
			0011		Plaster external 3.00
			0012		Plaster internal 5.00

Cashflow



Resources required for specific action in a time interval

Schedule allowables

1. Select Bar range:
 From: 0001 to: 0002

2. Select date range:
 From: 12 Januarie 201 to: 23 Januarie 201

3. Select Major Category Resource range:
 From: 2 to: 2

4. Output:
 Display Print Excel

5. Report:
 Allowables Financials BoQ/ Schedule quantities (only after Allowables)

6. Go ahead! Total: 59 500.18

Resource	Unit	Quantity	Rate	Amount
2 PLANT				
250CFM COMPRESSOR 250CFM(D)	Mnth	0.4	5 000.00	1 767.68
Cat320 Cat 320 excavator	Hr	35.0	392.00	13 720.00
Cat910 Cat 910 loader	Hr	22.5	290.00	6 525.00
Tipper Tipper 5M3 (wet)	Hr	105.0	250.00	26 250.00
Diesel DIESEL	Hr	998.9	11.25	11 237.50
Total PLANT				59 500.18

Projected daily cash flow

Date	Stat	Day	Sell	Cost	CumRevenue	CumExpense	CumReten.
CumDraw	Nett cash						
2015/02/14	N	324 077			-281 803	-32 408	-281 803
2015/02/15	N	324 077			-281 803	-32 408	9 866
2015/02/16	W	26 9 872	8 584	333 949	-290 387	-33 395	1 282
2015/02/17	W	27 9 872	8 584	343 821	-298 971	-34 383	-7 302
2015/02/18	W	2845 642	39 689	389 463	-338 660	-38 947	-46 991