

Estate Master Development Management



Operations Manual

ESTATEMASTER

PROPERTY SOFTWARE

www.estatemaster.net

Table of Contents

Part I Introduction to Estate Master	6
1 Introduction	6
2 Program Integrity.....	6
3 System Requirements.....	7
Part II Installation	9
Part III Introduction to Development Analysis	11
1 Development Margin.....	11
2 Time Value of Money.....	11
3 Discounted Cash Flow Analysis.....	12
4 Performance Indicators.....	12
5 Risk Assessment.....	13
6 Discount Rate.....	13
Part IV Quick Start Guide	16
1 Quick Start	16
2 Navigation	17
3 Estate Master Menu.....	18
4 Estate Master Tool Bar.....	19
5 Resizing the Model.....	20
Part V Estate Master Preferences	22
1 General	23
2 Inputs	24
3 Forecasts	26
4 Taxation	27
5 Financials	30
6 Hurdle Rates.....	32
7 Display	34
8 Resize	35
Part VI Setting the Original Budget	37
1 Import a Feasibility.....	37
2 Manually Input Data.....	37
Part VII Input Assumptions	39
1 Open File	39
2 Set Preferences and Default Setup.....	39
3 Inputting Data.....	39

4	Project Introduction.....	40
5	Preliminary	41
6	Taxation (GST,VAT,etc).....	42
7	Land Purchase and Acquisition Costs.....	43
8	Statutory Fees and Contributions	44
9	Project Contingency.....	45
10	Cost Escalation Rates.....	45
11	Professional Fees.....	47
12	Construction Costs.....	48
13	Miscellaneous Costs.....	49
14	Land Holding Costs.....	50
15	Revenue Escalation Rates.....	52
16	Sales Commission.....	53
17	Selling Costs.....	54
18	Sales Revenue Collection Profile.....	55
19	Sales	57
20	Rental Income and Capitalised Sales.....	59
21	Leasing Costs.....	63
22	Other Income.....	63
23	Financing	64
24	Equity	69
25	Loans 1, 2 and 3.....	72
26	Senior Loan.....	75
27	Other Finance Costs	77
28	Project Hurdle Rates.....	78
29	Project Timeline (Gantt Chart).....	78
30	Manual Cash Flow Inputs.....	79
31	Stamp Duty Tables.....	80
32	Land Tax Tables.....	81
33	S-Curves	82
34	Set Original Forecast.....	83
Part VIII Development Management		85
1	Cash Flow Components.....	85
	Cash Flow Tools	85
	Input Assumptions	89
	Forecast Summary	91
	Detailed Cash Flow	92
	Stock Summary	93
	Project Cash Flow Summary	94
	Financing	95
2	Updating Forecasts with Actuals.....	96
	Method 1 - Updating Input Assumptions	96
	Method 2 - Manually Override Cash Flow	97
	Method 3 - Import Accounts Data	99
	Setting Forecasts and Progressing in Time	101

3	Management Tools.....	101
Part IX	Summary and Cash Flow Reporting	106
1	Development Financial Summary.....	106
2	Cash Flow Table.....	110
3	Cash Flow Charts.....	113
Part X	Financial Reporting	115
1	Revenue Recognition.....	115
2	Profit Realisation.....	116
3	Profit and Loss Statement.....	117
4	Corporate Tax.....	118
5	Cash Flow and IRR.....	119
6	Balance Sheet.....	119
Part XI	Risk Assessment	122
1	Sensitivity Analysis.....	122
2	Monte Carlo (Probability) Analysis.....	125
Part XII	Printing Reports	130
Part XIII	Using the Estate Master Enterprise Database	133
1	Introduction to the Enterprise Database.....	133
2	Preparing Data for Exporting.....	133
3	Exporting to the Database.....	135
4	Importing from the Database.....	137
5	Exporting when Setting Budgets.....	138
Part XIV	Troubleshooting	140
1	Macros are Disabled.....	140
2	Maximum Cash Flow Periods.....	140
3	Entering the Correct Data.....	140
4	Cut & Move Commands.....	140
5	Importing Data from Previous Versions.....	141
Part XV	Licence Agreement	144

Part



1 Introduction to Estate Master

1.1 Introduction

This operations manual is a guide for using Estate Master DM developed in Microsoft Excel and Visual Basic .NET.

Estate Master DM is a cash flow model designed for managing and tracking development projects. It calculates forecasted and actual investment returns including, development profit, internal rate of return and net present value based on a comprehensive set of inputs.

The Program can be used to:

- Track a project's cash flow and risk exposure;
- Provide a tool for time and cost management;
- Enable re-forecasting and report current forecast against previous and original forecasts.

1.2 Program Integrity

Every effort has been made to provide a quality product that is simple, flexible and detailed in its analysis.

The Estate Master DM program has been originally sealed by a password to safeguard the integrity of the program and formulae. If the seal is broken the validity of the formulae and program calculations cannot be guaranteed any more. Therefore, we recommend that the authors be notified of any problems rather than the user attempting to rectify the problem by removing the protection facility.

To this end any modifications to the Estate Master DM program are prohibited without the express written approval of the authors Hill PDA Land Economists.

Also, we cannot guarantee that the program is or will remain error free for every possible input permutation. To retain the integrity of the programs we recommend you audit the models on a regular basis with manual reality checks on the output results.

Furthermore the program assumes certain tax assumptions such as rates of stamp duty. These may change in time and it is important for the user to keep abreast of such changes and know how they effect the model's assumptions.

If you have any queries or suggestions for improvements, please contact us:

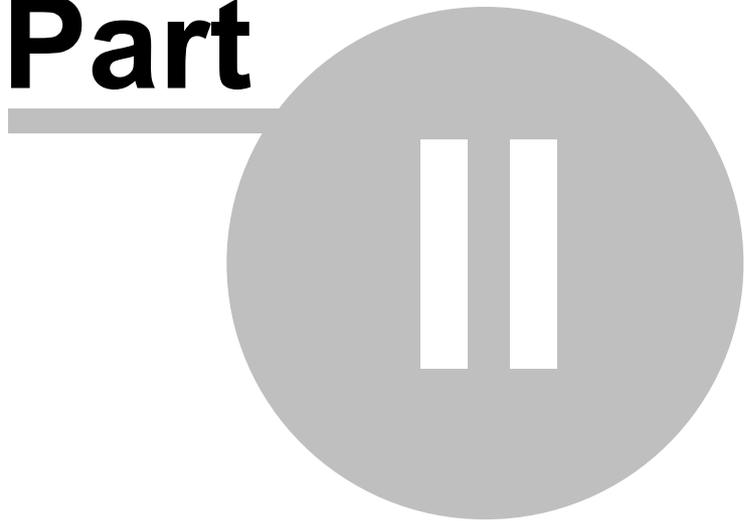
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1.3 System Requirements

To install and operate Estate Master DM efficiently, the following is recommended:

- PC with an Intel Core 2 Duo (3GHz) or Quad (2.4Ghz) minimum processor (or equivalent).
- Microsoft Windows 98 or later operating system. The software is not compatible with Macintosh systems.
- Microsoft Internet Explorer 5.1 or higher.
- Microsoft .Net Framework 2.0 or higher.
- Microsoft Excel 2000 or later. The software may run on Excel 97, but is not recommended.
- 1Gb RAM or higher.
- CD Drive (if installing from CD).
- Printer installed.
- Modem and internet connection (for downloading files and obtaining tech support).

Part



2 Installation

The program can only be installed by a person who has Administration rights for that PC. This is relevant for workstations that form part of a network.

To Install the File from CD

1. Place the Estate Master CD into the drive and wait for the installation program to automatically load.
2. Follow the prompts to install the program on the PC.

To Install the File from Download

1. After downloading the executable file from the Estate Master web site and saving it on your PC, open the file by double clicking on it with your mouse.
2. Follow the prompts to install the program on the PC.

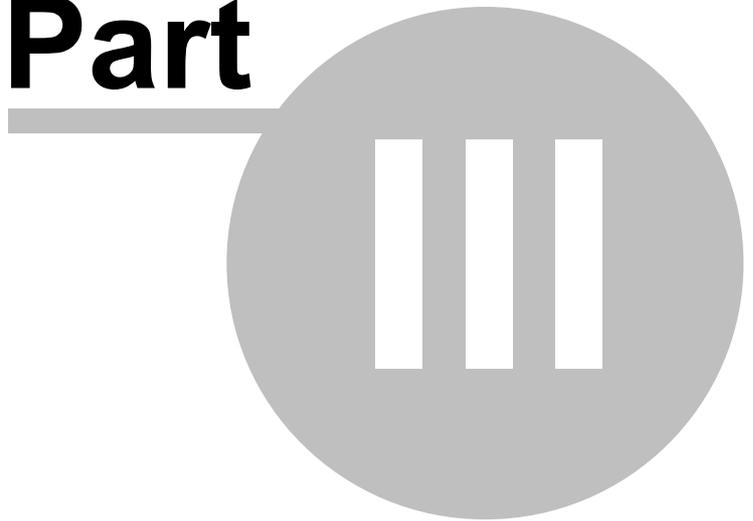
Opening and Closing the File - New File

1. In Microsoft Windows go to the [Start] → [Programs] → [Estate Master] → [DM4] and click on [Estate Master DM]
2. The program will begin to load. If asked, tick the box 'Always Trust Macros from this source' and ensure that macros have been 'Enabled'.
3. Once the file has opened, it is recommended that you save the file as a different filename. Be sure not to save your working file over the master file or template. If you have done so then you should re-install the master software.
4. After using the program, save the file if required, and close using the Excel File Close command.

Opening and Closing the File - Existing File

1. Go to the current Estate Master DM file you wish to open and double click with your mouse.
2. The program will begin to load. If asked, tick the box 'Always Trust Macros from this source' and ensure that macros have been 'Enabled'.
3. After using the program, save the file if required, and close using the Excel File Close command.

Part



3 Introduction to Development Analysis

3.1 Development Margin

Before the widespread use of personal computers the traditional approach to development analysis was to:

- Estimate the total development cost for a project in current dollars (non inflated) including interest on 100% borrowings;
- Estimate the sale prices (less selling costs) based on comparable sales or income capitalisation expressed in current dollars;
- Calculate the net profit by subtracting total development cost from revenue; and
- Calculate the development margin by dividing profit by total development cost:

$$\text{Development Margin} = \frac{\text{Net Profit} * 100\%}{\text{Total Development Cost}}$$

Through experience, a 15% to 30% development margin was considered adequate for a project to be viable, although this would vary according to the level of project, financial and market risk.

3.2 Time Value of Money

The traditional development method of project appraisal however was recognised to be flawed when one or more of the following factors were involved:

- Inflation and above inflation escalations occurred with costs and sale values;
- Project periods extended beyond two or more years;
- Other medium term investments competed for funds; and
- Costs and sales were staged giving variable cash flow exposures.

The analytical drawback is due to the fact that the traditional approach does not account for the time value of money. Usually, a dollar today is more valuable than a dollar next year. Future cash flows should therefore be reduced (discounted) in value to reflect their current (present) value.

To demonstrate the time value of money, consider the case in which an individual receives a sum of \$1,000 and invests it at a return of 10% per annum compounded in Government Bonds. The \$1,000 will grow to \$1,100 at the end of year 1 and \$1,210 at the end of year 2 and so on. It is assumed that this 10% return represents the best use for the funds at a risk free rate. In this example, the investor should value \$1,100 in a years time or \$1,210 in two years time as equivalent to \$1,000 now (ie. its present value). The reduction of future dollars to its equivalent value in money today is known as discounting. Discounting is the reciprocal of compounding and is expressed in the following formula:

$$PV = \frac{FV}{(1+i)^n}$$

Where:

PV = Present Value;

FV = Future Value (predicted amount);

i = Discount Rate per period of time; and

n = number of periods.

3.3 Discounted Cash Flow Analysis

Discounted Cash flow analysis takes into account the time value of money in a much more detailed way than the developer's profit margin by considering the timing of all costs and incomes.

The first requirement of cash flow analysis is to create a tabulation of money and time with cash flow items along one axis and time on the other axis. In other words the same cash items used in the traditional approach (except interest on finance), are tabulated against equal time periods (months, quarters or years) and the values of those cash items are recorded in the time period are forecasted. Interest is excluded because this is incorporated in the discount rate as demonstrated above.

The value of all cash items are totalled for each time period (with cost items being negative and revenue items being positive) resulting in a net cash flow range through time. This range of net cash flows is discounted to present value. The resultant net present value (NPV) measures the difference between the discounted revenues and the discounted costs. This is the first and perhaps the most important performance indicator. A positive NPV implies that the present value of incomes exceeds the present value of costs and the project is therefore feasible.

The other primary indicator is the internal rate of return (IRR). This is the discount rate at which the net present value equals zero. Possibly a better way to understand its meaning is to express it as the maximum interest rate that can be charged to a fully funded project before the project would show a net loss.

3.4 Performance Indicators

Development Margin

Is used as a reflection of profitability and is the percentage return of net profit over total development cost calculated in the following way:

$$\text{Development Margin} = \frac{\text{Net Profit} * 100\%}{\text{Total Development Cost}}$$

Where:

Net Profit = Total Revenue less Total Development Cost; and

Total Development Cost includes all finance and interest charges, land holding and selling costs.

Residual Land Value Based on Target Developers Margin

Is the maximum price that can be paid for the land and still achieve the desired development profit margin (Target Margin).

Net Present Value

Is the sum of the present values of all project cash inflows and outflows over the life of the project. A positive NPV infers an Internal Rate of Return (IRR) greater than the discount rate. Interest on borrowings and interest received on re-investment of surplus funds and equity is ignored since this is incorporated in the discount rate. The formula is:

$$\text{NPV} = \sum_{n=t}^{n=0} \left[\frac{\text{FV}}{(1+i)^n} \right]$$

Where:

PV = Present Value;

FV = Future Value (predicted amount);

i = Discount Rate per period of time; and

n = number of periods.

Internal Rate of Return (IRR)

Is the discount rate at which the sum of the discounted negative cash flows equals the discounted positive cash flows, i.e. the discount rate at which the NPV equals zero. Simplistically the IRR represents the ACTUAL RETURN on funds invested. Interest on borrowings is ignored since this is incorporated in the discount rate.

Residual Land Value Based on NPV

Is the value of land which makes the net present value of the project = Zero or the IRR = Target IRR or Discount Rate. It is the maximum price to be paid for the land (excluding transaction costs) that will make the project feasible.

3.5 Risk Assessment

Risk is usually dealt with in several ways:

- Incorporating a risk premium in the discount rate. This is based on the concept that developers and investors expect higher returns for more risky projects.
- Use of sensitivity testing whereby different low, medium and high values for risky variables are incorporated to test the effects on the performance indicators.
- Application of Scenario Analysis, which records the results from a combination of variations.
- Application of Probability Analysis to produce a probability distribution of outcomes.

The second method has an advantage over the first method since combinations of different values for different risky variables can provide a range of outcomes. However neither method provides a consideration of the probability of those outcomes. Monte Carlo method assigns probability distributions to the risky variables but because of its complexity and limitations this method is not often used in the property development industry.

3.6 Discount Rate

Discount Rate (or Target IRR) is simplistically the DESIRED RETURN on funds invested. For discounted cash flow analysis the discount rate is the rate at which future cash flows are discounted to present value. For a development to be feasible the discounted value of future cash flows (Net Present Value) must be greater than zero. A feasible project will have an internal rate of return (FORECAST RETURN) greater than the discount rate (DESIRED RETURN).

A simple and popular method for choosing a discount rate in discounted cash flow analysis is an "Opportunity Cost of Capital" rate, which is given, in the following formula:

Discount Rate = Inflation + Risk Free Rate of Return (Cost of Capital) + Risk Premium

The risk free rate of return or cost of capital reflects the opportunity cost in not proceeding with the development. It may be defined by the current 5-10 year Government Bond rate. Note this includes an expectation of long-term inflation. If a zero inflation model is adopted then a medium term market forecast of inflation should be subtracted from the Government Bond rate to calculate the real risk free rate of return.

Risk Premium

Risk Premium is the level of discounting over and above the risk free rate (or cost of capital), which reflects the level of risk in the project.

Weighted Average Cost of Capital

A more sophisticated method of calculating the discount rate is the WACC which is the weighted required rate of return on debt and equity funding. The formula is as follows:

$$\text{WACC} = \frac{D}{(D+E)} * R_D + \frac{E}{(D+E)} * R_E$$

Where:

D = Total Debt

E = Total Equity

R_D = Cost of Debt (risk free rate of return plus debt premium based on the credit rating of the company); and

R_E = Cost of Equity (required return on equity)

A popular method of calculating the required return on equity is the capital asset pricing model (CAPM). The formula is:

$$R_E = R_F + \beta * (R_M - R_F)$$

Where:

R_E = expected return on equity;

R_F = risk free rate of return (10 year Commonwealth Bond rate);

β = sensitivity of an investment's return to the return on the hypothetical market portfolio of shares;

R_M = expected nominal return on the market portfolio (approximated by the yield on the market portfolio of common equity shares); and

(R_M - R_F) = the market risk premium, or additional return demand by investors for holding risky assets.

Part



4 Quick Start Guide

4.1 Quick Start

1. Open the Estate Master DM program.
2. Save your working file using the Excel - 'File' - 'Save As' command or the Estate Master Tool Bar
3. Set Input Preferences by clicking 'Estate Master' - 'Preferences' from the workbook menu bar (or F10).
4. Navigate around the program by clicking 'Estate Master' - 'Go to Setup' or 'Go to Reports' from the Estate Master Menu or by selecting the worksheet tabs at the bottom of the screen.

Input Global Budget Information

- In the 'Setup' and 'Cash Flow' sheets.
- Enter data into input cells with a font colour of blue, purple or green.
- Fixed cells (non input) have a black font colour. Because the worksheets are protected and locked, the model will only allow you to enter into the relevant input cells.

Input Cells
<p>Blue Font Cells: Cells with blue font are the main input cells in the program.</p> <p>Green Font Cells: Cells with green font relate to presales and are not relevant if you are not taking presales into account.</p> <p>Purple Font Cells: Cells with purple font relate to inputs that are entered via a list selector. When selecting the cell, a drop-down arrow will appear. Click the arrow and a list of options for that input cell will be displayed.</p>

- When starting a fresh model the original budget information can be manually input into the model or imported from a compatible Estate Master DF model using the import function.
- These inputs are dynamic and should be updated by the user if the program assumptions change during the project.
- Make sure all calculations are updated by pressing F9. If calculations have not been refreshed, a warning will appear on all worksheets. Check that your assumptions are correct and targets are met and if necessary return to the 'Setup' and 'Cash Flow' sheets to add or adjust your assumptions.

Set Original Budget

- It is recommended to set the original budget at the beginning of the project once it has been entered into the model. The performance of the project will be reported against the Original Budget on a frequent basis.
- To set the Original Budget use the 'Set as Original Budget' option under 'Management Tools' in the Estate Master Menu. Future updating of the Original Budget can be disabled and locked in the Estate Master Preferences.

Input Actual Costs in the Cash Flow Sheet

- The actual costs of the project can be entered directly into the cash flow to accurately maintain a history of the project.
- The model will automatically reforecast costs and revenues based on the actual costs entered.

Roll Forward and Produce Management Reports

- Once the actual data has been entered into the cash flow the model can be rolled forward one time period and may set the current forecast as the previous forecast. Any variations to the current forecast will now be represented as a variation to the previous forecast (if stored).
- When you are satisfied that the information has been entered correctly you may select the Print Report Options on the Estate Master Menu. This will allow you to print management reports to detail the history of the project and any variations to forecasts.
- Save your changes using the Excel - 'File' - 'Save' command or the Estate Master Tool Bar.

Conduct a Risk Analysis

- When data input is complete, you may run the Sensitivity Analysis or Probability Analysis by clicking on the button on the relevant worksheets or on the Estate Master Menu.

4.2 Navigation

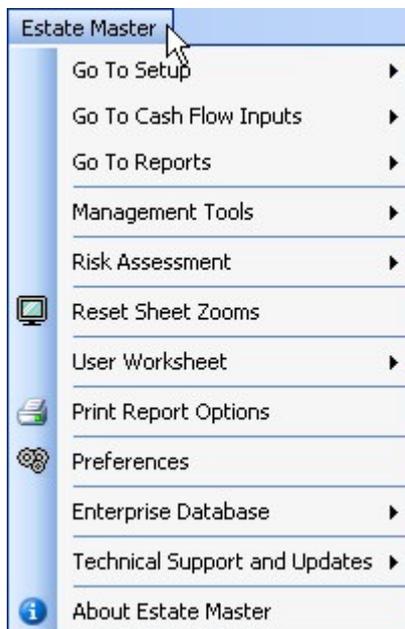
The Estate Master DM program is subdivided into a series of Excel worksheets. To navigate around the Estate Master DM program, there are two methods available:

1. Use the 'Go to Setup', 'Go to Cash Flow Inputs' and 'Go to Reports' navigation tool on the Estate Master Menu.
2. Click on the relevant sheet on the workbook sheet tabs.

Intro	Introduction page. Enter project name and other details.
Setup	Data input sheet for global budget parameters on escalation, GST, finance, etc
Cash Flow	Primary data input sheet. This is where costs and revenue forecasts and actuals are entered and monitored. This sheet can transform into a Gantt Chart.
Financials	Profit and Loss and Balance Sheet reporting.
Summary	The development financial summary containing the financial performance indicators for the Current, Previous, Project and Original Forecasts.
Chart	Project cash flow charts for the various forecasts.
Sensitivity	The tables and charts from the Sensitivity Analysis.
Probability	The Probability Analysis inputs and distribution profiles of the Development Margin and IRR.
Title	A title page for the financial reports. A custom disclaimer can be entered here.
S-Curve	The look-up tables for the development cost drawdown s-curves.
Stamp-Duty and Land-Tax	The adjustable stamp duty and lax tax calculation tables.

4.3 Estate Master Menu

The Estate Master Menu is automatically loaded into Excel when you open the Estate Master DM program. It provides the user with shortcuts to the various functions available in the program.



Go To Setup	Go to any of the global input parameters such as GST, escalation rates, commission rates, funding, etc.
Go To Inputs	Go to any of the main cost and revenue input areas in the 'Cash Flow' sheet.
Go To Reports	Go to any of the reporting worksheets, such as the Summary, Sensitivity Tables, Charts, etc.
Management Tools	Run the main Management Tools such as importing feasibilities from Estate Master DF, rolling forward/back a time period and setting forecasts.
Risk Assessment	Run the Sensitivity Analysis and Probability Analysis functions.
Reset Sheet Zooms	Fits the sheet zoom to the size of the users monitor/screen size.
User Worksheet	Insert and name blank worksheets with the ability to delete them.
Print Report Options	Loads the print form to allow the user to select the worksheets to be printed, and if required, to run the default print setup.
Preferences	Opens the form for the user to select their data Input Preferences. These should be set before any data is entered but can be changed at any time.
Enterprise Database (requires Estate Master Enterprise database to be installed)	This function allows the user to export/import all the input data in the model to or from the Estate Master Enterprise database for cash flow archiving, consolidating, comparison and reporting purposes.

Tech Support and Updates

Allows the user to:

- Send a technical support query via email/internet
- Check the latest version of the software online (requires internet connection).
- Opens the Estate Master Help program.
- Use the 'Import Data from Previous Version' function after installing new versions.

About Estate Master

Allows the user to view the licence details and re-register an existing licence.

4.4 Estate Master Tool Bar

The Estate Master Toolbar is automatically loaded into Excel when you open the Estate Master DM program. It provides the user with shortcuts to the various functions available in the program.



- Save the current Estate Master file.
- Load the print report options menu.
- Roll the cash flow forward one time period.
- Roll the cash flow back one time period.
- Run the sensitivity analysis function.
- Load the Estate Master Preferences.
- Export the file into the Estate Master Enterprise database.
- Export data from the Estate Master Enterprise database.
- Open the Estate Master Help utility.

Information for Excel 2007 Users

Due to the changes in the user interface in Office 2007, for Excel 2007 users, the Estate Master Tool Bar and Estate Master Menu can be found in the 'Add-Ins' menu in Excel's new 'Ribbon'.



4.5 Resizing the Model

The Estate Master model can be resized in two areas:

1. Adding more time periods (45 to 150)
2. Adding more cost and revenue rows.

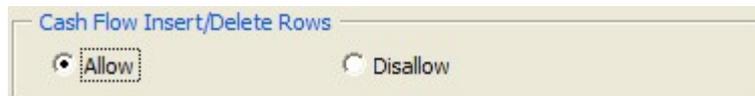
Resize Time Periods

To resize the time periods, use the 'Resize Model' feature in the Estate Master Menu Preferences.

1. Go the Estate Master Menu and click on  Preferences or just click F10.
2. Go to the 'Resize' tab.
3. The form will load with a toggle switch.



4. Expand or reduce the number of time periods. Only add what you need as it will impact on the size of the file.
5. Click on OK and it will make the appropriate changes to the file.
6. You can also select not to allow users to add/delete rows.



Resize Cost/Revenue Rows

To insert/delete rows on the cash flow, use the Insert/Delete Row buttons on the top of the Cash Flow sheet.



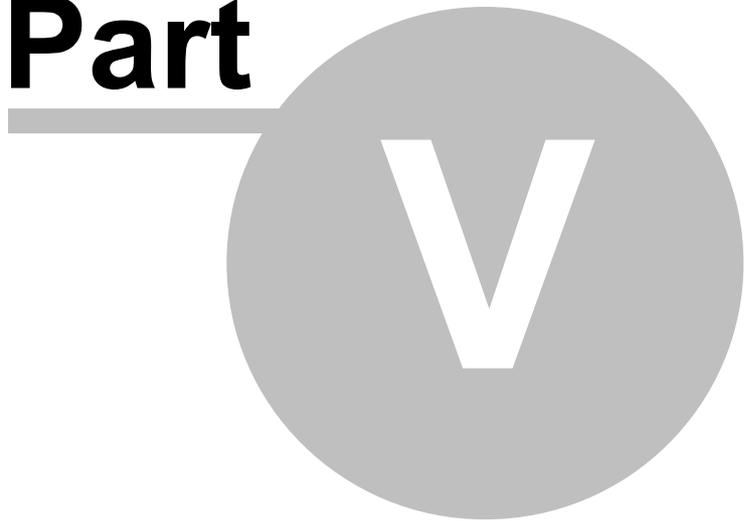
Inserting Rows:

1. Select the row where you would like to add rows above.
2. Click on the 'Insert Rows' button.
3. The program will then prompt how many rows you would like to insert - up to 50 at a time.
4. Click OK to the number, and the model will then resize.

Deleting Rows:

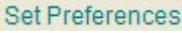
1. Highlight the rows that you would like to delete.
2. Click on the 'Delete Rows' button.
3. Click OK, and the model will then delete the selected rows.
4. If these rows have any budget/forecast data in them, either Original, Project, Previous or Current Forecast, it will not delete these rows.

Part



5 Estate Master Preferences

The program allows flexibility by the way of user preferences. These are operated by

1. Clicking on  Preferences on the Estate Master Menu,
2. Clicking on  on the 'Setup' sheet,
3. Pressing F10, or
4. Clicking on the  buttons next to the relevant section in the input areas.

Locking Preferences

Each preference can be individually set and locked with password protection, allowing the user to standardise settings and minimise the risk of incorrectly changing them.

To lock a Preference:

1. Set the preference and then click on the  button located to the right of it.
2. It will be shown as 'locked'  and the selected preference will then be disabled.
3. A Password field will be displayed at the bottom on the Preferences form.
4. The user must enter in a password before they can click 'OK' and save their changes.

To unlock a Preference:

1. Go to the preference and then click on the  button located to the right of it.
2. It will be shown as 'unlocked'  and the selected preference can then be changed by the user.
3. A Password field will be displayed at the bottom on the Preferences form.
4. The user must enter in a password before they can click 'OK' and save their changes.

Printing an Assumptions Report

To check what preferences and settings have been defined in the model, an Assumptions Report is available to be printed, just by clicking on the 'Print Assumptions' button at the bottom of the Preference form.

5.1 General

Taxation Format

Set the taxation format to be used in the model:

- **GST (Goods and Services):** A consumption (as opposed to income) tax levied on the purchases of goods and services. GST can be applied to all costs and revenues in the program
- **VAT (Value Added Tax):** Similar to GST, however there is no option to adopt the Margin Scheme when this option is applied.
- **Sales Tax:** This is a tax applied to end sales only. Not tax is applied to costs in the program when this option is selected.

If 'Nil Tax' is selected, then the tax inputs are hidden.

Currency

Set the currency format. This is important if the Estate Master CC software is used to consolidate cash flows that are based on different currencies.

Cash Flow Rest Period

Nominate the rest periods for the cash flow. This option will determine how the Start and Span dates are to be entered and how the cash flow will be displayed.

Changing the rest period after you have started a model will not affect any existing values for Start and Span dates for individual cost and revenue items.

For example, say you change 'Monthly' rests to 'Quarterly' rests - a cost item that started Month 4 and spanned 3 months will now start Quarter 4 and span 3 quarters, so it will need to be manually updated by the user to start Quarter 1 and span 1 quarter.

- Financial Year End Month** Select what month is to represent the end of Financial Year. This is used for the setting of Escalation Tables and for Financial reporting.
- Export to Enterprise Database** Select whether the software is to always prompt the user to store the data into the Enterprise Database when setting a budget.
- Automatic Check for Updates** Select whether the software is to check for updates over the internet every time it is started or not.
- Saving** Select whether the software is to control the saving of files. This option should only be deselected if you are using a Document Management System with your Microsoft Office Software that controls File Saving. By deselecting this option, file size may be slightly larger after saving.

5.2 Inputs

Input Number Formats

Select the number of decimal places for the input cells.

Stamp Duty

Stamp duty is automated based upon the location you select, and whether it is calculated on the land price including or excluding tax. The rates used to calculate duties can be changed in the 'Stamp Duty' sheet.

Escalation Method

Select how the escalation on Costs and Revenue (exc Rent Review Escalation) in the model operates.

Applied Per Annum
Applied Per Month

Escalation can either be applied on a:

- **Per Annum** basis

For example, if 5% is entered in for a particular year in the escalation table, this then equates to approx 0.41% per month (if using monthly rest periods), and each cost/revenue occurring in each month for that year, is escalated by 0.41%.

- **Per Rest Period** basis (e.g. 5% per month if using monthly rest periods).

For example, if 5% is entered in for a particular year in the escalation table, this is then applied per month (if using monthly rest periods), and each cost/revenue occurring in each month for that year, is escalated by 5%.

The Escalation tables on the Input can also be set up in one of two ways:

Cashflow Period Years
Financial Years

- **Cash Flow Period Years:** This option is where the model assumes that the annual escalation rates are defined by the Project Start Date month, and starts on that date.

For example, if Date of First Period (Project Start) is Jan-2007, then Escalation Table starts from Jan-2007.

- **Based on Financial Years:** This option is where the model assumes that the annual escalation rates are defined by the Financial Year End month, and commences from the start of the Financial Year that the project is starting in.

For example, if Date of First Period (Project Start) is Jan-2007 and Financial Year End is June, then Escalation Table starts from Jul-2006.

Sales Revenue Collection Profile

This option allows you to decide how the milestones for the Sales Revenue Collection Profiles are set. They can either be base on:

- Specific Time Periods in the Cash Flow, or
- A certain number of months after the Date of Exchange for each sale item.

If the Sales Collection Profile is not required, there is an option to 'disable' it.

Based on specific Months in Cash Flow
Based on Months after Date of Exchange
Disable

Code and Description Protection

This allows you to Lock the Code and Descriptions for all cost and revenue line items. This is helpful if you wish to standardise the inputs and create a template.

5.3 Forecasts

Original & Project Budget Override

Select to allow or disallow the Original and/or Project Budgets to be overridden after it has been set. Overriding includes:

- Resetting a budget, or
- Clearing a budget.

Cash Flow History Override

This will allow you to choose whether you want to allow the editing of history in the cash flow. Editing history includes the ability to:

- Edit cash flow columns left to the 'current period' (yellow column).
- Use the 'Roll Back' feature to move back to a historical period and make amendments.

Rollover of Previous Forecast

Select when the rollover of the previous forecast is to occur automatically - Monthly, Quarterly or Yearly. The model will also ask from which time period you would like to roll over the forecast from.

If the automatic feature is not preferred, the user can select the 'Manual Rollover' check box, and the Previous Forecast can be set at any time by the user via the Estate Master Menu function 'Set as Previous Forecast'.

Summary Variance Display

This will allow you to choose whether you want the variances to the stored budgets in the 'Summary' sheet to be reported as a percentage (%) or value (\$).

Cost to Date Calculation

Select whether the current time period is to be included in the 'Cost to Date' calculations in the cash flow summary on the 'Cash Flow' sheet.

5.4 Taxation

Tax Type

Indicate whether the GST/VAT scheme is based on a single or multiple tax rate structure.

GST (Goods and Services Tax) Single Rate
GST (Goods and Services Tax) Multiple Rates
NIL

- If **Single Rate** is selected, then the user will have the option to enter 1 tax rate in the Input sheet, and then nominate a 'Y' (Yes), or 'N' (No) for each cost and revenue item, if that tax rate is to be applied to it or not
- If **Multiple Rate** is selected, then the user will have the option to enter up to 3 different tax rates in the Input sheet, and then nominate a 'A or Y' (first rate), 'B' (second rate), 'C' (third rate) or 'N' (No) for each cost and revenue item, if that tax rate is to be applied to it or not

Goods and Services Tax					
Goods and Services Tax Rate:	10.00%				
		A or Y	B	C	N
Goods and Services Tax Rate:	10.00%	10.00%	12.50%	20.00%	0.00%

Single rate (left) or multiple rate (below)

Cost and Revenue Input Method

Select how costs and revenues are to be entered in the model.

Net of GST
Inclusive of GST

- If **Net of Tax** is selected, the model will assume that amounts entered in the input sheet do exclude tax and if a GST/VAT rate is applied to that item then it will be automatically escalated to include tax in the cash flow and reclaim tax credits or pay tax liabilities.

If 'Net of Tax' is selected for cost inputs, then an 'Add Tax' option is available for each cost line item.

Base Rate / Unit	Add GST	Total Current Costs (exc GST)	Total Current Costs (inc GST)
100,000	Y	100,000	110,000

Once the user enters in the net cost (e.g. 100,000) and nominates to Add Tax ('Y'), the total cost will then be 110,000 (assuming the tax rate is 10%)
The user can also enter 'N' if no tax is to be added.

- If **Inclusive of Tax** is selected then the model will assume that amounts entered in the input sheet already include tax and if a GST/VAT rate is applied to that item then it will only reclaim tax credits or pay tax liabilities.

If 'Inclusive of Tax' is selected for cost inputs, then an 'Tax Included' option is available for each cost line item.

Base Rate / Unit	GST Included	Total Current Costs (exc GST)	Total Current Costs (inc GST)
110,000	Y	100,000	110,000

Once the user enters in the gross cost (e.g. 110,000) and nominates that Tax is Included ('Y'), the net cost will then be 100,000 (assuming the tax rate is 10%)
The user can enter 'N' if no tax is included in the base.

Tax Liability Calculation Method

Choose whether the model calculates the GST/VAT liability automatically or via a manual input by the user.

AUTO - General Tax Rule
Margin Scheme with Valuation
Margin Scheme with % Cost Completed 1-7-2000
Manual Input of Liability

- **AUTO - General Tax Rule:** The program automatically calculates the GST/VAT liabilities and credits depending on what the user entered into the GST/VAT cell for each cost and revenue line item.
- **Margin Scheme with Valuation (GST Model Only):** The user is prompted to enter the margin value for the calculation of GST liability. The program will then automatically calculate the GST liabilities and credits depending on what the user entered into the GST cell for each cost and revenue line item.
- **Margin Scheme with % Cost Completed 1-7-2000:** Based on the user's inputs in the cost sections, the model will determine by default the % of costs that have been incurred before 1-7-2000. It then applies the Margin Scheme with Valuation calculation to determine input credits and liabilities.
- **Manual Input of Liability:** The program automatically calculates the GST/VAT credits depending on what the user entered into the GST/VAT cell for each cost line item, but the user must manually input the lump sum liability with start and span dates.

Tax Payment and Reclaim Frequency

These options allow the user to nominate the delay between expenditure of costs and the reimbursement of the GST/VAT credits and the delay between receipt of revenues and the payment of the GST/VAT liabilities for the Developer and Land Owner (in a Joint Venture model).

Paid in the Same Month
Paid ONE Month Later
Paid TWO Months Later
Paid every 2 months from January
Paid every 2 months from February
Paid Quarterly from January
Paid Quarterly from February
Paid Quarterly from March

Tax Liability Frequency

In addition to different timings (i.e monthly, quarterly, etc), the tax credit reclaims have two other distinct options:

- **Offset Against Liability at Sale:** No credits are reclaimed until sales occur.
- **Calculated but not Reclaimed:** The tax paid on costs is shown on the Summary report as a separate line item, but is not effectively reclaimed by the developer.

A separate option is also available to determine the GST/VAT reclaim frequency for the land cost.

Reclaim All After First Land Payment
Reclaim All After Final Land Settlement
Reclaim Proportionally with Land Payments

5.5 Financials

Financial Reporting

To enable Profit & Loss Statements, Balance Sheet and Corporate Tax reporting click the 'Enable Reporting and Corporate Tax Calculation' option.

Revenue Recognition

Type

There are 2 calculation options for the Recognition of Revenue:

% Completed
On Completion

- **On Completion:** As settlements occur revenue is recognised in the Profit and Loss Statement in proportion to the % settled.
- **% Completed:** Revenue is recognised on a weighted percentage of construction completed and percentage sold. Effectively you are recognising revenue for the proportion of the building which is complete for which you have sold.

For instance: if the property is 50% sold and 50% built, the revenue recognised in the P&L would be 25% (50% x 50% = 25%)

% Sold Method

There are 2 options for the method for calculating the % Sold in the Profit Realisation Analysis.

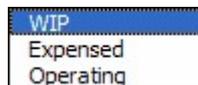
Based on % of Revenue Sold
Based on % of Area Sold

- % of Revenue Sold (by value)
- % of Area Sold

Work in Progress, Expensed or Operating Cost

For each of the cost and revenue sections you have the option to:

- **Expensed:** Directly expense the cost at the date it is incurred in the 'Cost of Sales' section of the Profit and Loss statement, impacting how the Project Margin is calculated.
- **WIP:** Add it to the Work in Progress. This defers the recognition of the cost in the Profit and Loss statement until such time that the defined threshold levels are reached. Until the thresholds are reached, these costs appear as a 'Current Asset' in the Balance Sheet called 'Work in Progress'.
- **Operating:** Define the cost as an Operating Cost. These are expensed to the Profit and Loss statement in the 'Operating Expenses' section. The difference between an Operating expense and a Cost of Sales expense (as defined above) is that an Operating expense is not included in the Project Margin calculation. It is however included in the overall Profit and Loss calculation.



Selecting an item as an Operating Cost will impact on where it is shown in the P&L. Operation Costs in the P&L are displayed below the Margin line.

Items in Work in Progress will be expensed in accordance with selections in the Revenue Recognition settings.

Project Equity Treatment

There are 2 options on how to treat project equity in the Balance Sheet:



- **Shareholders Equity (Project Capital):** Developer's equity contributions appear as 'Project Capital' in the 'Shareholders Equity' section of the Balance Sheet.
- **Long Term Liabilities (Intercompany Loan):** If using this option, the Developer's equity contributions are treated as an Intercompany Loan and appear in the Balance Sheet under the 'Long Term Liabilities' section. If this option is selected, the user will also need to input in the Balance Sheet the paid up Share Capital of the company.

5.6 Hurdle Rates

Discount Rate Conversion

This enables you to select the method of conversion from the annual discount rate (that is entered by the user) to the periodic discount rate (monthly, quarterly or half yearly depending upon the rest period you selected). The difference is given in the following formulae:

Nominal Conversion	D/T
Effective Conversion	$[(D + 1)^{1/T}] - 1$

Where:

D = is the annual discount rate.

T = The number of rest periods per annum (i.e Monthly = 12, Quarterly = 4, Half Yearly = 2)

Note:

- It is imperative that a universal usage for the conversion of the discount rate be adopted for all evaluations.
- The first formula simply divides the annual discount rate by 12 while the second formula is the effective conversion and takes into account the compounding on a monthly, quarterly, half yearly basis depending on the cash flow being modelled.
- The choice between these two methods of conversion only affects the NPV and IRR calculation - not the development margin.

IRR and NPV Calculation

Nominate if Finance Costs, Interest Charges or Corporate Tax are to be included in the calculation of the Project IRR and NPV.

- **Financing Costs** = Cost defined in the 'Financing Costs' section and Line Fees and Application Fees associated for each loan.
- **Interest** = Interest charged on equity or the loan facilities.
- **Corp Tax** = Corporate Tax on project profit that is applied on the Financials sheet (as opposed to GST/VAT/Sales Tax)

The options that **include interest** are generally not recommended as discounting an after interest cash flow is a form of double-counting interest cost.

Development Margin Calculation

Nominate what forms the basis of calculating the Development Margin.

on total development costs (inc selling and leasing costs).
 on total development costs (inc selling costs).
 on total development costs (net of selling and leasing costs).
 on total revenue (net of GST).
 on total sales proceeds (net of selling costs and GST).

The following defines the exact components of the Summary Report that are used in the calculation of each option:

- **Development Costs (inc Selling and Leasing Costs) =** 'Total Costs' *plus* 'Selling Costs' and 'Purchasers Costs'
- **Development Costs (inc Selling Costs) =** 'Total Costs' (exc GST/VAT reclaims on any Leasing Costs) *plus* 'Selling Costs' and 'Purchasers Costs'
- **Development Costs (net of Selling and Leasing Costs) =** 'Total Costs' (exc GST/VAT reclaims on any 'Selling and Leasing Costs')
- **Total Revenue net of GST/VAT/Sales Tax =** 'Total Sales Revenue' *plus* 'Rental Income' *plus* 'Interest Received' *plus* 'Other Income' *less* 'GST/VAT/Sales Tax Paid'
- **Total Sales Proceeds (net of Selling Costs and GST/VAT/Sales Tax) =** 'Net Sales Proceeds' *less* 'GST/VAT/Sales Tax Paid' on Sales only (not Rental or Other Income)

Gross or Net Profit Performance

Determines how any Profit Share that is paid to other parties (Land Owner or Lenders) are treated in the calculation of various performance indicators. This is only relevant if the profit share to land owner and/or profit share to mezzanine lender.

Based on Gross Development Profit (Before Profit Share)
 Based on Net Development Profit (After Profit Share)

This will impact the calculations for Development Margin, NPV, IRR, Sensitivity and Probability Analysis.

5.7 Display

Input Sheets and Report Sheets to Display

Select the worksheets which are to be hidden. This simply allows you to hide worksheets that you are not working on or do not intend to display making navigation around the workbook a little easier. Hiding sheets does not impede in the operation of the program

Warning Display

Select which warnings you would like to appear in the cash flow sheet (in the form of red highlighted cells), such as:

- Exceeding commitments.

Show no warnings
Warn when exceeding Current Budget
Warn when exceeding Forecast to Complete

- Cash flow input variations.

Show no warnings
Warn when Inputs & Cash Flow vary

There is also the option to warn the user of these issues when saving a file or exporting to the Enterprise Database, thus prompting them to address the issues.

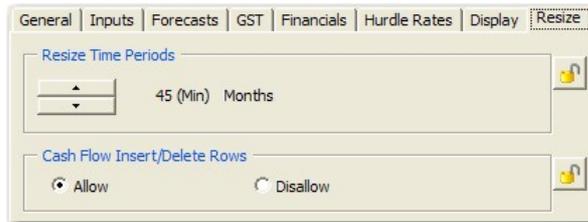
Spreadsheet Display

These options allow you to hide the standard Excel toolbars (option not available in Excel 2007) or hide the worksheet row and column headers, therefore increasing the viewable area of the worksheet.

Corporate Logo

Insert your own custom corporate logo on the report sheets. The logo must not exceed 50kb in size.

5.8 Resize

**Resize Time Periods**

Increase or decrease the number of timer periods in the model to suit user preference (45 to 150).

Cash Flow Insert/Delete Rows

Disable the function that allows users to insert/delete rows on the Cash Flow sheet.

Part



6 Setting the Original Budget

6.1 Import a Feasibility

The inbuilt import feature in Estate Master DM allows the user to automatically extract input data from a feasibility created in a compatible Estate Master DF model. This feature is accessed via the Estate Master Menu in the 'Management Tools' section.

To import feasibility data:

1. Ensure that the relevant Option/Stage has been recalled and stored on the Estate Master DF 'Input' sheet (if used) and that the file has been saved and closed.
2. With your Estate Master DM file open and ready for importing, go to the 'Import Feasibility' function in the Estate Master Menu under the 'Management Tools' section.
3. A dialog box will appear stating that only values will be copied into your Estate Master DM model and not formulae. If you had user-inserted formulae in the Estate Master DF file and you want it retained in the Estate Master DM file you will need to re-input the formulae manually after the import process is complete.

Importing Feasibility Data

The following data is not imported automatically when using the feature in Estate Master DM:

- User-Inserted worksheets in the Estate Master DF model.
- Joint Venture scenarios - running JV's is not available in Estate Master DM

4. To proceed, click 'Yes' and the program will prompt you to select the relevant Estate Master DF file that you wish to import from (only a compatible DF file can be imported). The program will then copy the input data from the DF file and paste the values in the Estate Master DM file that is currently open.

Set Original Budget

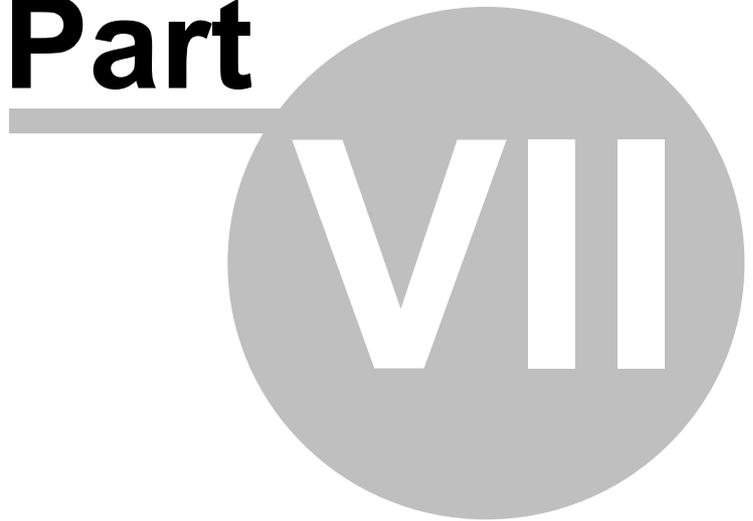
At the end of the import process you will be asked if you would like to set the imported data as the Original Budget. You may alternatively wish to allow the data to be imported and conduct a review before you set the Original Budget. Once you are satisfied that the input data and results are correct you can save your Original Budget by clicking on the 'Set as Original Budget' function in the Estate Master Menu.

This sets the current forecast, net cash flow and the performance indicators as the Original Budget on all reports.

6.2 Manually Input Data

Estate Master DM can be used without the need of feasibility data created in an Estate Master DF model. Costs and revenues can be manually inputted in the various sections of the model and updated accordingly during the development process.

Part



7 Input Assumptions

7.1 Open File

Depending upon whether or not the file has been installed as an Excel file or a template, to open the Master file either:

- Open the Estate Master DM program via the shortcut in the Windows Start Menu (if installed from CD);
- Go File_New from the Excel Menu (if the file has been installed as a template in your template directory);
- Go File_Open from the Excel Menu; or
- Consult your I.T. staff.

7.2 Set Preferences and Default Setup

It is recommended that before entering any data, the user set their default preferences and cash flow setup. This is done in two main areas:

1. Estate Master Preferences: An input form that appears when the following are clicked:

- 'Preferences' on the Estate Master Menu.
- Set Input Preferences' on the 'Setup' sheet.
- F10 (shortcut key).
- The options in the Preferences are detailed in Section 7.

2. The 'Setup' sheet: The 'Setup' sheet contains global input parameters such as:

- Project description and start date.
- GST/VAT options.
- Costs, Sales and Rental escalation rates.
- Sales Commission rates.
- Equity and Debt funding options.
- Project performance hurdle rates.

7.3 Inputting Data

Enter data into input cells with a font colour of blue or green. Fixed cells (non input) have a black font colour. Since the worksheets are protected and locked, the model will only allow you to enter into the relevant input cells.

Input Cells

Blue Font Cells: Cells with blue font are the main input cells in the program.

Green Font Cells: Cells with green font relate to presales and are not relevant if you are not taking presales into account.

Purple Font Cells: Cells with purple font relate to inputs that are entered via a list selector. When selecting the cell, a drop-down arrow will appear. Click the arrow and a list of options for that input cell will be displayed.

Start and Span

For every payment it is necessary to put a start date and span period, or else the program will not add the payment to the cash flow.

The start date must be a number between zero (0) (which represents the first or current period) or an applicable letter (i.e. "L" for land costs or "C" for Professional Fees) and the span period must be greater than but not equal to zero.

The start and span numbers must not add up to more than the maximum time periods in the model - or else you will exceed the program's limits.

7.4 Project Introduction

ESTATE MASTER Project Introduction			
Project Name	Project Title		
Street Address	Address		
City/Suburb	City/Suburb	Zip/Post Code	Zip/Post Code
State/County	State/County	Country	Country
Account Code	Account Code	Project Number	Project Number
Prepared By	Report Prepared By	Developer	Enter Developer Name
Prepared For	Report Prepared For		

Mandatory inputs are highlighted in red

Project Name (Mandatory)

Enter the name of the project that the property belongs to. 'Project' may be interpreted as a 'development project', an 'investment project', a 'valuation project', etc.

Project Number (Mandatory)

Enter the unique project number related to the project.

Account Code (Optional)

Enter in the unique reference code that this project belongs to in your accounting system.

It is used only when using the 'Update from Accounts' function.

Street Address, City/Suburb, Zip/Post Code, State/County and Country (Optional)

Enter the physical address of the subject property.

Prepared By (Optional)

Enter in who this report was prepared by.

Prepared For (Optional)

Enter in who this report was prepared for.

Developer (Optional)

Enter the name of the developer.

7.5 Preliminary

Preliminary			
Cash Flow Title	Cash Flow Title	Description of Option/Stage	Enter Description of Option or Stage
Date of First Period:	Jan-2009		
Cash Flow Rest Period:	Monthly		
Enter Project Size (a)	-	Units	
Enter Project Size (b)	-	GFA	
Enter Site Area	-	SqM	Floor Space Ratio: 0.1
			Equated Gross Floor Area: 0.00 SqM
Type	Miscellaneous		
Status	Initial Budget		

- Cash Flow Title** (Mandatory) Enter the name of the project that the property belongs to. 'Project' may be interpreted as a 'development project', an 'investment project', a 'valuation project', etc.
- Description/Option/Scenario** (Mandatory) Enter the description of the option, scenario or stage of the development.
- Date of First Period** (Mandatory) Enter the date of the first period in the cash flow. The first period is time period Zero (0).
- Cash Flow Rest Period** The cash flow rest period (monthly, quarterly, half-yearly or yearly) is set using the Estate Master Preferences.
- Enter Project Size** (Optional) Project size relates to the size of the developable area, land area, gross building area, net lettable area, gross floor area or number of lots, dwellings, apartments, etc. You may enter any type of measurement to summarise the development. These do not affect the cash flow and are only used for reporting purposes on the 'Summary' sheet.
- Enter Site Area** (Optional) Enter the land area based on the units of measurement in the list selection (purple font cell).
- Floor Area Ratio** (Optional) Select from the list the appropriate terminology to be used for a floor area ratio and then enter the ratio to calculate a Gross Floor Area from the given Site Area.
- Type** (Mandatory) Nominate the type of development from the list selection (purple font cell). This is useful for distinguishing different development options.
- Status** (Mandatory) Nominate the status of the project to identify at what stage of the analysis it is at.

7.6 Taxation (GST,VAT,etc)

Goods and Services Tax				
	A or Y	B	C	N
Goods and Services Tax Rate	10.00%	12.50%	20.00%	0.00%
Value at 1-7-2000 or Acquisition Price	0			
Percent of Cost Completed at 1 July 2000	0.0%			
GST Cost Lump Sum Amount	-		Start: 0	Span: -

Tax Rate (Optional)

The program allows for up to 3 different default GST/VAT rates. In the GST/VAT cell for each line item, the user may enter:

- **A, B or C:** To correspond with the different default rates entered (if Multiple Rate option is selected in the Estate Master Preferences).
- **Y or N:** Y will implement the rate entered in the GST/VAT rate cell of the Input Sheet and N will be 0%.
- **%:** If a user requires a GST/VAT rate that is not in either A, B or C, then they may enter the rate manually as a percentage in the GST/VAT cell for any line item.

Value at 1-7-2000 or Acquisition Price (Optional)

You may enter either a valuation figure or leave the default formula in the cell, which is the maximum of land purchase price or costs spent up to the GST commencement Date (1/7/2000).

This is only relevant if the 'Margin Scheme with Valuation' option is selected in the Estate Master Preferences.

Percent of Cost Completed at 1st July 2000 (Optional)

You may enter either a percentage or leave the default formula in the cell. The default is based on the user's inputs in the cost sections and the % of costs that have been incurred before 1-7-2000. It then applies the Margin Scheme with Valuation calculation to determine input credits and liabilities.

This is only relevant if the 'Margin Scheme with % Cost Completed 1-7-2000' option is selected in the Estate Master Preferences.

Lump Sum Amount (Optional)

The program automatically calculates the GST/VAT credits depending on what the user entered into the GST/VAT cell for each cost line item, but the user must manually input the lump sum liability with start and span dates.

This is only relevant if the 'Manual Input of Liability' option is selected in the Estate Master Preferences.

All other options for GST/VAT are set using the Estate Master Preferences.

7.7 Land Purchase and Acquisition Costs

Land Purchase Price (Optional)	Input the land purchase price in the first input item.
Deposit and Payments (Optional)	You can stage your land acquisition payments - deposit plus multiple staged payments either as a percentage and/or an amount. Each payment is a transfer of funds from the Developer to the Land Owner. Note that Deposit in a trust account is different from a payment because the land owner does not receive it until settlement or the first payment date.
Stamp Duty (Optional)	<p>The automatic stamp duty is calculated for the total purchase price. An option in the Estate Master Preferences is available to select whether stamp duty is calculated on the land including or excluding GST/VAT. You will need to input the start and span dates for the payment of stamp duty.</p> <p>If several acquisitions are involved then you should set the automatic stamp duty to NIL and manually calculate each stamp duty payment and enter them in 'Other Acquisition Costs'.</p>
Interest on Deposit in Trust Account (Optional)	Interest may be earned on that deposit during the time it sits in the trust account and the interest is divided evenly between the seller (Land Owner) and the buyer (Developer). Both the deposit percentage and interest on deposit are optional inputs.
Profit Share to Land Owner (Optional)	You can also nominate a percentage of your development profit to be paid to the land owner at the completion of the project, irrespective if you are modelling a joint venture or not. By entering a percentage for profit share, it will impact your performance indicators and risk assessment, depending on what option you nominate in the Estate Master Preferences for the calculation of Development Profit - Gross (before profit share) or Net (after profit share).
Other Acquisition Costs	
% Paid and Lump Amount (Optional)	<p>For other acquisition costs, such as legal fees, survey costs, etc, you may elect to either enter:</p> <ul style="list-style-type: none">• A percentage of the land's purchase price, and/or• A lump sum amount. <p>If entering a % of the land price and running the model in either GST or VAT mode then:</p> <ul style="list-style-type: none">• The cost will be based on the land price excluding GST/VAT when using the General Tax Rule.• The cost will be based on the land price including GST when using the Margin Scheme (GST Mode only).
Start and Span (Mandatory)	<p>For each item's Start and Span, you have the following options:</p> <ul style="list-style-type: none">• Enter a number to nominate the start and span manually, or• Enter "L" as the start date to have the cost paid pro-rata with land payments. If "L" is chosen, the span date is ignored.

GST/VAT (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

Start and Span
<p>For every payment it is necessary to put a start date and span period, or else the program will not add the payment to the cash flow.</p> <p>The start date must be a number between zero (0) (which represents the first or current period) or an applicable letter (i.e. "L" for land costs or "C" for Professional Fees) and the span period must be greater than but not equal to zero.</p> <p>The start and span numbers must not add up to more than the maximum time periods in the model - or else you will exceed the program's limits.</p>

7.8 Statutory Fees and Contributions

The title to this section may be changed to suit the user's requirements. All references to this section in other areas of the program will be changed automatically (i.e. 'Summary' sheet, Cash Flow, etc).

Amount and Start and Span

(Mandatory)

For each cost item it is mandatory to input:

- The number of units (e.g sqm) and base rate per unit (e.g \$/sqm), and
- The start and span periods.

If any of the above are entered as zero (0), then the program will not include the cost in the cash flow.

Escalation (Optional)

You may elect to apply escalation on any cost items.

- Enter "**E**" to escalate to start, or
- Enter "**R**" to escalate to start and continue escalation through span period, or
- Leave blank or enter "**N**" to assume the cost is fixed, hence no escalation.

S-Curve (Optional)

You may elect to span the cost payments evenly through the span period or apply a cumulative S-shape curve.

- Leave blank or enter "**E**" to evenly spread the cost, or
- Enter one of the codes (**S**, **S1**, **S2**, **S3** and **S4**) for the five (5) client customisable S-Curves. You can modify the S-curve profiles in the 'S-Curve' sheet.

Start and Span (Mandatory)

For each item, you must enter the start and span periods. If the span periods is zero (0) then the program will not include the cost in the cash flow.

GST/VAT (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

7.9 Project Contingency

1,000,000	And / Or	12.00%	of Construction, Professional, Statutory & Misc. Costs
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In this item you may put in a project contingency factor (or project reserve) as an amount and/or a percentage of development costs (construction, professional fees, contributions and miscellaneous costs inclusive of any GST/VAT). This cost is automatically paid pro-rata with the aforementioned development costs.

7.10 Cost Escalation Rates

		Escalation Rates (Applied Per Annum) based on Cashflow Period Years commencing									
		Jan-09	Jan-10	Jan-11	Jan-12	Jan-13	Jan-14	Jan-15	Jan-16	Jan-17	Jan-18
	Professional Fees	5.00%	5.00%	5.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
Code	Construction Costs (Uncategori	3.00%	2.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
SUB	Subdivision Costs	2.50%	3.50%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
STG	Stage Costs	3.20%	3.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
BUI	Built Form	2.00%	3.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
OT1	Other	2.10%	3.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
OT2	Other	2.00%	3.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
	Statutory Fees	3.50%	4.50%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	5.00%
	Miscellaneous Costs 1	3.00%	4.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
	Miscellaneous Costs 2	3.00%	4.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
	Miscellaneous Costs 3	3.00%	4.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
	Land Holding Costs	3.00%	4.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
	Selling and Leasing Costs	3.00%	4.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%
	Finance Costs	3.00%	4.00%	3.00%	4.00%	4.00%	3.00%	4.00%	4.00%	4.00%	5.00%

Escalation Rates can be defined for different categories of costs in the escalation table. Escalation rates can be set up in different ways:

- Either on a **Per Annum** basis (e.g. 5% per annum) or **Per Rest Period** basis (e.g. 5% per month).
- Either by **Cash Flow Period Years** or **Financial Years**.
- As a **Positive** (inflation) or **negative** (deflation) percentage.

Please note, when entering a cost that is a percentage of another cost item, it will be a percentage of the total escalated cost. Therefore, by entering an escalation for that cost item, it will be 'double escalated'.

Please refer to the Estate Master Preferences on configuring the different escalation options.

Construction Cost Types

In the Cost Escalation table, there is provision to further classify Construction Costs into 5 separate categories. These categories can be manually defined by the user by setting a 3 character code and a short description. Apart from being able to define specific escalation rates for each category, the user can then defined each Construction Cost lines item to that category for reporting purposes.

Description	Cost Type
Subdivision	SUB
Construction Contract	BUI

Application of Escalation Rates for Costs

The method of application of escalation can vary for each cost item. Below is the method of applying escalation rates.

- **E** = Escalates the cost to its start date;
- **R** = Escalates the cost to its start date and continues the escalation through the span period; and
- **N** = Does not apply escalation (this is the default if you leave the escalation input blank).

Escalation Examples

Say there is a \$60,000 cost that starts in month 4 and has a 6 month duration and escalates 5% per annum. Using the different methods of escalation, the following cash flows would be created:

Current Amount	Month Start	Month Span	Current Amount (per Month)
60,000	4	6	10,000

Month 0	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Escalation Factor Compounded Monthly (= Previous Months Escalation Factor x (1+5%) ^(1/12))									
100.00%	100.41%	100.82%	101.23%	101.64%	102.05%	102.47%	102.89%	103.31%	103.73%

Code	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Total
N	10,000	10,000	10,000	10,000	10,000	10,000	60,000
E	10,164	10,164	10,164	10,164	10,164	10,164	60,984
R	10,164	10,205	10,247	10,289	10,331	10,373	61,608

- When "E" is selected, the Month 4 Escalation Factor (101.64%) is applied to the non-escalated amount per month (10,000) for the entire span.
- When "R" is selected, the Month 4 - 9 Escalation Factors are applied to the non-escalated monthly amount (10,000) for that specific month.

7.11 Professional Fees

% of Construction and/or Amount (Mandatory)

For each cost item it is mandatory to input:

- A percentage of total construction cost (excluding GST/VAT if applicable), and/or
- The number of units (e.g sqm) and base rate per unit (e.g \$/sqm).

Start and Span (Mandatory)

For each item's Start and Span, you have the following options:

- Enter a number to nominate the start and span manually, or
- Enter "**C**" as the start date to have the cost paid pro-rata with construction costs. If "C" is chosen, the span date is ignored.

Escalation (Optional)

You may elect to apply escalation on any cost items.

- Enter "**E**" to escalate to start, or
- Enter "**R**" to escalate to start and continue escalation through span period, or
- Leave blank or enter "**N**" to assume the cost is fixed, hence no escalation.

S-Curve (Optional)

You may elect to span the cost payments evenly through the span period or apply a cumulative S-shape curve.

- Leave blank or enter "**E**" to evenly spread the cost, or
- Enter one of the codes (**S**, **S1**, **S2**, **S3** and **S4**) for the five (5) client customisable S-Curves. You can modify the S-curve profiles in the 'S-Curve' sheet.

GST/VAT (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

Development Management Fee (Optional)

Scroll down the last professional fee item to input a percentage for Development Management. It can be expressed as a percentage of:

- Total Gross Sales proceeds,
- Total Net Sales proceeds (Gross Sales *less* Selling Costs),
- Total Project Costs including Land, or
- Total Project Costs excluding Land.

Project costs exclude finance costs and GST/VAT if applicable.



The Development Management Fee can also be spread in the cash flow in five different ways:

- Enter a start and span period manually.
- Enter "**C**" as the start date to have the cost paid pro-rata with Construction Costs.
- Enter "**P1**" as the start date to have the cost paid pro-rata with Project Costs (inc Land).
- Enter "**P2**" as the start date to have the cost paid pro-rata with Project Costs (exc Land).
- Enter "**S**" as the start date to have the cost paid pro-rata with Sales Settlements.

7.12 Construction Costs

Cost Type (Optional)

Enter the relevant Code defined in the Construction Cost Type section. This will categorise the Construction Costs and report them appropriately on the Summary Report. It also allows the user to apply different escalation rates to different components of construction.

Leave blank or enter in 0 (Zero) if you do not wish to allocate this item to any specific cost type.

Amount and Start and Span (Mandatory)

For each cost item it is mandatory to input:

- The number of units (e.g sqm) and base rate per unit (e.g \$/sqm), and
- The start and span periods.

If any of the above are entered as zero (0), then the program will not include the cost in the cash flow.

Escalation (Optional)

You may elect to apply escalation on any cost items.

- Enter "**E**" to escalate to start, or
- Enter "**R**" to escalate to start and continue escalation through span period, or
- Leave blank or enter "**N**" to assume the cost is fixed, hence no escalation.

S-Curve (Optional)

You may elect to span the cost payments evenly through the span period or apply a cumulative S-shape curve.

- Leave blank or enter "E" to evenly spread the cost, or
- Enter one of the codes (**S**, **S1**, **S2**, **S3** and **S4**) for the five (5) client customisable S-Curves. You can modify the S-curve profiles in the 'S-Curve' sheet.

Start and Span (Mandatory)

For each item, you must enter the start and span periods. If the span periods is zero (0) then the program will not include the cost in the cash flow.

GST/VAT (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

Construction Contingency (Optional)

Scroll down the last construction cost item to input a percentage for Construction Contingency (optional) as an amount and/or a percentage of construction costs (inclusive of any GST/VAT if applicable). This cost is automatically paid pro-rata with the construction costs.

5,000,000	And / Or	10.00%	of Construction Costs
-----------	----------	--------	-----------------------

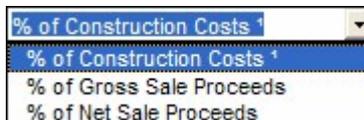
7.13 Miscellaneous Costs

% and/or Amount (Mandatory)

For each cost item it is mandatory to input:

- A percentage (based on the options below), and/or
- The number of units (e.g sqm) and base rate per unit (e.g \$/sqm).

The percentage basis is selected via the drop-down list, and can be different for each Miscellaneous Cost section.



- **% of Construction:** Construction costs including contingency, but excluding GST/VAT if applicable.
- **Gross Sale Proceeds:** Gross sales include items included in the Sales input section and Capitalised Sales from the Tenants section. They are inclusive of any GST/VAT/Sales Tax if applicable
- **Net Sale Proceeds:** Gross Sales less Selling Costs.

Escalation (Optional)

You may elect to apply escalation on any cost items.

- Enter "**E**" to escalate to start, or
- Enter "**R**" to escalate to start and continue escalation through span period, or
- Leave blank or enter "**N**" to assume the cost is fixed, hence no escalation.

S-Curve (Optional)

You may elect to span the cost payments evenly through the span period or apply a cumulative S-shape curve.

- Leave blank or enter "**E**" to evenly spread the cost, or
- Enter one of the codes (**S**, **S1**, **S2**, **S3** and **S4**) for the five (5) client customisable S-Curves. You can modify the S-curve profiles in the 'S-Curve' sheet.

Start and Span (Mandatory)

For each item's Start and Span, you have the following options:

- Enter a number to nominate the start and span manually, or
- Enter "**C**" as the start date to have the cost paid pro-rata with construction costs, or
- Enter "**S**" to have the cost paid pro-rata with sales settlements.

If "**C**" or "**S**" is chosen, the span date is ignored.

GST/VAT (Optional)

Select "**Y**" or "**A**", "**B**", or "**C**" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

7.14 Land Holding Costs

Amount (Mandatory)

For each cost item it is mandatory to input:

- The number of units (e.g sqm), and
- Base rate per unit per term (e.g \$/sqm/month), where the term is identified in the following input column.

If any of the above are entered as zero (0), then the program will not include the cost in the cash flow.

Term (Mandatory)

This is the payment frequency for the nominated amount:

- **M** = Monthly
- **BM** = Bi-Monthly
- **Q** = Quarterly
- **BA** = Bi-Annually
- **Y** = Yearly

Escalation (Optional)

You may elect to apply escalation on any cost items.

- Enter "**E**" to escalate to start, or
- Enter "**R**" to escalate to start and continue escalation through span period, or
- Leave blank or enter "**N**" to assume the cost is fixed, hence no escalation.

Start and Span (Mandatory)

For each item, you must enter the start and span periods. In the case of the span period you may elect to input a number span or the letters DS or DR.

- **DS** = The span period will indicate to the model that you would like to diminish the land holding costs proportionally with sales.
- **DR** = The span period will indicate to the model that you would like to diminish the land holding costs proportionally with the take-up of leases/rental income.

GST/VAT (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

7.15 Revenue Escalation Rates

Code	Category	Escalation Rates (Applied Per Annum) based on Cashflow Period Years commencing									
		Jan-09	Jan-10	Jan-11	Jan-12	Jan-13	Jan-14	Jan-15	Jan-16	Jan-17	Jan-18
RS1	Residential - 1 Bedroom Units	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
RS2	Residential - 2 Bedroom Units	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
RS3	Residential - 3 Bedroom Units	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
RDD	Detached Dwellings Lots	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
RTH	Townhouse Lots	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
COM	Commercial Office	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
RET	Retail Shops	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
IND	Industrial Units	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
STW	Storage & Warehousing	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
OTH	Other	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Escalation Rates can be defined for different categories of sales and rental revenue in the escalation table. Escalation rates can be set up in different ways:

- Either on a **Per Annum** basis (e.g. 5% per annum) or **Per Rest Period** basis (e.g. 5% per month).
- Either by **Cash Flow Period Years** or **Financial Years**.
- As a **Positive** (inflation) or **negative** (deflation) percentage.

Please refer to the Estate Master Preferences on configuring the different escalation options.

Escalation Rates

For each relevant category you may enter up to 10 years of escalation rates.

- **For Sales:** Escalation rates apply to end sale values from the first escalation month. Where the user has assumed pre-sales, escalation applies up to the exchange dates, otherwise it applies up to the settlement dates.
- **For Rents (Pre Lease):** Escalation rates apply to rental values from the first escalation month up to the lease start date. For escalation on rents during the lease period, refer to the rent review table in the Rental input section.

Where the **first escalation month** is identified as the first month in the escalation table, and may changing depending on the preference to set escalation based on Cash Flow Period Years or Financial Years.

Code and Category

You have ability to define your own property categories (eg. "Residential") and codes (eg. "RS") for multiple escalation rates. There are 10 different property categories that can all have different escalation rates; the code for each property category is defined by the user (1-3 character length allowed). Negative escalation rates can be inputted.

7.16 Sales Commission

Selling and Leasing Costs				
Sales Commission (To be entered Net of GST)		Sales Comm ¹	% of Comm. Pre-sales ²	Deposits (% of Price) ³
RS1	Residential - 1 Bedroom Units	0.00%	0.00%	0.00%
RS2	Residential - 2 Bedroom Units	0.00%	0.00%	0.00%
RS3	Residential - 3 Bedroom Units	0.00%	0.00%	0.00%
RDD	Detached Dwellings Lots	0.00%	0.00%	0.00%
RTH	Townhouse Lots	0.00%	0.00%	0.00%
COM	Commercial Office	0.00%	0.00%	0.00%
RET	Retail Shops	0.00%	0.00%	0.00%
IND	Industrial Units	0.00%	0.00%	0.00%
STW	Storage & Warehousing	0.00%	0.00%	0.00%
OTH	Other	0.00%	0.00%	0.00%
Report Pre-sale Commission as Project Cost			<input checked="" type="checkbox"/>	
Interest Rate on Deposits Invested in Trust Account				0.00%
% of Interest retained by Developer upon settlement				0.00%

Sales Commission (Optional)

For each relevant category you may enter sales commission. The first input column refers to sales commission as a percentage of gross selling price (i.e sales price inclusive of any GST/VAT/Sales Tax) that can be applied to:

- Revenue items in the 'Sales' input section.
- Capitalised Sales entered in the 'Tenants' section.

% of Commission at Pre-Sale (Optional)

The second input column (green font) is only relevant for pre-sales and refers to the proportion of sales commission that is paid at exchange date (date of pre-sale). Typically selling agents require a proportion of their commission to be paid on exchange of contracts.

Deposit (Optional)

The third input column (green font) is only relevant for pre-sales and refers to the size of the deposits to be met by the end buyers. The model assumes that all pre-sale deposits are deposited in trust until settlement.

In addition to setting the deposit amount, you can nominate:

- Any interest earned on the deposit. The interest on deposits is calculated from the middle of the exchange period to the middle of the settlement period and spread evenly through the settlement period.
- The proportional split of the interest earned between the buyers and the seller (developer). By inputting 100% the developer would retain all the interest earned on the deposit. Typically contracts specify a 50:50 split.

Report Pre-Sale Commissions as Project Cost (Optional)

Tick the checkbox if you wish to report all Commissions incurred at time of Exchange as a Project Costs (as opposed to a negative Revenue). This will impact how the Development Margin is reported, and where other cost items are a % of Project Costs.

7.17 Selling Costs

% Paid and/or Amount (Mandatory) For each selling costs item, such as marketing, advertising, legals etc, it is mandatory to input:

- A percentage of gross sales (i.e sales price inclusive of any GST/VAT/Sales Tax), and/or
- The number of units (e.g lots) and base rate per unit (e.g \$/lot).

Escalation (Optional)

You may elect to apply escalation on any cost items.

- Enter "**E**" to escalate to start, or
- Enter "**R**" to escalate to start and continue escalation through span period, or
- Leave blank or enter "**N**" to assume the cost is fixed, hence no escalation.

Start and Span (Mandatory)

For each item, you must enter the start and span periods. In the case of the span period you may elect to input a number span or the letters S or E.

- Enter "**S**" to have the cost paid pro-rata with settlements or instalments (if using the Sales Revenue Collection Profile function), or
- Enter "**E**" to have the cost paid pro-rata with pre-sale exchanges (if used, otherwise it will be highlighted red).

If "S" or "E" is chosen, the span date is ignored.

GST/VAT (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

7.18 Sales Revenue Collection Profile

	% Payable at Each Instalment (Based on specific Months in Cash Flow)									Balance on Settlement
	0	2	4	8	10	14	22	28	30	
Profile 1	0.00%	10.00%	5.00%	5.00%	10.00%	5.00%	5.00%	5.00%	5.00%	50.00%
Profile 2	0.00%	10.00%	10.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00%	70.00%
Profile 3	0.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	0.00%	0.00%	70.00%
Profile 4	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Profile 5	0.00%	20.00%	5.00%	5.00%	10.00%	0.00%	0.00%	10.00%	0.00%	50.00%
Profile 6	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Profile 7	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Profile 8	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

The Sales Revenue Collection Profile feature is enabled via the Estate Master Preferences. It allows you to set milestones for receiving multiple payment instalments from purchasers prior to project completion, either based on specific time periods in the cash flow, or on certain number of months after the Date of Exchange for each sale item.

There are the 8 different Sales Revenue Collection Profiles that can be set. Once the profiles have been created, in the Sales input section, enter in 1 - 8 in the Revenue Collection Profile column

Current Sale Price	Pre-Sale Exchanges		Settlements		Revenue Collection Profile
	Month Start	Month Span	Month Start	Month Span	
500,000	4	12	56	1	1
650,000	18	12	64	1	2
-	-	-	0	-	-
-	-	-	-	-	-

Allocate Sales items (which have pre-sale dates defined) to a specific collection profile from 1 to 8.

There are a few rules in relation to using this feature:

- A Sales Revenue Collection Profile can only be applied to a sale item if Pre-sale Exchanges start and span dates are set for that item.
- If a Sales Revenue Collection Profile is applied to a sale item, then any Pre-Sale Exchange Deposits and Interest on Deposits are ignored for that item.
- This functionality is not available for Capitalised Sales on the Tenants sheet.

Timing of Instalment

The Estate Master Preferences allows you to set whether instalments are base on:

- Specific Time Periods in the Cash Flow, or
- A certain number of months after the Date of Exchange for each sale item.

When setting the instalment timings, each subsequent instalment must be later than the previous.

Instalment %

This is the % amount of the sale value that is paid by the purchaser directly to the developer (not held in a trust account) at the nominated instalment milestone.

Balance on Settlement

This shows the outstanding amount that is payable to the developer at Settlement for each sale item that applies that specific profile. However the actual settlement dates defined in the sales section take precedence and any future collection profiles (instalments set to occur after a settlement date) are ignored.

Collection Profile Examples

Say there are three a \$1,000,000 sales occurring as per the following collection profile, and the user has also nominated that there is a 10% Deposit payable on exchange, and that deposit earns interest at 5%:

Months in Cash Flow	4	5	6	7	8	9	10	18
Instalment %	20%	10%	10%	5%	10%	10%	5%	10%

Scenario	Pre-Sale Exchange				Settlement		Results
	Deposit	Interest on Deposit	Start	Span	Start	Span	
Sale 1 Pre-Sale Exchange Start is before first instalment and Settlement is before last instalment.	10%	5%	2	4	14	6	<ul style="list-style-type: none"> No 10% deposit is collected from purchaser at month 2 and placed in a trust account to earn interest. The first payment to the developer is made in month 4 as per collection profiles. Outstanding amounts are paid in full at settlement month 14 over a 6 month span, irrespective of the future collection profiles in month 18.
Sale 2 Pre-Sale Exchange Start occurs at the same time as the first instalment and Settlement Start occurs at the same time as the last instalment, but is spread over several months.	10%	5%	4	4	18	6	<ul style="list-style-type: none"> No 10% deposit is collected from purchaser at month 4 and placed in a trust account to earn interest. The first payment to the developer is made in month 4 as per collection profiles. Final payment is collected in month 18 as per collection profile irrespective of the nominated Settlement dates.
Sale 3 Pre-Sale Exchange Start is after the first instalment and Settlement Start is after last instalment.	10%	5%	6	4	20	6	<ul style="list-style-type: none"> No 10% deposit is collected from purchaser at month 6 and placed in a trust account to earn interest. In month 6, instalments 1 (20%), 2 (10%) and 3 (10%) are collected, equating to total back-pay of 40%. Final payment is collected in month 18 as per the collection profile irrespective of the nominated Settlements dates.

7.19 Sales

Units and Area (Mandatory)

For each sale item it is mandatory to enter:

- The total quantity (no. of lots, units, etc), and
- The total size of all sale items for that line item (sqm, sqft, ha, etc) based on the unit of measurement from the list selector (purple font), such as number of units or sqm, NLA, GFA, etc.

This information is used for further analysis on the Summary and Cash Flow (Stock Summary).

Current Sale Price (Mandatory)

This is the current non-escalated sale price. This must be based on either the Units or Area measurement (ie \$/unit or \$/area)

Sale Calc Method (Mandatory)

Indicate the method of calculating the total sale value. It is based on how the 'Current Sale Price' has been entered:

- If 'Current Sale Price' has been entered in as a \$/sqm, then select "Per Sqm" from the list selector in the Sales Rate column. The unit of measurement (sqm, sqft, etc) is based on the option selected in the 'Total Area' column.
- If 'Current Sale Price' has been entered in as a lump amount, then select "Per Unit" from the list selector.

Pre-Sale Exchange Start and Span (Optional)

You may enter an exchange start date and span period, which is relevant only for pre-sales (items sold before completion).

If you nominate a pre-sale exchange for a sales line item, the program assumes all items in that line are pre-sold. Alternatively, you can split sales into two line items if you wish - those pre-sold and those sold after completion of development (i.e pre-sale exchange is ignored).

You should be aware of the following when adopting pre-sale exchanges:

- Any revenue escalation selected for that sale item will only apply up to the date of exchange. If no pre-sale date is entered then the escalation rates apply up to the date of settlement.
- Unless the Sales Revenue Collection Profile feature is used, no revenue is actually collected by the developer until settlement. At pre-sale exchange, any deposit that is paid by the buyer is actually paid into a trust account and is not received by the developer until settlement.
- The dates entered for the pre-sale exchange will impact the 'Sales Summary' on the Stock Summary report on the Cash Flow sheet.

Settlement Start and Span
(Mandatory)

It is mandatory to enter the settlement date and span period for each sale item, otherwise the program will not include the revenue in the cash flow.

You should be aware of the following in relation to settlements:

- If the user has adopted pre-sale exchanges for a sale item and has elected to earn interest on any deposits collected at pre-sale, the interest earned will be apportioned between the developer and purchaser at time of settlement.
- When using the Sales Revenue Collection Profile feature, the final payment/instalment to the developer is made at the earliest milestone reached between the final nominated sales collection profile instalment and the settlement date.
- The dates entered for the settlements will impact the 'Handover Summary' on the Stock Summary report on the Cash Flow sheet.

GST/VAT (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the revenue is GST/VAT inclusive and the developer or JV will pay a percentage of the revenue as a tax liability.

Land Use Code (Optional)

By detailing the land use code for a sale item, it will apply the following:

- **Escalation**, based on the rates entered for that specific land use in the Revenue Escalation table.
- **Sales Commissions**, based on the rates entered for that specific land use in the Sales Commission section.

If you neglect to enter a land use code, the sales revenue will still be calculated, however:

- It will exclude escalations and sales commissions, and
- It will be shown as 'Not Classified' on the Summary Report rather than be grouped under a specific land use type.

Revenue Collection Profile
(Optional)

Enter a Profile Number defined in the Sales Revenue Collection Profile table. If this is left as Zero, then revenue is only received during the defined Settlement Start and Span dates.

This option is only available if the Sales Revenue Collection Profile feature is enabled via the Estate Master Preferences

7.20 Rental Income and Capitalised Sales

Rental Income

Land Use Code (Optional)

By detailing the land use code for a tenant, it will apply the following:

- **Escalation on rental income**, up until the lease start, based on the rates entered for that specific land use in the Revenue Escalation table.
- **Sales Commissions** for capitalised sales, based on the rates entered for that specific land use in the Sales Commission section.

If you neglect to enter a land use code, the rental and capitalised sales revenue will still be calculated, however:

- It will exclude escalations and sales commissions, and
- It will be shown as 'Not Classified' on the Summary Report rather than be grouped under a specific land use type.

Total Area (Mandatory)

Enter the size of tenancy based on the unit of measurement from the list selector (purple font) such as number sqm, sqft, etc.

This information is used for further analysis on the Summary and Cash Flow (Stock Summary for Capitalised Sales).

Current Rent (Mandatory)

Enter in the current rent based on the unit of measurement selected and either as a monthly or annual rate (chosen from the list selector).

Outgoings and Vacancies (Optional)

You may select outgoing expenses and vacancy allowances either as:

- A lump sum per annum/month, and/or
- Percentage of gross rent.

Outgoings and Vacancies are shown as a 'Leasing Cost' in the Summary and Cash Flow reports are paid during the nominated lease start and span.

Pre-Commitment (Optional)

You may enter a lease pre-commitment period that is before the Lease Start month. When adopting a pre-commitment:

- Escalation on rental income will be applied up until the pre-commitment period only.
- A portion of the nominated Letting Fee can be paid at that point in time.

Lease Start and Span (Mandatory)

To calculate a rental income stream, enter a lease start date and lease span period. If the span period is zero (0) then the program will not include the rental revenue in the cash flow.

Once the Current Rent and Lease Start is entered, the 'Escalated Rent as at the Lease Start' will be displayed. It is the Current Rent that has been escalated from the Revenue Escalation rates table. To escalate rents once the leases commence, use the Rental Review Escalation table.

Rent Reviews and Leasing Costs

Rental Review Escalation

(Optional)

For each tenant you may enter up to 10 years of rental review escalation rates. Escalation rates are applied on the anniversary month (Lease Start month) on a yearly basis (as opposed to cost escalation which is applied on each time period) and commence 1 year after Lease Start (ie the first 12 months of rent are calculated based on the rent value at the lease start date).

Rental Review Escalation is in addition to the Pre-Lease Rental Escalation that is calculated via the land use codes (ie RS1, COM, etc). It allows the user to enter in rent reviews during the lease period, whereas Pre-Lease Rental Escalation applies escalation to the current rent up until the lease start date.

Letting Fee (Optional)

You may enter a letting fee expressed as a percentage of the gross annual rent. It is default to be paid in full at the start of the lease, otherwise you may elect to enter in a percentage that is paid at Pre-Commitment.

Letting Fees are shown as a 'Leasing Cost' in the summary and cash flow reports.

Lease Incentives (Optional)

You may enter leasing incentives as:

- Rent Free Periods (calculated from the lease start date), or
- Fit-out Costs (calculated from the project start date to the start of the lease).

Lease Incentives are shown as a 'Leasing Cost' in the summary and cash flow reports.

GST/VAT on Costs and Rents

(Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the rents and leasing costs are GST/VAT inclusive and the developer or JV will pay/receive a percentage of the revenue/cost as a tax liability/credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the rents and/or costs entered to include tax in the cash flow and and reclaim tax credits (costs) or pay liabilities (rents).
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits or pay liabilities based on the rent and/or cost amount entered.

Capitalised Sales

Residual Capitalisation Rate (Optional)

Entering a capitalisation rate credits the project with a terminal or residual value (i.e. sale revenue) at the end of the rental period (lease start plus span) or at the optional Settlement date, whichever is later.

The Capitalised Value is calculated by the following formula:

Capitalised Value = Net Rental Income / Residual Capitalisation Rate

Where:

Net rental Income = Gross Rental Income less Outgoings and Vacancies. Letting Fees and Incentives are not capitalised and therefore do not impact then Capitalised Value.

Residual Capitalisation Rate = A capitalisation rate (also now as "Yield") that has been adopted from comparable evidence and research.

If there no actual rental income to be received by the developer for a specific tenancy (e.g it is not leased out or is sold on completion) and you only want to indicate a capitalised sale, the lease span should be left at ZERO and the capitalised value is calculated at the lease start (unless a Settlement date later than the lease start is entered).

Pre-Sale Exchange (Optional)

You may enter a Pre-Sale Exchange date for capitalised sales. If it is adopted, you should be aware of the following:

- Any revenue escalation selected for that sale item will only apply up to the date of exchange. If no pre-sale date is entered then the escalation rates apply up to the date of settlement (lease start plus span or at the optional Settlement date, whichever is later).
- No capitalised sales revenue is actually collected by the developer until settlement. At pre-sale exchange, any deposit that is paid by the buyer is actually paid into a trust account and is not received by the developer until settlement.
- Any deposits collected and invested in the trust account can earn interest at a user-defined rate.
- The dates entered for the pre-sale exchange will impact the 'Sales Summary' on the Stock Summary report on the Cash Flow sheet.

Settlement (Optional)

This is used to nominate a settlement date that is later than the lease start and span period. If this is left as zero, then the end of the lease start and span will be used as the settlement.

You should be aware of the following in relation to settlements:

- If the user has adopted pre-sale exchanges for a sale item and has elected to earn interest on any deposits collected at pre-sale, the interest earned will be apportioned between the developer and purchaser at time of settlement.
- The dates entered for the settlements will impact the 'Handover Summary' on the Stock Summary report on the Cash Flow sheet.

Leasing Up Period / Letting Void (Optional)

This allows the user to make an adjustment to the capitalised end sale value to take into account a known or expected vacancy period. Entering a Leasing Up Period (also known as 'Letting Void') requires two optional inputs:

- **Period Vacant:** Nominate the duration of the letting up (known/expected vacancy) period. The value of that vacancy is then determined by the following formula: Period Vacant x Forecasted Rental Income per Period
- **Discount Rate:** Given that the leasing up period may occur over more than one period, its 'present value' (as at the date of sale) can be calculated by adopting a discount rate.

The escalated end sale value will then be adjusted by the equivalent rental value (discounted by the optional discount rate).

For example: If you were to sell an office building that has a current rental of \$100k per annum on a capitalised basis for say \$1mil, and there is a known vacancy at the time of sale (e.g it is vacant for the next 6 months), then you can enter in '6' as the 'Months Vacant' period. The capitalised value of \$1mil will actually be reduced by \$50k (being 6 months rent), therefore the adjusted end sale price will be \$950k. If a discount rate has been adopted (say 14%), then the present value of the \$50k over 6 months will be calculated at approx \$48k, therefore the adjusted capitalised value in that instance will be approx \$952k.

The purchaser may request this (sort of like a 'rental guarantee') because they will argue that there is no point in them paying the full value when it will be vacant for 6 months.

Purchasers Costs (VAT mode only)

'Purchasers Costs' are calculated on the escalated end sale value and take into consideration items such as Stamp Duty, Legal and Agency Fees and Survey Fees.

This input is only activated when the VAT Taxation Format is adopted in the Estate Master Preferences.

% Paid by Land Owner (JV mode only)

You may elect a percentage of the costs to be paid for by the Land Owner if you are modelling a joint venture arrangement.

GST/VAT on Sale (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the revenue is GST/VAT inclusive and the developer or JV will pay a percentage of the revenue as a tax liability.

7.21 Leasing Costs

- % Paid and/or Amount** (Mandatory) For other leasing costs that are not entered on the Tenants sheet, it is mandatory to input:
- A percentage of gross rents (i.e. total gross rental income received inclusive of any GST/VAT/Sales Tax), and/or
 - The number of units (e.g unit) and base rate per unit (e.g \$/unit).
- Escalation** (Optional) You may elect to apply escalation on any cost items.
- Enter "**E**" to escalate to start, or
 - Enter "**R**" to escalate to start and continue escalation through span period, or
 - Leave blank or enter "**N**" to assume the cost is fixed, hence no escalation.
- Start and Span** (Mandatory) For each item's Start and Span, you have the following options:
- Enter a number to nominate the start and span manually, or
 - Enter "**R**" as the start date to have the cost paid pro-rata with rental income. If "R" is chosen, the span date is ignored.
- GST/VAT** (Optional) Select "Y" or "A", "B", or "C" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.
- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
 - If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

7.22 Other Income

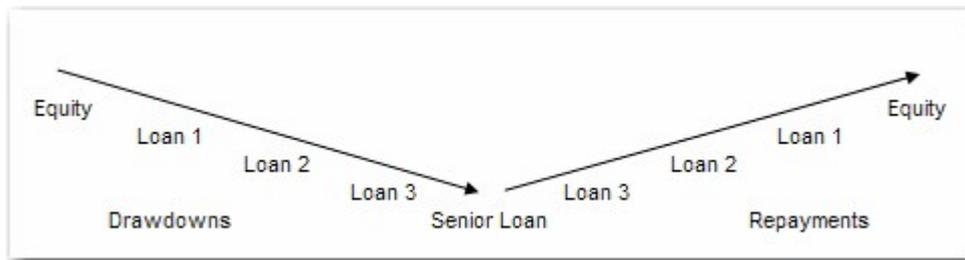
- Land Use Code** (Optional) By detailing the land use code you are able to apply varying escalation rates to each revenue item. If you neglect to enter the category code (eg "RS"), escalations will not be applied. Unlike items in the 'Sales' section, the Land Use Code does not calculate commissions on items in the 'Other Income' section.
- Amount and Start and Span** (Mandatory) For each revenue item it is mandatory to input:
- The number of units (e.g sqm) and base rate per unit (e.g \$/sqm), and
 - The start and span periods.
- If any of the above are entered as zero (0), then the program will not include the revenue in the cash flow.
- GST/VAT** (Optional) Select "Y" or "A", "B", or "C" in the GST/VAT column if the revenue is GST/VAT inclusive and the developer or JV will pay a percentage of the revenue as a tax liability.

7.23 Financing

Default Funding Priority

The program accommodates up to 5 sources of financing - Equity and 4 levels of debt. The program assumes the following default funding priority (this can be manually adjusted in the cash flow tables):

1. Equity is drawn down first as costs are expended.
2. Thereafter money is borrowed from Loans 1, then Loan 2 and then Loan 3 (if used), either fully upfront or drawdown progressively, until the maximum amount of these loans is borrowed.
3. Money is then borrowed from the Senior Loan (by default, acts as a Line of Credit facility).
4. As the project receives net revenue this reduces Loan 3 until the loan is fully paid.
5. Thereafter revenue pays back Loan 2, then Loan 1.
6. Thereafter revenue pays back Equity.
7. Thereafter the project pays profit shares (if applicable) and then retains the balance as profit.



Default Funding Priority

Funding Limits and Loan Ratios

Throughout the Finance Preferences, the user will have the ability to set:

- **Loan Facility Limits:** These are the defined drawdown limits for a loan, and
- **Loan Ratios:** The denominator for working out the % that is borrowed for reporting purposes only. It may be different to the Facility Limit.

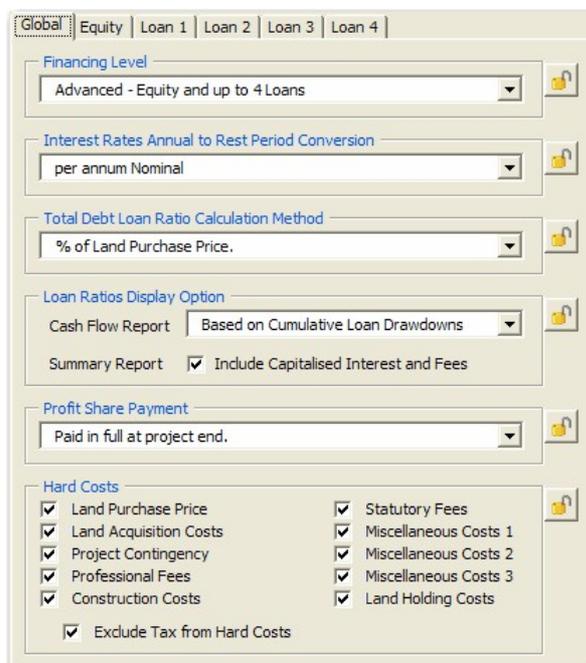
It is therefore important to understand the options that are available for these preferences:

Option	Description	Facility Limits	Equity Ratios	Debt Ratios
Fixed Amount	The loan limit is manually entered on the Finance input section.	○	○	○
% of Purchase Price	A percentage of the Land Purchase price only, inclusive of GST/VAT.	○	○	○
% of Land Acquisition Costs	A percentage of the Land Purchase price and any associated acquisitions costs (Stamp duty, Legal Fees, etc), inclusive of GST/VAT.	○	○	○
% of Project Costs	A percentage of all Project Costs (exclusive of GST/VAT), which exclude Selling Costs, Leasing Costs, Interest Charges, Application Fees and Line Fees.	○	○	○
% of Project & Finance Costs	A percentage of all Project Costs (exclusive of GST/VAT), which exclude Selling Costs and Leasing Costs but include Interest Charges, Application Fees and Line Fees.	○	○	○
% of Hard Costs	A percentage of costs that have defined as 'Hard Costs' as per the 'Global' section of the Finance Preferences.	○	○	○
% of Construction Costs	A percentage of total Construction Costs and Contingencies inclusive of GST/VAT.	○	○	○
% of Gross Sales	A percentage of Gross Sales Revenue (including Capitalised Sales) inclusive of GST/VAT/Sales Tax.	○	○	○
% of Sales (net of Tax)	A percentage of Sales Revenue (including Capitalised Sales) exclusive of GST/VAT/Sales Tax.	○	○	○
% of Sales (net of Selling Costs and Tax)	A percentage of Sales Revenue (including Capitalised Sales) exclusive of GST/VAT/Sales Tax and Selling Costs.	○	○	○
% of Value of Pre-Sales	A percentage of all Sales Revenue (including Capitalised Sales) that have been sold at a defined pre-sale exchange date.	○	○	○
% of Debt Funding	A percentage of total funds invested by all debt Lenders.	○	○	○
% of Net Profit	A percentage of total net development profit (after profit share has been paid out).	○	○	○

Global Finance Preferences

Finance Preferences are also available and can be loaded via the  buttons in the finance section of the Input sheet next to each finance facility.

Some of the global preferences are:



Financing Level

This options allows the user to toggle between two finance layouts:

Simple - Equity and Senior Debt Only
Advanced - Equity and up to 4 Loans

- **Simple:** Use Equity and Senior Loan only. When clicked it resets and hides the other Loans 1, 2 and 3 from the input and output sheets.
- **Advanced:** Use All funding facilities.

Interest Rate Conversion

This is to do with the method for converting all the in the model interest rates from their annual rate to the selected rest period (months, quarters, half years or years) for all interest payable and receivable.

Nominal Conversion	D/T
Effective Conversion	$[(D + 1)^{1/T}] - 1$

Where:

D = is the annual interest rate.

T = The number of rest periods per annum (i.e Monthly = 12, Quarterly = 4, Half Yearly = 2)

Note:

- It is imperative that a universal usage for the conversion of the interest rate be adopted for all evaluations.
- The first formula simply divides the annual interest rate by 12 while the second formula is the effective conversion and takes into account the compounding on a monthly, quarterly, half yearly basis depending on the cash flow being modelled.

Total Debt Loan Ratio Calculation Method

Indicate the denominator for the loan ratio calculation for the total debt overdraft. This is only used to show the Loan Ratio on the Reports.

% of Land Purchase Price	
% of Land Acquisition Costs.	
% of Project Costs (net of Interest/Fees and GST).	
% of Project & Finance Costs (inc Interest/Fees and net of GST).	
% of Hard Costs.	
% of Construction Costs.	
% of Gross Sales.	
% of Sales (net of GST).	
% of Sales (net of selling costs and GST).	
% of Value of Pre-Sales.	

RETURNS ON FUNDS INVESTED		Total Debt
Loan to Value Ratio		3.72%
Loan Ratio		95.57%
		of Land Purchase Price.

Summary Total Debt Loan Ratio

Loan Ratios Display

This options allows you to set how the Loan Ratios are displayed on the following reports:

- **Cash Flow Report:** Set the Loan Ratio to be calculated on either cumulative loan drawdowns, or on the current loan balance (which may include capitalised interest and fees)
- **Summary Report:** Set the Loan Ratio to be calculated on total funds invested, either including or excluding capitalised interest and fees.

Loan 4 - Lender Name				
Drawdown	(1,000,000)	-	-	-
Loan Interest Rate (%/ann)	5.00%	5.00%	5.00%	5.00%
Interest Charged	-	(4,167)	(4,184)	(4,201)
Application and Line Fees	-	-	-	-
Interest Paid by Equity	-	-	-	-
Loan Repayment	-	-	-	-
Interest and Fees	-	-	-	-
Principal	-	-	-	-
Loan Balance	(1,000,000)	(1,004,167)	(1,008,351)	(1,012,552)
% of Land Purchase Price.	90.91%	90.91%	90.91%	90.91%
Loan 4 Cash Flow	(1,000,000)	-	-	-

Cash Flow Loan Ratio

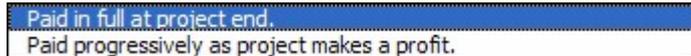
RETURNS ON FUNDS INVESTED		Loan 4
		Lender Name
Funds Invested (Cash Outlay)		8,415,007
% of Total Funds Invested		100.00%
Payback Date		Jun-12
Month of Payback		Month 41
IRR on Funds Invested		5.00%
Equity to Debt Ratio		N.A.
Loan to Value Ratio		3.72%
Loan Ratio		95.57%
		of Land Purchase Price.

Summary Loan Ratio

Profit Share Payment

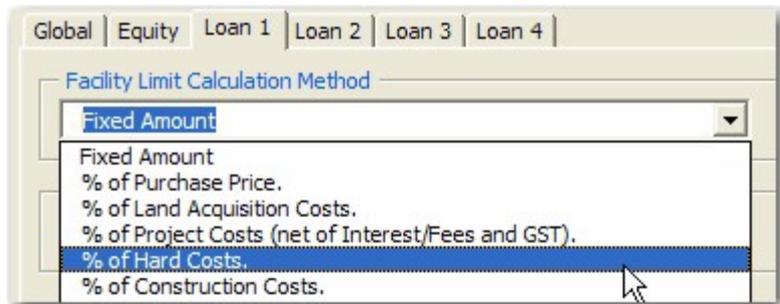
If there are any profit share payments to the Land Owner or Lenders 1, 2 or 3, then this options allows you to select when the profit share is paid out:

- **Paid in full at project end:** The model waits till the end of the project before any profit share payments are distributed.
- **Paid Progressively:** As soon as the project makes a profit (are debts are repaid), then any profit share payments will be distributed progressively. This option will only work if the option for 'Equity Repayment' is set to 'repay when available' as well, otherwise it will default to paying it at the end of the project.



Hard Costs

Select which project costs are classified as 'Hard Costs' for the purpose of loan ratios or facility limits that are based on 'Total Hard Costs' (as below).



If the tax component (GST/VAT) of the selected hard costs are to be excluded from amount, then make sure the last check box is ticked.

7.24 Equity

Developer's Equity Contribution Injected in total upfront.	Fixed Amount 1,000,000	Percentage 0.00%	Fixed Amount
Interest Charged on Equity	5.00%	per annum Nominal - Capitalised (Compounded)	
Interest received on Surplus Cash	4.00%	per annum received in arrears.	
% of Available Funds to Repay Equity Before Debt	20.00%		

Developer's Equity Contribution

You can nominate an equity contribution by the Developer, either by a fixed amount or a on a percentage loan ratio, and can either be injected upfront or progressively when required. These options are set via the Finance Preferences.

Alternatively you can manually stage the equity injections/repayments in the cash flow table (click on the relevant button).

You cannot manually inject equity after the last date that the cumulative cash flow turns positive. Any date before then, you can put a:

- **Negative amount (repayment)**, where the equity owner is contributing to the project (i.e. equity owner cash outflow and project cash inflow, or
- **Positive amount (injection)**, where the equity owner is extracting equity from the project (i.e. equity owner cash inflow and project cash outflow).

Interest Charged on Equity

There is provision to nominate a per annum interest rate charged on the equity loan balance. The way that interest is paid is set via Finance Preferences.

Interest received on Surplus Cash

There is provision to nominate a per annum interest rate earned on surplus cash reserves.

% of Available Funds to Repay Equity Before Debt

Enter a % of available funds (positive net cash flow) that is used to repay equity before repaying debt.

- Equity will only be repaid via this option if it has been set in the Finance Preferences that equity is 'repaid when available'. If it has been set that equity is 'repaid at project end' and the user has entered a % in this input, then rather than repay equity, the nominated % of funds will be placed in the surplus cash account.
- If the % is too high, debt may never be able to be repaid due to interest being higher than available repayments.

Opening Balances

Enter in the opening balances for Interest Charged on Equity and Received on Surplus Cash.

These inputs can be used where:

- The funding facility is not solely used for this particular project, or
- The costs/revenue were incurred before the model's 'Date of First Period' (or Project Start).

Equity Preferences

Facility Limit

Nominate the limit of funds injected into the cash flow. This amount excludes interest and fees. The limit can either be based on a:

- Fixed amount.
- Ratio of project costs or revenues (unless otherwise stated, these are inclusive of any tax).

Equity Injection Method

Indicate how the Equity is injected into the project:

- Fully upfront at project commencement.
- Progressively injected when required.

Interest Payment Method

Indicate how the interest charged on the funds is paid:

- **Accrued not Capitalised (Simple Interest):** Where interest is only calculated on the equity drawn down and not on any interest.
- **Capitalised (Compound Interest):** Where interest is calculated on the loan balance that includes any capitalised interest.

Equity Ratio Calculation Method

Indicate the denominator for the ratio calculation for equity cash flow. This is only used to show the Loan Ratio on the Reports.

Equity Repayment Method

Nominate when the equity is repaid back to the project:

- **At Project End:** Where any excess funds are deposited into the surplus cash account until such period.
- **When Available (retain cash for future costs):** Where equity is repaid progressively as it is realised. The cash flow may retain funds in the surplus cash account if it identifies future costs that may need to be funded.
- **When Available (do not retain cash for future costs):** Where equity is repaid progressively as it is realised. Any future costs that may need to be funded are ignored and no cash is retained to fund these.

Any manual equity repayment adjustments in the cash flow table will override the preferences.

Outstanding Debts at Project End

You can elect to have equity pay any outstanding debts at the end of the project, rather than leave them unpaid.

7.25 Loans 1, 2 and 3

By default, Loans 1, 2 and 3 are the next lending facilities after equity has been utilised. They may be commonly a first mortgage against the land or could also represent a quasi equity partner. There are certain items that are relevant if Loans 1, 2 and 3 are used.

Loan 1 - 3		Description	Lender Name	Opening Balances	
Facility Limit		Fixed Amount	Percentage		
Drawn down in total at loan commencement		1,000,000	0.00%	Fixed Amount	
Month Commencement	Auto <input checked="" type="checkbox"/>		May-09		
Maturity Month	Auto <input type="checkbox"/>	24	Jan-11	Repayments by Equity	
Interest Rate		5.00%	per annum Nominal - Principal and Interest		5,214
Fees		Amount	Percentage	Month Paid	
Application Fee		1,500	0.00%	2	344
Line Fee		-	1.00%		-
Profit Split to Lender		10.00%			

Facility Limit

This is the amount of debt that is borrowed, either as a fixed amount or a on a percentage loan ratio. If there is no Loan 1, 2 or 3 debt, set this to zero (0), or switch to Simple Mode. The user may also indicate whether the loan is drawn down at the loan commencement or progressively drawn down when required. These options are set via the Finance Preferences.

Alternatively you can manually stage the debt drawdowns/repayments in the cash flow table (click on the relevant button) by entering a:

- **Negative amount (drawdown)**, where the developer is manually drawing down more funds from the lender.
- **Positive amount (repayment)**, where the developer is manually repaying funds back to the lender.

Month Commencement

The commencement date (period start) for the loan.

- If nominating a commencement period, it must be later than the maturity period.
- If left as Auto (Automatic Commencement), the loan will be drawn down according to the default funding priority.

Maturity Month

Even though the program automatically pays back the loan, the user has the ability to set a maturity date (period end) for the loan.

- If nominating a maturity period, the user may also nominate which other funding source will be refinancing that loan at maturity via the Finance Preferences.
- If left as Auto (Automatic Maturity), the loan will cease according to the default funding priority.

This input is mandatory if a Principal and Interest facility is selected for a loan.

Interest Rate

There is provision to nominate a per annum interest rate charged on the loan, and it can be manually varied for different periods in the cash flow tables.

- Fees**
- There are two types of fees (entered as either an amount or a % of the facility limit) that can be paid to a lender:
- **Line Fees:** These are a per annum amount and charged and paid in arrears from the first drawdown to the final repayment.
 - **Application Fees:** These are a one-off payment and paid at the nominated period.
- Profit Split**
- A percentage rate can be inputted to split a portion of the profit to the lender as a form of 'success fee'.
- By entering a percentage for profit share, it will impact your performance indicators and risk assessment, depending on what option you nominate in the Estate Master Preferences for 'Gross or Net Profit Performance'.
- Opening Balances**
- Enter in the opening Interest and Fee Balances for the Debt accounts.
- These inputs can be used where:
- The funding facility is not solely used for this particular project, or
 - The costs were incurred before the model's 'Date of First Period' (or Project Start).

Loan Preferences

Facility Limit Calculation Method

Nominate the limit of funds injected into the cash flow. This amount excludes interest and fees. The limit can either be based on a:

- Fixed amount.
- Ratio of project costs or revenues (unless otherwise stated, these are inclusive of any tax).

Loan Drawdown Method

Indicate how the loans are drawn down into the project:

- **Upfront:** Funds are drawn down in total at project commencement (or Commencement Month if used).
- **Progressively:** Funds are drawn down as and when when required.
- **Progressively, limited to cumulative facility limit:** This option is only available if a facility limit is based on a % ratio of project costs or revenues. It will draw down funds in line with the cumulative facility limit (eg if a % of Construction Costs is chosen as the facility limit, then funds will only be drawn down during the period that construction costs are incurred).

Interest Payment Method

Indicate how the interest charged on the funds is paid:

- **Paid for by equity:** Where interest is paid by equity as soon as it is charged, either from the surplus cash account (if funds are available) or from additional equity injections (once the surplus cash account has been exhausted).
- **Accrued not Capitalised (Simple Interest):** Where interest is only calculated on the drawn downs and not on any interest.
- **Capitalised (Compound Interest):** Where interest is calculated on the loan balance that includes any capitalised interest.
- **Principal and Interest:** With this type of loan, the repayments are made up of the periodic interest on the outstanding balance plus an amount which will reduce the principal. If this option is selected:
 - The Loan Drawdown Method automatically reverts to 'Upfront'.
 - The user must set a manual 'Maturity Period', which is used to determine the term for the loan.

Facility Limit	Fixed Amount
Drawn down in total at loan commencement.	1,000,000
Month Commencement	Auto <input checked="" type="checkbox"/>
Maturity Month	Auto <input type="checkbox"/> 35

Using the Principal and Interest Option

Loan Ratio Calculation Method

Indicate the denominators for the loan ratio calculation for each loan. This is only used to show the Loan Ratio on the Reports.

Refinancing at Maturity or Principal and Interest Repayments

This option may display one of two labels:

- **Refinancing at Maturity:** This option is only applicable if you have chosen a manual Maturity Month for that loan. Nominate which other source of funding is to refinance the loan at the nominated Maturity Month.
- **Principal and Interest Repayments:** If a Principal and Interest loan is selected, then this option will prompt the user to define which loan facility is to fund the periodic repayments for the subject facility.

7.26 Senior Loan

The Senior Loan is drawn down when all equity and Loans 1, 2 and 3 have been fully used.

Loan 4		Description	Lender Name	Opening Balances	
No Limit (use as overdraft facility)			-		
Interest Rate		5.00%	per annum Nominal - Capitalised (Compounded)	5,214	
Fees		Amount	Percentage	Month Paid	
		Application Fee	1,500	0.00%	4
		Line Fee	1,200	0.00%	
				344	
				-	
Maintain Leverage on Loan 4		30.00%	% of unsold Stock (net of selling costs and GST)		

Facility Limit

The use of the facility limit can be changed via the Finance Preferences:

- **Used as an Overdraft Facility:** By default, this is a line of credit facility and there is no limit on the borrowed amount. No facility limit is required and the input is disabled.
- **Use Equity as the Overdraft Facility:** A facility limit can be set on the Senior Loan as a fixed amount, and then any additional funding is sourced from Equity.

The funds draw down for the Senior Loan are automatically progressively drawn down as and when required. This cannot be changed by any manual inputs, unlike Loans 1, 2 and 3.

Interest Rate

There is provision to nominate a per annum interest rate charged on the loan, and it can be manually varied for different periods in the cash flow tables.

Fees

There are two types of fees that can be paid to a lender:

- **Line Fees:** These are a per annum amount and charged paid in arrears from the first drawdown to the final repayment.
- **Application Fees:** These are a one-off payment and paid in nominated period.

If the loan is setup to be used as an overdraft facility, then these fees can only be entered as an amount, otherwise if a facility limit can be set, then they can also be entered as a % of the facility limit.

Maintain Leverage on Senior Loan

To maintain a certain level of leverage on the Senior Loan, enter in a % of unsold stock (net of selling costs and GST/VAT/Sales Tax).

This will ensure that some leverage is maintained and enable quicker repayments to equity and hence improve the return on equity.

Opening Balances

Enter in the opening Interest and Fee Balances for the Debt accounts.

These inputs can be used where:

- The funding facility is not solely used for this particular project, or
- The costs were incurred before the model's 'Date of First Period' (or Project Start).

Loan Preferences

Facility Limit Calculation Method

Nominate the limit of funds injected into the cash flow. This amount excludes interest and fees.

- **No Limit - Use as an Overdraft Facility:** This is a line of credit facility and there is no limit on the borrowed amount. No facility limit is required and the input is disabled.
- **Set Fixed Limit - Use Equity as the Overdraft Facility:** A facility limit can be set on the Senior Loan as a fixed amount, and then any additional funding is sourced from Equity.

Interest Payment Method

Indicate how the interest charged on the funds is paid:

- **Paid for by equity:** Where interest is paid by equity as soon as it is charged, either from the surplus cash account (if funds are available) or from additional equity injections.
- **Accrued not Capitalised (Simple Interest):** Where interest is only calculated on the drawn downs and not on any interest.
- **Capitalised (Compound Interest):** Where interest is calculated on the loan balance that includes any capitalised interest.

The interest rate can be manually varied for different periods in the cash flow tables.

Loan Ratio Calculation Method

Indicate the denominators for the loan ratio calculation for each loan. This is only used to show the Loan Ratio on the Reports.

7.27 Other Finance Costs

Amount and Start and Span (Mandatory)

For each finance cost item such as application fees, legal fees, mortgage stamp duty, etc, it is mandatory to input:

- The number of units (e.g sqm) and base rate per unit (e.g \$/sqm), and
- The start and span periods.

If any of the above are entered as zero (0), then the program will not include the cost in the cash flow.

Escalation (Optional)

You may elect to apply escalation on any cost items.

- Enter "**E**" to escalate to start, or
- Enter "**R**" to escalate to start and continue escalation through span period, or
- Leave blank or enter "**N**" to assume the cost is fixed, hence no escalation.

GST/VAT (Optional)

Select "Y" or "A", "B", or "C" in the GST/VAT column if the cost is GST/VAT inclusive and the developer or JV will claim a percentage of the cost as an input credit.

- If the header shows 'Add GST/VAT' the model will automatically escalate the cost entered to include tax in the cash flow and reclaim tax credits.
- If the header shows 'GST/VAT Included', then the model will only reclaim tax credits based on the cost amount entered.

7.28 Project Hurdle Rates

Project Discount Rate (target IRR)	25.00%	per annum Nominal, on cash flow that includes financing costs but excludes interest and corp tax.
Nominate an estimate of IRR	25.00%	per ann.
Developer's Target Return on Equity	30.00%	

Project Discount Rate (Target IRR)

The discount rate or target IRR only affects three performance indicators on the 'Summary' sheet:

- Project Net Present Value (NPV),
- Benefit Cost Ratio.

You can use the Estate Master Preferences to change the discount rate calculation method (include or exclude finance costs and interest) and also the method of conversion from the annual discount rate to the monthly discount rate (quarterly or half yearly depending upon the rest period you selected).

Nominate an Estimate of IRR

This is a number that you guess is close to the result of IRR. Microsoft Excel uses an iterative technique for calculating IRR. Starting with the estimate, it cycles through the calculation until the result is accurate within 0.00001 percent. If it can't find a result that works after 20 tries, the #NUM! error value is returned.

In most cases you do not need to provide the estimate for the IRR calculation. If it is omitted, it is assumed to be 0.1 (10 percent).

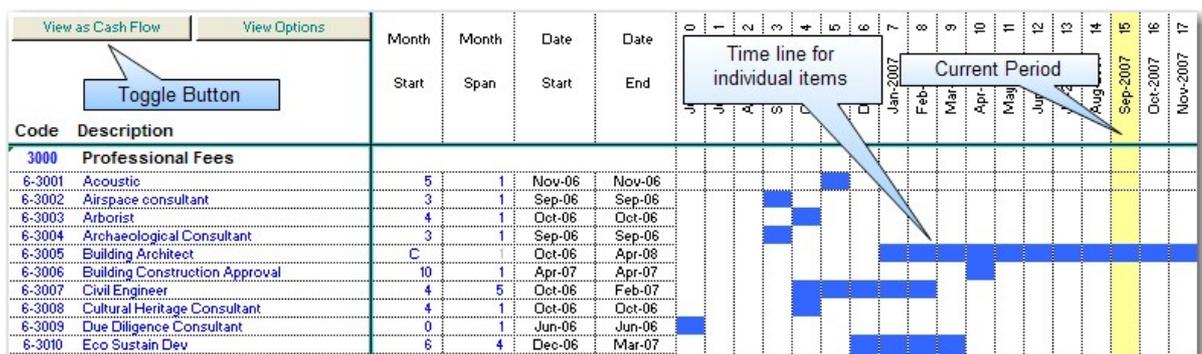
If it gives the #NUM! error value, or if the result is not close to what you expected, try again with a different value for the estimate.

Developer's Target Equity IRR

Enter in the desired return on the developer's equity.

This is used to calculate the Weighted Average Cost of Capital on the Summary Report

7.29 Project Timeline (Gantt Chart)



The Gantt chart is generated via the button on the top left of the 'Cash Flow' sheet. It provides a project timeline based on the timings in the 'Input Assumptions' and the manual inputs in the detailed cash flow. Transforming the Cash Flow into a Gantt Chart, hides all input columns, except for the period starts and spans, allowing the user to easily manipulate the timing and staging of the cash flow.

While in 'Gantt Chart' mode, the detailed cash flow section of the 'Cash Flow' sheet is locked and no manual inputs can be made other than in the period starts and spans.

7.30 Manual Cash Flow Inputs

The Cash Flow sheet gives you the opportunity to manually input amounts in a cash flow table for the following items:

- **All Project Revenues and Costs:** This is covered in more detail in the Development Management section.
- **Financing:** Such as adjustments for equity and debt drawdowns and repayments and interest rates variations for the loan facilities.
- **Discount Rate Variations**

Financing

Manual input rows are readily available in the Financing component of the Cash Flow sheet to make adjustments to the following:

- Equity injections (positive) and repayments (negative).
- Debt drawdowns (negative) and repayments (positive) for Loans 1, 2 and 3.
- Periodic interest rate variations for Loans 1, 2, 3 and the Senior Loan.

Loan 1 - Lender Name					
Manual Adjustments (Drawdown - / Repay +)	?	(900,000)	0	(900,000)	0
Drawdown		(900,000)	-	(900,000)	-
Loan Interest Rate (%/ann)			0.00%	5.00%	5.00%

Discount Rate

At the bottom of the Cash Flow sheet, there is provision to have a variable discount rate throughout the life of the cash flow.

PROJECT IRR & NPV					
Cash Flow that includes financing costs but excludes interest and corp tax.		(1,005,000)	(188,012)	(12,893)	(833)
Static Discount Rate (per ann. nominal)	20.00%				
PV for each Month	51,152,157	(1,005,000)	(184,930)	(12,473)	(793)
NPV of Future Cash Flows		51,152,157	53,026,443	54,101,363	55,016,160
Variable Discount Rate (per ann. nominal)	20.65%	20.00%	20.00%	20.00%	25.00%
NPV (using weighted avg discount rate)	50,089,024				

Variable Discount Rate to provide an additional NPV

- The discount rate that was entered in the Hurdle Rates input section is known as the **'Static Discount Rate'** and that will form the basis of all IRR and NPV calculations on other reports, such as the Summary, Sensitivity and Probability reports. In addition, it will also be used to report the following in the Cash Flow:
 - The Present Value (PV) of net cash flow for each time period.
 - The Net Present Value (NPV) of all future cash flows at each time period.
- The Static Discount Rate then forms the starting point for the **'Variable Discount Rate'** inputs, where the user can manually adjust the discount rate up or down to reflect different levels of risk at different points in time in the project. Using the Variable Discount Rates entered by the user, a weighted average discount rate is calculated, and then it is used to calculate an NPV.

7.31 Stamp Duty Tables

It is recommended that the user regularly checks their relevant Statutory Revenue Office for recent changes to taxes and duties. Estate Master has inbuilt Stamp Duty and Land Tax calculators based on tables for different regions that can be easily updated by the user when required:

Updating Stamp Duty

1. Click on the 'Stamp Duty' worksheet tab.
2. There will be tables for each region. Each table has the following columns:
 - **Max Land Price:** The upper value of the dutiable land value range.
 - **Lump Amount:** The fee that is payable in addition to the rate.
 - **Marginal Rate:** The percentage marginal rate on the dutiable value of land.
3. For Stamp Duty, the first row of data in each table is always left blank to indicate to duty is not payable when the land price is nil.
4. For the other rows of data, the upper value of the dutiable land value range is entered, along with the lump amount and marginal duty rate.

Stamp Duty Example

Say Stamp Duty is calculated as per the following rates:

- \$0 - \$14,000: \$1.25 for every \$100 or part of the dutiable value
- \$14,001 - \$30,000 \$175 plus \$1.50 for every \$100 or part, by which the dutiable value exceeds \$14,000
- \$30,001 - \$80,000 \$415 plus \$1.75 for every \$100 or part, by which the dutiable value exceeds \$30,000
- \$80,001 - \$300,000 \$1,290 plus \$3.50 for every \$100 or part, by which the dutiable value exceeds \$80,000
- \$300,001 - \$1m \$8,990 plus \$4.50 for every \$100 or part, by which the dutiable value exceeds \$300,000
- over \$1m \$40,490 plus \$5.50 for every \$100 or part, by which the dutiable value exceeds \$1,000,000

Land Value		Lump Amount	Marginal Rate
0	or under	0	0.0%
14,000	or under	0	1.25%
30,000	or under	175	1.5%
80,000	or under	415	1.75%
300,000	or under	1,290	3.5%
1,000,000	or under	8,990	4.5%
Over 1,000,000		40,490	5.5%

7.32 Land Tax Tables

It is recommended that the user regularly checks their relevant Statutory Revenue Office for recent changes to taxes and duties. Estate Master has inbuilt Stamp Duty and Land Tax calculators based on tables for different regions that can be easily updated by the user when required:

Updating Land Tax

1. Click on the 'Land Tax' worksheet tab.
2. There will be a summary table followed by tables for each region. Each table has the following columns:
 - **Rating Land Value:** The taxable value of the land.
 - **Amount:** The fee that is payable in addition to the rate.
 - **Rate:** The percentage land tax rate on the taxable value of land.
3. **If there is a tax free threshold** - this is indicated by entering '0's in the first row of a land tax table. The threshold land value is entered in the second row, along with the fee and rate that is payable on land that is in excess of the threshold.
 - Example: This year a \$352,000 threshold will apply to owners of liable land. The land tax rate will be \$100 plus 1.7% on the combined value of all taxable land in excess of \$352,000.

Land Value	Amount	Rate
0	0	0%
352,000	100	1.7%

4. **If there is no tax free threshold** - this is usually indicated by entering only a % rate in the first row of a land tax table. The taxable land values are then entered in the following rows, along with the fee and rate that is payable.
 - Example: There is no threshold for land tax this year. Taxable land is assessed at the following rates:
 - Not more than \$400,000: 0.4%
 - Between \$400,000 and \$500,000: \$1,600 plus 0.6% on the taxable value that exceeds \$400,000
 - More than \$500,000: \$2,200 plus 1.4% on the taxable value that exceeds \$500,000

Land Value	Amount	Rate
0	0	0.4%
400,000	1,600	0.6%
500,000	2,200	1.4%

7.33 S-Curves

The S-Curve tables are based on cumulative cost and cumulative time.

For example, in using the default S-Curve in the model (see S-Curve 1 below), and construction occurs over 10 months, then it would assume that after 10% of the cumulative time (or 1 month), 5% of the cumulative costs should have been drawn down (paid) in the cash flow to date. After 20% (or 2 months), 11% of the cumulative costs should have been drawn down, comprising of the 5% after one month and an additional 6%, and so on.

To show a cost drawdown that is skewed towards the earlier months of a span (more is paid earlier or quicker) ensure that the %'s increase earlier (see S-Curve 2 below).

Time	S-Curve 1	S-Curve 2
0.00%	0.00%	0.00%
2.00%	1.00%	1.00%
4.00%	2.00%	3.00%
6.00%	3.00%	4.00%
8.00%	4.00%	6.00%
10.00%	5.00%	10.00%
12.00%	6.10%	15.10%
14.00%	7.25%	17.25%
16.00%	8.50%	18.50%
18.00%	9.75%	19.75%
20.00%	11.00%	24.00%
22.00%	12.25%	32.25%
24.00%	13.50%	33.50%

7.34 Set Original Forecast

At the end of the manually inputting data you have the option to set the Original Budget. You may alternatively wish to conduct a review before you set the Original Budget. Once your satisfied that the input data and results are correct you can save your Original Budget by clicking on the 'Set as Original Budget' function in the Estate Master Menu.



This sets the current forecast, net cash flow and the performance indicators as the Original Budget.

Part



8 Development Management

Once you have imported your feasibility from an Estate Master DF file or manually entered input data to set your Original Budget, you may begin to track your project through the progression in time.

In order to successfully track your project, it is imperative that:

1. You are familiarised with the 'Cash Flow' sheet and its components.
2. You understand the different methods of updating forecasts with actuals.

Cash Flow Components:

- Cash Flow Tools
- Input Assumptions
- Forecast Summary
- Detailed Cash Flow
- Stock Summary
- Project Cash Flow Summary
- Financing

Updating Forecasts with Actuals:

- Method 1: Updating Input Assumptions
- Method 2: Manually override Cash Flow
- Method 3: Import Accounts Data

8.1 Cash Flow Components

8.1.1 Cash Flow Tools

The 'Cash Flow' sheet contains several tools to increase its flexibility and functionality. These tools are located at the top left of the sheet:

ESTATE MASTER PROPERTY SOFTWARE		INPUT ASSUMPTIONS				
Code	Stage	Description	Reforecast Mode (A,S,N,M)	%	And/Or	No.
1000		Land and Acquisition				
		Total Land Purchase Price				
1002	-	Deposit in Trust Account	A	0.00%	of Total Land Purchase Price.	
1003	-	Payment 1	B	0.00%		

Insert Rows

Allows the user to insert additional input rows for any cost or revenue section. To insert more rows:

1. Select any cell along the row below where you want to insert a row (rows will be inserted above the selected cell).
2. Click on the 'Insert Row' button.
3. The function will prompt the user to indicate the number of additional rows required (max 50 at a time) and insert them above the selected cell.

ESTATEMASTER PROPERTY SOFTWARE

View as Gantt View Options Insert Rows Delete Rows

Code	Stage	Description
2000		Project Contingency
3000		Professional Fees
3001	-	Consultants
3002	-	Development Management
3003	-	Other

Select the cell where to insert the row(s) and click 'Insert Rows'

A new row(s) will be added above the selected cell

Code	Stage	Description
3000		Professional Fees
3001	-	Consultants
-	-	
3002	-	Development Management
3003	-	Other

Delete Rows

Allows the user to delete input rows not being used on the 'Cash Flow' sheet. To delete rows:

1. Highlight the cells for the rows you wish to delete (the entire row does not need to be highlighted).
2. Click on the 'Delete Row' button.
3. The function will check to make sure that the rows are allowed deleted before doing so:
 - The first and last input row of a section can not be deleted.
 - Only one group of rows can be deleted at a time (only contiguous rows can be deleted).
 - Rows containing a description or cash flow data for any stored forecast can not be deleted.

ESTATEMASTER PROPERTY SOFTWARE

View as Gantt View Options Insert Rows Delete Rows

Code	Stage	Description
2000		Project Contingency
3000		Professional Fees
3001	-	Consultants
-	-	
3002	-	Development Management
3003	-	Other

Select the row(s) to delete and click 'Delete Rows'

The selected row(s) will then be deleted if they contain no data

Code	Stage	Description
3000		Professional Fees
3001	-	Consultants
3002	-	Development Management
3003	-	Other

Disabling the ability to Insert or Delete Rows

In the Estate Master Preferences, there is an option to disallow the Insert/Delete Row feature. This may be helpful when creating templates and the number of rows is required to be fixed.

Cash Flow Insert/Delete Rows

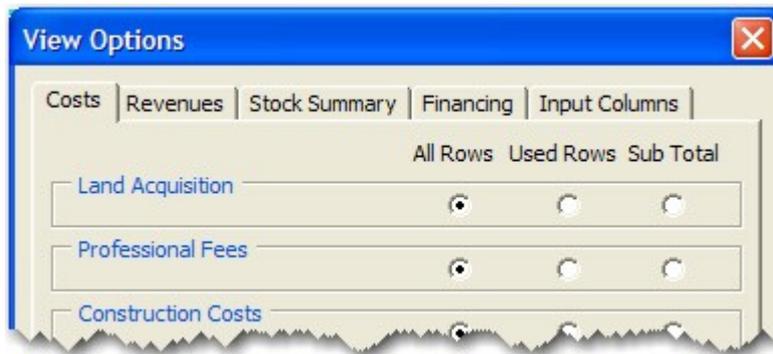
Allow Disallow

View Options

Allows the user to change the way the cash flow input sections are displayed in relation to the rows and columns.

For each cost and revenue section, the user can select from the following row views:

- **All Rows:** Shows all rows (used and unused) for a particular input section.
- **Populated Rows:** Shows only used rows for a particular input section. A row is 'used' when there is an input description evident and/or there is data in any of the stored forecasts.
- **Sub Totals:** Hides all input rows for a section and only shows the heading and sub total row.



For the Stock Summary report, the user can select from the following row views:

- **Quantity Sold/Handed Over:** Select to hide/show the exchanges and settlements by quantity.

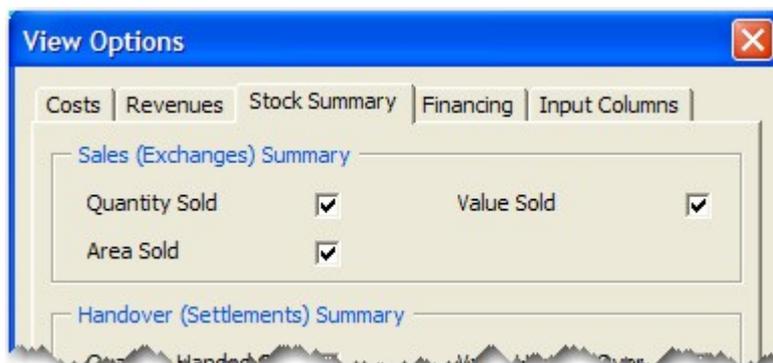
Units Sold		-	-
Cumulative Units Sold		6.00	6.00
% Units Sold		85.7%	85.7%

- **Area Sold/Handed Over:** Select to hide/show the exchanges and settlements by area.

SqM Sold		-	-
Cumulative		2.00	2.00
% SqM Sold		0.0%	0.0%

- **Value Sold/Handed Over:** Select to hide/show the exchanges and settlements by value.

AUD Sold		-	-
Cumulative		1,000,000	1,000,000
% AUD Sold		62.3%	62.3%



8.1.2 Input Assumptions

The 'Input Assumptions' section of the 'Cash Flow' sheet is where the majority of input data would have been imported to from an Estate Master DF file or where a user would have manually entered data before setting an Original Budget.

The 'Input Assumptions' has a generic header with relevant input cells appearing for each section as the user scrolls down the page.

To assist in entering data, comments have been inserted that can be displayed by selecting an appropriate header description.

The header row of the Input Assumptions describes the inputs for each section as you scroll down.

Tooltips appear when the header descriptions are selected.

Additional specific comments and assumptions are also provided.

No. Units
Enter the number of units, for example:
- No. of sqm.
- No. of lots or dwellings, etc.
For lump amounts, enter in 1 as the unit.

Code	Stage	Description	Reforecast Mode (A,S,N,M)	%	And/Or	No. Units	Current
1000		Land and Acquisition					
		Total Land Purchase Price					
1002	-	Deposit in Trust Account	A	0.00%			
1003	-	Payment 1	A	0.00%			
1004	-	Payment 2	A	0.00%			
1005	-	Payment 3	A	0.00%			
1006	-	Payment 4	A	0.00%			
1007	-	Settlement (balance)	A	100.00%			
1008	-	Stamp Duty (NIL)	A		Calculate an Land Value of inc. GST		

Reforecast Mode

This relates to how the user wants to enter costs and revenues while managing their project.

Setting the Reforecast Mode for individual line items

Code	Stage	Description	Reforecast Mode (A,S,N,M)	%	And/Or
3000		Professional Fees			
3001	-	Consultants	M		
3002	-	Development Management	A	8.00%	
3003	-	Other	S	0.00%	
3004			A	0.00%	

A = Automatic Mode: If 'A' is entered as the Reforecast Mode for a cost or revenue, then the following occurs:

- The Input Assumptions for that cost or revenue are displayed and is used to generate the detailed cash flow for that line item to the right.
- The cash flow that is generated for that line item is displayed in black font, indicating that the default formulas are being used.
- Any manual inputs made directly to the cash flow will reforecast the cash flow by reapportioning the balance over the defined span. Once the defined period (start and span) has been surpassed by a manual input, any balance is then allocated to the next month only.

S = Single Reforecasting Mode: If 'S' is entered as the Reforecast Mode for a cost or revenue, then the following occurs:

- The same as 'Automatic Mode', except any manual inputs will reforecast the cash flow by reapportioning the balance over the next time period only.

N = No Reforecasting Mode: If 'N' is entered as the Reforecast Mode for a cost or revenue, then the following occurs:

- The same as 'Automatic Mode', except any manual inputs will not reforecast the cash flow.

M = Manual Mode: If 'M' is entered as the Reforecast Mode for a cost or revenue, then the following occurs:

- The Input Assumptions for that cost or revenue are disabled and the cash flow for that item is reset.
- The cash flow for that line item is displayed in blue font, indicating that the default formulas are not being used and data must be entered directly in the cash flow by the user by way of manually overriding the cash flow cells.

Reforecast Mode Example

Say there is a \$1,000 cost that starts in month 0 and has a 4 month duration (i.e. \$250 per month), it would generate the following cash flow.

Professional Fees	?				
Consultants		250	250	250	250

Using the different Reforecast Modes, the following scenarios would occur if the amount in month 0 is manually overridden to show an actual expenditure of \$100:

A = Automatic Mode

The remaining balance of \$150 (\$250 forecast less \$100 actual) is evenly spread across the 3 remaining months (an extra \$50 per month) of the specified span of 4 months.

Professional Fees	?				
Consultants		100	300	300	300

S = Single Reforecasting Mode

The remaining balance of \$150 (\$250 forecast less \$100 actual) is allocated to the next month only, increasing it from \$250 to \$400.

Professional Fees	?				
Consultants		100	400	250	250

N = No Reforecasting Mode

When the Reforecasting Mode is switch to 'N' (No Reforecasting), then any manual inputs in the cash flow have no affect on the future months.

Professional Fees	?				
Consultants		100	250	250	250

M = Manual Mode

Since the Input Assumptions are ignored when in Manual Model, no other amounts will appear in the cash flow other than what is manually inputted by the user.

Professional Fees	?				
Consultants		100			

8.1.3 Forecast Summary

The 'Forecast Summary' section of the 'Cash Flow' sheet details all the forecasts that have been stored and their relative variations.

It also details the actual cost to date and what amounts are forecast to complete.

This section is also used to enter Budget Transfers, Commitments and Accruals (all optional).

Budget Transfers

This feature allows you to transfer an amount from one input section/row (by indicating a negative transfer amount) to another section/row on the 'Cash Flow' sheet (by indicating a positive transfer amount). These +/- amounts offset any variations that may be deceptive.

Budget Transfer Example

Say there are two cost items that were original budgeted at \$30,000, but a saving on one cost is required to be used to fund an overrun of another cost.

Both costs have been budgeted at \$30,000

	No. Units	Current Base Rate / Unit	Original Budget Jun-2006	Budget Transfers	Previous Forecast Aug-2007	Current Forecast Sep-2007	Variation to Previous	Variation to Original
3000 Professional Fees								
6-3001 Acoustic	1	30,000	30,000	-	30,000	30,000		
6-3002 Airspace consultant	1	30,000	30,000	-	30,000	30,000		

The budget for one cost has been reduced, but another has increased, showing a variation to the stored budgets

	No. Units	Current Base Rate / Unit	Original Budget Jun-2006	Budget Transfers	Previous Forecast Aug-2007	Current Forecast Sep-2007	Variation to Previous	Variation to Original
3000 Professional Fees								
6-3001 Acoustic	1	20,000	30,000	-	30,000	20,000	(10,000)	(10,000)
6-3002 Airspace consultant	1	40,000	30,000	-	30,000	40,000	10,000	10,000

To reflect a budget transfer from one cost to another, a negative amount is entered in the source row, and a positive amount in the target row. This adjusts 'variations' accordingly.

	No. Units	Current Base Rate / Unit	Original Budget Jun-2006	Budget Transfers	Previous Forecast Aug-2007	Current Forecast Sep-2007	Variation to Previous	Variation to Original
3000 Professional Fees								
6-3001 Acoustic	1	20,000	30,000	(10,000)	30,000	20,000	-	-
6-3002 Airspace consultant	1	40,000	30,000	10,000	30,000	40,000	-	-

Commitments and Accruals

- Funds Committed:** This feature allows the user to input any costs or revenues that may not have been paid or received yet but are entirely committed to. Warnings can be set via the Estate Master Preferences to alert the user if the Commitments entered by the user exceed the 'Current Forecast' or 'Forecast to Complete' amounts.
- Accruals:** This feature allows the user to take into account accrued as well as actual expenses and revenue during the relevant accounting period. Entering an Accrual will adjust the 'Total Cost to Date' and 'Forecast to Complete' columns.

	Current Forecast Sep-2007	Funds Committed	Current Month Cost Sep-2007	Actual Cost to Date Sep-2007	Accruals	Total Costs to Date	Forecast to Complete
3000 Professional Fees							
6-3001 Archaeological Consultant	45,600	10,000	-	30,000	5,000	35,000	10,600
6-3002 Building Architect	1,400,000	700,000	145,737	687,064	-	687,064	712,936

8.1.4 Detailed Cash Flow

The detailed cash flow is initially generated by the data entered in the 'Input Assumptions' section.

Current Period						
12	13	14	15	16	17	18
Jun-2007	Jul-2007	Aug-2007	Sep-2007	Oct-2007	Nov-2007	Dec-2007
-	-	-	-	-	-	-
63,000	84,000	170,328	145,737	15,600	103,313	130,775

Historical Data
Forecast Data

Yellow Column

Indicates what the **current period** is.

- The current period can be manually overridden with updated actual expenditure and revenue.
- The future periods can be manually overridden with updated forecasted expenditure and revenue.
- Anything to the left of the current period is 'historical data' and can be locked from editing by setting the 'Cash Flow History Override' option to 'Disallow' in the Estate Master Preferences.
- As the user progresses through the project life using the 'Roll-Forward' feature (or 'Roll Back'), the Yellow Column will adjust accordingly to reflect the new current period.

Black Font

Indicates a cash flow cell contains the default formula and is being generated by the 'Input Assumptions'.

Blue Font

Indicates a cash flow cell is in 'Manual Input Mode' or that a default formula has been overridden in the cash flow. If a default formula has been overridden, then the 'Input Assumptions' for that line item become invalid for the relative cells.

8.1.5 Stock Summary

The Stock Summary is located on the Cash Flow sheet between the Detailed Cash Flow and the Cash Flow Summary. It reports on stock that has been 'Sold' and 'Handed Over' via the revenue inputs from the Sales section and the Capitalised Sales calculated from the Rental Income section.

- Stock is **'Sold'** at the defined 'Pre-Sale Exchange' date for a sale item, or if no pre-sale is nominated, then at the defined 'Settlement' date.
- Stock is **'Handed Over'** at the defined 'Settlement' date for a sale item.

Stock Summary						
SALES SUMMARY						
Units Sold		5.00	5.00	-	-	-
	Cumulative Units Sold	20.00	25.00	25.00	25.00	25.00
	% Units Sold	80.0%	100.0%	100.0%	100.0%	100.0%
SqM Sold		400.00	500.00	-	-	-
	Cumulative	400.00	500.00	500.00	500.00	500.00
	% SqM Sold	80.0%	100.0%	100.0%	100.0%	100.0%
AUD Sold		375,000	375,000	-	-	-
	Cumulative	1,500,000	1,875,000	1,875,000	1,875,000	1,875,000
	% AUD Sold	80.0%	100.0%	100.0%	100.0%	100.0%
HANDOVER SUMMARY						
Units Handed Over		-	-	5.00	5.00	5.00
	Cumulative Units Handed Over	-	-	5.00	10.00	15.00
	% Units Handed Over	-	-	20.0%	40.0%	60.0%
SqM Handed Over		-	-	100.00	100.00	100.00
	Cumulative	-	-	100.00	200.00	300.00
	% SqM Handed Over	-	-	20.0%	40.0%	60.0%
AUD Handed Over		-	-	375,000	750,000	1,125,000
	Cumulative	-	-	375,000	750,000	1,125,000
	% AUD Handed Over	-	-	40.0%	60.0%	60.0%

Sales Summary displays the stock that has been sold at pre-sale, or on completion

Handover Summary displays when the stock has been settled and ownership has been transferred to the purchaser

In Estate Master DM, the user is able to make manual adjustments to the Units and Area Handed Over, as forecasted revenue in the Cash Flow is updated with actual revenue. When the user makes a manual adjustment in either of these two lines and the default formula is override, the font will turn blue, and the balance will be automatically apportioned over the remaining span.

For accurate Stock reporting, adjustments can be made to reflect the exact quantity and area that is handed over in each period, rather than it being averaged it across the defined span

HANDOVER SUMMARY						
Units Handed Over		6.00	6.00	6.00	6.00	3.00
	Cumulative Units Handed Over	6.00	12.00	18.00	24.00	27.00
	% Units Handed Over	22.2%	44.4%	66.7%	88.9%	100.0%
SqM Handed Over		600.00	600.00	600.00	600.00	300.00
	Cumulative	600.00	1,200.00	1,800.00	2,400.00	2,700.00
	% SqM Handed Over	22.2%	44.4%	66.7%	88.9%	100.0%
AUD Handed Over		775,000	775,000	775,000	775,000	775,000
	Cumulative	775,000	1,550,000	2,325,000	3,100,000	3,875,000
	% AUD Handed Over	20.0%	40.0%	60.0%	80.0%	100.0%

If the Cash Flow was updated to reflect that a forecasted sale had not occurred (i.e revenue was zeroed out in that month on the Cash Flow), then the user will need to be aware that the Handover Summary will need to be manually updated to reflect nothing was handed over (i.e Quantity and Area Handed Over should be set to zero), as highlighted by the red warnings.

HANDOVER SUMMARY			
Units Handed Over		6.00	6.00
	Cumulative Units Handed Over	6.00	12.00
	% Units Handed Over	22.2%	44.4%
SqM Handed Over		600.00	600.00
	Cumulative	600.00	1,200.00
	% SqM Handed Over	22.2%	44.4%
AUD Handed Over		775,000	-
	Cumulative	775,000	775,000
	% AUD Handed Over	20.0%	20.0%

The Cash Flow was updated to show that no sales revenue occurred in that month, however the user had not updated the Units or Area 'Handed Over' to reflect this

8.1.6 Project Cash Flow Summary

The 'Project Cash Flow Summary' section is situated at the bottom of the 'Cash Flow' and summarises the detailed project costs and revenue cash flow above (excluding interest) and provides a summary of the various forecasts stored.

No inputs are available in this section.

Detailed Cash Flow Section

Project Summary		1	2	3	4	5	6
		Jul-2006	Aug-2006	Sep-2006	Oct-2006	Nov-2006	Dec-2006
REVENUE							
9000	Gross Sales Revenue	-	-	-	-	-	-
8000	Selling Expenses	(896,364)	(161,364)	(41,364)	(41,364)	(41,364)	(41,364)
12000	Gross Rental Income	-	-	-	-	-	-
13000	Tenancy Costs	-	-	-	-	-	-
11001	Interest Received	-	-	-	-	-	-
11003	GST Expense	-	-	-	-	-	-
TOTAL NET REVENUE		(896,364)	(161,364)	(41,364)	(41,364)	(41,364)	(41,364)
COSTS							
1000	Land Acquisitions	-	-	-	-	-	-
2000	Project Contingency	-	-	-	-	-	-
3000	Professional Fees	54,500	253,560	106,526	121,960	159,303	149,114
4000	Construction Costs	-	-	-	-	1,400,000	2,100,000
5000	Statutory Fees and Contributions	-	7,951,300	-	-	-	-
-	Miscellaneous Costs	-	-	-	-	-	-
-	Miscellaneous Costs	-	-	-	-	-	-
6000	Miscellaneous Costs	-	180,000	-	-	-	-
7000	Land Holding Costs	-	130,000	-	-	10,000	-
10000	Financing Costs (before interest)	8,636	8,636	8,636	8,636	8,636	8,636
11002	GST Input Credits	-	-	-	-	-	-
TOTAL NET COSTS		63,136	8,523,497	115,162	130,596	1,577,940	2,257,750
NET CASH FLOW (before Interest)		(959,500)	(8,684,860)	(156,526)	(171,960)	(1,619,303)	(2,299,114)
Cumulative Cash Flow before Interest		(18,861,000)	(27,545,860)	(27,702,386)	(27,874,346)	(29,493,649)	(31,792,763)

Cash Flow Financing Section

8.1.7 Financing

The 'Financing' section is located below the 'Project Summary' and is used to manage the various sources of equity and debt funding. In this section the user can:

- Manually stage equity injections.
- Make manual repayments of Loans 1, 2 and 3.
- Vary the interest rates for Loans 1, 2, 3 and the Senior Loan.
- Manually enter line fees or interest earned/paid on any of the equity or debt sources.

FINANCING				
Equity				
Manual Adjustments (Inject + / Repay -)		0	0	0
Injections		200,000	-	-
Interest Charged		-	-	-
Equity Repayment		-	-	-
Less Profit Share		-	-	-
Equity Balance	8,019,765	(200,000)	(200,000)	(200,000)
Equity Cash Flow**	8,019,765	(200,000)	-	-
Project Cash Account				
Surplus Cash Injection	6,400,133	200,000	-	-
Cash Reserve Drawdown	(6,400,133)	(200,000)	-	-
Interest on Surplus Cash	-	-	-	-
Surplus Cash Balance	-	-	-	-
Loan 4 - Lender Name				
Drawdown	(23,843,632)	(661,110)	(37,879)	(247,581)
Loan Interest Rate (%/ann)		7.50%	7.50%	7.50%
Interest Charged		-	(4,132)	(4,395)
Application and Line Fees		-	-	-
Interest Paid by Equity		-	-	-
Loan Repayment	23,843,632	-	-	-
Interest and Fees	2,474,763	-	-	-
Principal	23,843,632	-	-	-
Loan Balance	-	(661,110)	(703,121)	(955,096)
% of Land Purchase Price.		5.09%	5.41%	7.35%
Loan 4 Cash Flow	2,474,763	(661,110)	(37,879)	(247,581)
Project Overdraft		(661,110)	(37,879)	(955,096)
% of Land Purchase Price.		5.09%		
Net Cash Flow (after Interest)	765	(861,110)		(251,976)
Cumulative Cash Flow**		(861,110)	(303,121)	(1,155,096)

Manual adjustment rows for drawdowns/ repayments and interest rates

Loans that are not being used can be hidden via the 'View Options' function

Repayments broken up by Interest and Principal component

Running Loan Ratios for each Loan

8.2 Updating Forecasts with Actuals

8.2.1 Method 1 - Updating Input Assumptions

This is the basic method of managing costs and revenues and it involves adjusting the 'Input Assumptions' on the 'Cash Flow' sheet.

Input Assumptions				Cash Flow		
No. Units	Current Base Rate / Unit	Month Start	Month Span	3 Sep-2006	4 Oct-2006	5 Nov-2006
1	30,000	5	1	-	-	30,000
1	30,000	3	1	30,000	-	-
1	30,000	3	1	-	30,000	-

Simply by changing the Input Assumptions, the Cash Flow will update.

This method adjusts the detailed cash flow out to the right of the assumptions, as long as both of the following conditions are met:

1. That the Current Period (yellow highlighted column in Cash Flow) has not surpassed the entire nominated duration of the line item (Start plus Span).

For example, if the Current Month is 12, and a line item has a Start of 6 and Span of 4 (starting in period 6 and ending in period 9), then adjusting the amount for that item will have no impact of the cash flow as it is deemed to be in the past. However, if the line item had a start of 10 and span of 4 (starting in period 10 and ending in period 13), then adjusting the amount will impact on the Current and future time periods that are remaining in relation to the Current Month (i.e. period 12 and 13).

2. That the cash flow period that the Input Assumptions are intending to change have not been overridden by the user.

For example, if a line item has a start of 6 and span of 4 (starting in period 6 and ending in period 9), and the user has overridden the amounts generated by the default formulae in the cash flow for period 6 and 7, then any change in the Input Assumptions will have no impact on the overridden cells.

This method can be used in conjunction with any of the following methods, for example:

- A user may be manually overriding items in the Current Period (yellow column) in the cash flow with actual costs, while utilising the 'Input Assumptions' to accurately forecast revenue in the future using \$/dwelling over a desired start and span.
- A user may be manually entering sales revenue in the cash flow, however allowing the 'Setup' and 'Input Assumptions' section to calculate the sales commission and GST payable on those sales by way of default percentage inputs.

8.2.2 Method 2 - Manually Override Cash Flow

The detailed cash flow that is generated by the 'Input Assumptions' may be manually overridden by the user. Once a cash flow cell has been overridden, it turns from a black to blue font to differentiate it.

15 Sep-2007	16 Oct-2007	15 Sep-2007	16 Oct-2007
-	-	-	-
144,811	158,714	95,056	165,822

A Cash Flow cell's default formula overridden by the user will turn the font from black to blue

When manually overriding the Cash Flow, follow this process:

- For each line item where necessary, set the 'Reforecast Mode' to the desired type:
 - Please Note: Enter 'M' only if you wish to manually enter the data for an entire cost or revenue line item (thus not requiring the Input Assumptions to generate the cash flow for that item). In this instance the Input Assumptions for that cost or revenue are disabled and the cash flow for that item is reset. The cash flow for that line item is displayed in blue font, indicating that the default formulas are not being used and data must be entered directly in the cash flow by the user by way of manually overriding the cash flow cells.

Code	Stage	Description	Reforecast Mode (A,S,N,M)	%
6-3018	-	Landscape Architect	A	0.00%
6-3019	-	Legal	A	0.00%
6-3020	-	Market Research	S	0.00%
6-3021	-	Mechanical	N	0.00%

- The yellow column in the 'Cash Flow' sheet is the Current Period. Input the actual costs and revenues for the current time period in this column.

Code	Stage	Description	13 Jul-2007	14 Aug-2007	15 Sep-2007
6-3018	-	Landscape Architect	-	-	-
6-3019	-	Legal	33,333	33,333	45,000
6-3020	-	Market Research	-	-	3,455

- Re-calculate the model if is prompted.
- Check rows for a 'Cash Flow/Input Variation'. This happens where the manual overrides do not equate to the 'Input Assumptions'. You can go to the 'Input Assumptions' of the 'Cash Flow' sheet and readjust them, however it is not vital, because as you start to track a project, costs, revenues and timings are likely to change from their initial forecasts anyway.

This indicates that the Cash Flow is 5,909 higher than the Input Assumptions, caused by a manual override by the user

Code	Stage	Description	Cash Flow / Input Variation
6-9004	-	Trustee and agency fee	5,909
6-9005	-	Other	-
TOTAL			

A Preference is available to highlight the cell red and warn the user if there is a variation

Cash Flow - Input Variation Warning

Warn when Inputs & Cash Flow vary Warn on Save and Export

Show no warnings

Warn when Inputs & Cash Flow vary

5. Cells that remain with blue font indicate that the manual override is different to what was forecasted by the 'Input Assumptions', while cells that remain with black font indicate that they are equal to the 'Input Assumptions'.

Reforecast Function

When a forecast (cash flow formula) has been overridden, manual inputs may automatically re-forecast other sections of the cash flow, as summarised below:

	Land Acquisition Costs	Professional Fees	Development Management Fee	Miscellaneous Costs	Project Contingency	Sales Commissions	Selling Costs	Leasing Costs	GST/AT Recalculs	GST/AT/Sales Tax Liabilities
Manual Cash Flow inputs in the sections below ↓ may automatically reforecast the cash flow items to the right →										
Land Payments	✓	✓						✓		
Land Acquisition Costs		✓							✓	
Professional Fees		✓	✓						✓	
Development Management Fee			✓						✓	
Construction Costs	✓	✓	✓	✓					✓	
Statutory Fees		✓		✓					✓	
Miscellaneous Costs		✓		✓					✓	
Land Holding Costs		✓							✓	
Project Contingency		✓							✓	
Sales Commissions		✓	✓						✓	
Selling Costs		✓	✓						✓	
Leasing Costs									✓	
Sales Revenue		✓	✓		✓	✓				✓
Capitalised Sales		✓				✓				✓
Rental Income							✓			✓
Other Income										✓
Finance Costs								✓		

*Only applicable if cost/revenue is a percentage of other item, ie Miscellaneous Cost entered as a % of Construction.

8.2.3 Method 3 - Import Accounts Data

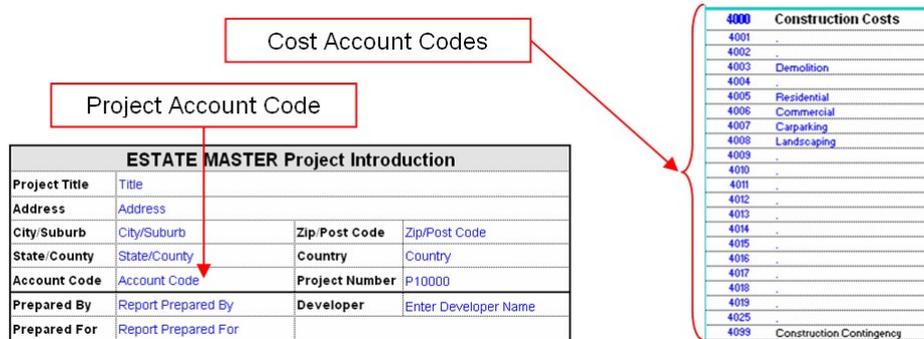
This method allows you to update the forecasts in your cash flows with actual expenditure and revenue data from your accounting system.

Preparing the Data

To do this, you must have the ability to export data from the accounts system to a blank spreadsheet in the following format:

Project Account Code	PC2004	Jan-07	Feb-07	Mar-07	Accounting Period
	5010	89,437	69,437	34,022	
	5030	65,332	81,389	45,721	
	4090	94,668	69,342	36,702	
	7500	93,070	64,268	32,799	
	8850	85,559	89,663	38,454	Actual Costs / Revenues
Cost Account Codes	9100	67,551	100,346	45,396	
	9200	118,119	92,863	50,635	
	10002	116,971	112,950	37,619	
	11500	95,469	110,193	29,135	

Once the data has been exported in the above format, the Estate Master DM model will need to be setup accordingly to be able to 'read' the data.



Uploading the Data

1. Open the Estate Master DM working file.
2. Up to 12 time periods of accounts data can be updated into the model at any one time using this feature. To extract the accounts data, either:
 - Switch to the accounts system and highlight and copy the data from the system in the above format into the clipboard (area to be copied indicated by broken lines), or
 - Export the data into a blank spreadsheet in the Estate Master DM working file and highlight and copy the data in the above format into the clipboard.

	A	B	C	D	E	F
1						
2	US0001	Sep-07	Oct-07	Nov-07	Dec-07	
3	6-3005	25,000	0	0	0	
4	6-3020	0	4,500	0	0	
5	6-3099	213,409	0	0	0	
6	6-4006	0	0	7,738,300	0	
7	6-8001	0	0	0	7,500	
8	6-8005	0	25,000	0	0	
9	6-8007	0	7,500	0	0	
10	6-9004	4,000	0	0	0	
11	6-9010	0	0	0	218,872	
12	6-9012	0	0	413,165	0	

Selecting to update a single period of data.

	A	B	C	D	E	F
1						
2	US0001	Sep-07	Oct-07	Nov-07	Dec-07	
3	6-3005	25,000	0	0	0	
4	6-3020	0	4,500	0	0	
5	6-3099	213,409	0	0	0	
6	6-4006	0	0	7,738,300	0	
7	6-8001	0	0	0	7,500	
8	6-8005	0	25,000	0	0	
9	6-8007	0	7,500	0	0	
10	6-9004	4,000	0	0	0	
11	6-9010	0	0	0	218,872	
12	6-9012	0	0	413,165	0	

Selecting to update multiple periods of data (max 12).

3. Switch back to the Estate Master DM working file.

4. Via the 'Management Tools', click on the 'Update From Accounts' button.



5. If the unique 'Project Account Code' or any of the 'Cost Account Codes' in the 'Cash Flow' sheet do not match your Estate Master DM file or there are duplicate account codes in the 'Input Assumptions', then no data will be updated and a printable error report will be shown allowing the user to make any corrections.



6. If all codes are compatible, the program will replace all formulas in the current time periods with the actuals derived from the accounts and the user can then print any reports for the current period, and roll forward to the next time period when ready.

 A screenshot of a spreadsheet showing a table of account data. A callout box points to the table with the text: 'The Current Period is updated with actual data (blue font indicating default formula has been overridden)'. The table has three columns: 'Code', 'Description', and two time periods: '15 Sep-2007' and '16 Oct-2007'. The data is as follows:

Code	Description	15 Sep-2007	16 Oct-2007
6-3004	Archaeological Consultant	-	-
6-3005	Building Architect	25,000	178,894
6-3006	Building Construction Approval	-	-

7. If the user is updating accounts for more than one time period at any single time (more than one column of actuals) the model will sort the data to make sure it has been updated in chronological order, replace all formulas in the matching time periods and automatically roll the cash flow forward for each time period.

8.2.4 Setting Forecasts and Progressing in Time

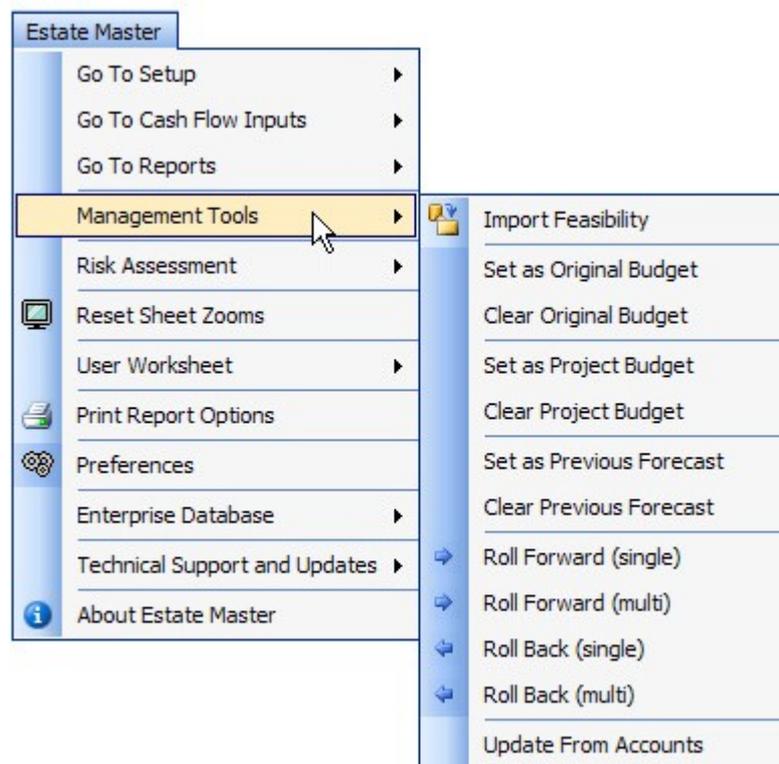
Once one of the above methods is used to update the forecast and/or actuals in the project cash flow, the user has several options in proceeding to the next time period using the 'Management Tools'

- **Setting Budgets:** The user can set the Current Forecast as either the Original, Project or Previous forecast at any time while tracking the project
- **Rolling Forward:** This is used once a user has completely entered in the actuals and updated any forecasts for the current time period and they wish to move to the next time period.
- **Rolling Back:** If an error is made when updating the cash flow with actuals and the time period in question is now historical data, then the user will have to use the 'Roll Back' feature to go back top that time period and update the data.

For more information in relation to these features, refer to the following Management Tools section.

8.3 Management Tools

The Management Tools are accessed via the Estate Master Menu. They include the following:



Import Feasibility

- Imports a feasibility from a compatible Estate Master DF version 4 file.
- Refer to the 'Setting the Original Budget - Import a Feasibility' section for more instructions

Original Budget

The Original Budget is the budget that is set at the beginning of the project to reflect the feasibility/forecast that was approved to commence the project.

- **Set as Original Budget:** Store the Current Forecast as the Original Budget (eg. feasibility) on the Cash Flow, Summary and Chart reports for comparison purposes.
- **Clear Original Budget:** Clears the Original Budget from all reports.

Project Budget

A Project Budget is a secondary budget that can be used for any purpose by the user and can be hidden if not required using the Cash Flow 'View Options'.

- **Set as Project Budget:** Store the Current Forecast as the Project Budget on the Cash Flow, Summary and Chart reports for comparison purposes.
- **Clear Project Budget:** Clears the Project Budget from all reports.

Disabling the ability to Set or Clear Budgets

In the Estate Master Preferences, there are options to prevent the user from overriding the Original and Project Budgets.

If these have been set to 'Disallow' then the user will not be allowed to Set or Clear a budget.

Original Budget Override

Allow Disallow

Project Budget Override

Allow Disallow

Previous Forecast

This can be set either manually in the same way as the Original Budget, or it can be set to rollover automatically via the Estate Master Preferences. The user selects the frequency of the rollover (i.e. Monthly, Quarterly, Yearly) and the time period in which it is to start. When the cash flow is then roll forward, these settings are checked to see if the storing of the Previous Forecast is triggered.

- **Set as Previous Forecast:** If 'Manual Rollover' is selected in the Estate Master Preferences, then this function allows the user to store the Current Forecast as the Previous Forecast on the Cash Flow, Summary and Chart reports for comparison purposes. If 'Manual Rollover' is not preferred, there is also an automatic feature for this tool, where the Previous Forecast is stored during the 'Roll Forward' process on a predefined basis (i.e every month, quarter, etc).
- **Clear Previous Forecast:** Clears the Previous Forecast from all reports.

Roll Forward

The 'Roll Forward' feature is used once a user has completely entered in the actuals and updated any forecasts for the current time period and they wish to move to the next period.

Roll Forward options in the menu include:

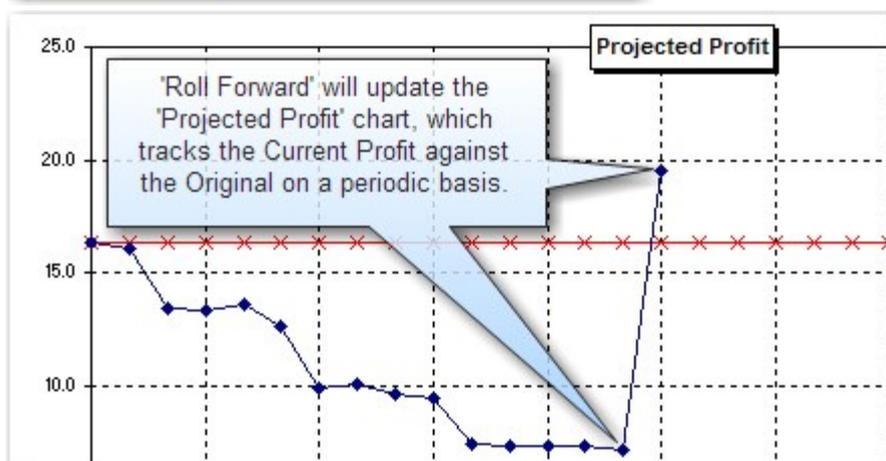
- **Single:** Move one time period forward.
- **Multi:** Move multiple time periods forward.

The 'Roll Forward' procedure includes the following tasks:

- Completes a full calculation update of the model.
- Checks to see if the Previous Forecast is in 'Auto' mode and stores the Current as Previous if necessary.
- Locks the yellow column (current time period) in the detailed cash flow (if Cash Flow History Override is locked via the Estate Master Preferences).
- Moves the yellow column forward (right) one time period in the cash flow.
- Updates the 'Projected Profit' chart

Project Title - CASH FLOW		
0	1	2
Jan-2009	Feb-2009	Mar-2009
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
0	0	-
-	-	-

'Roll Forward' will highlight Feb-09 as the 'Current Month' and Jan-09 will become history



Roll Back

If an error is made when updating the cash flow with actuals and the time period in question is now historical data (left of the yellow column on the detailed cash flow), then the user will have to use the 'Roll Back' feature to go back to that time period and update the data.

The 'Roll Back' function is basically an 'Undo' procedure for the roll forward, moving the yellow column on the cash flow one time period to the left, and also restoring any reports (such as Charts, Previous Forecast, etc) that were changed from the last Roll Forward. Roll Back is only available if Cash Flow History Override in the Estate Master Preferences is allowed.

Roll Back options in the menu include:

- **Single:** Move one time period forward.
- **Multi:** Move multiple time periods forward.

The 'Roll Back' procedure includes the following tasks:

- Check to see if the last time period it is rolling back to has a Previous Forecast stored, and if so, reverses the procedure and rolls back to the preceding Previous Forecast.
- Prompts the user if the formulas are to be replaced in the current time period. If so, any input line that is in 'A', 'S' or 'N' 'Reforecast Mode' will have the default cash flow formula replaced in the relevant cell, while any input line that is in 'M' 'Reforecast Mode' will be left as is.
- Rolls back one time period and unlocks the previously locked cells.
- Prompts the user if the formulas are to be replaced in the new current time period.

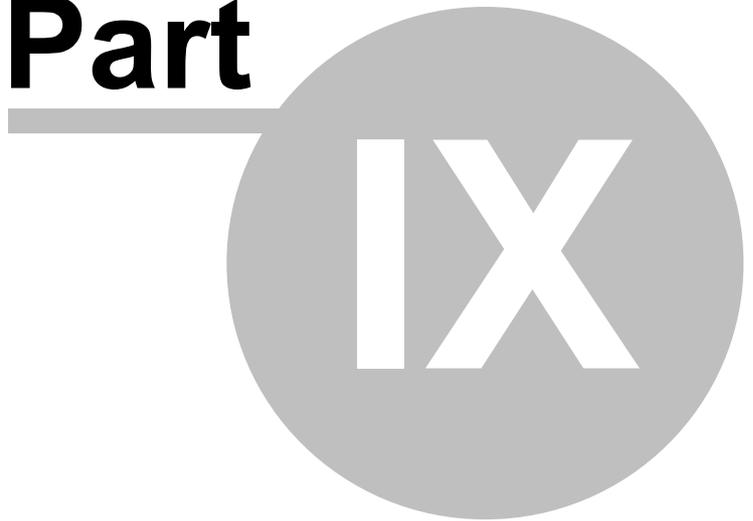
Using the Roll Back Procedure

Please note that the 'Roll Back' feature only replaces formulas in the current and previous time period that the user is rolling back to. It does not undo any input updates or manual cash flow overrides that affected future time periods while the user was rolling forward. These stay static and the user can 'undo' them manually if they need to roll back to a time period with the cash flow exactly the way it was.

Update from Accounts

This tool is used to import data into the cash flow from outputs generated by external accounting systems (see Method 3 - Import Accounts Data)

Part



9 Summary and Cash Flow Reporting

9.1 Development Financial Summary

The screenshot displays the 'Summary Report' interface in Estate Master DM. At the top, there are navigation buttons for 'Print', 'View as Current/Variation', and 'Hide/Show Rows'. The main area is divided into several sections:

- Forecast Variation Summary:** A table with columns for 'Month', 'Original', 'Project', 'Forecast', 'Current', and 'Variation to'. It lists various cost categories like 'Total Sales Revenue', 'Marketing Costs', and 'Construction Costs'.
- Performance Indicators:** A section with checkboxes to select rows for hiding/showing, and a table with columns for 'Budget', 'Actual', and 'Variance'.
- Footnotes:** A list of explanatory notes at the bottom of the report.
- Returns on Funds Invested:** A detailed table with columns for 'Month', 'Original', 'Project', 'Forecast', 'Current', 'Variation to', and 'Budget'. It includes sub-sections like 'Level 1 Landfill Return' and 'Level 2 Landfill Return'.

Callout boxes provide additional context:

- 'Function buttons such as Print, View as Current/Variation and Hide/Show Rows' points to the top navigation bar.
- 'Manual Budget column' points to the 'Budget' column in the 'Returns on Funds Invested' table.
- 'Checkboxes to select what rows to hide/show' points to the checkboxes in the 'Performance Indicators' section.
- 'Performance Indicators' points to the table with 'Budget', 'Actual', and 'Variance' columns.
- 'Footnotes' points to the list of notes at the bottom.
- 'Print option for Returns on Funds Invested table' points to the 'Print' button above the table.
- 'Returns on Funds Invested' points to the main table in the bottom section.
- 'Footnotes' (second instance) points to the notes at the very bottom of the page.

The 'Summary' sheet shows a summary of costs, revenues and performance indicators. Using the 'View As.....' button at the top left of the sheet, the user can switch between the following reports:

- **Current Forecast Summary:** Shows the summary and performance indicators of the Current Forecast only.
- **Forecast Variation Summary:** Shows the summary and performance indicators of the Current, Previous, Project and Original cases and their variances as either as a percentage or value.

Performance Indicators

Gross Development Profit	Total Project Revenue less Total Project Costs (after GST/VAT/Sales Tax paid and reclaimed, but before any profit share/split has been made to either the land owner or lender at the completion of the project).
Net Development Profit	Gross Development Profit less any profit share/split to either the land owner or lenders.
Development Margin (profit/risk margin)	<p>The ratio of Development Profit to:</p> <ul style="list-style-type: none"> • Development Costs (inc Selling and Leasing Costs), or • Development Costs (inc Selling Costs), or • Development Costs (net of Selling and Leasing Costs), or • Total Revenue net of GST/VAT/Sales Tax, or • Total Sales Proceeds (net of Selling Costs and GST/VAT/Sales Tax). <p>These options can be chosen on the 'Hurdle Rates' tab of the Estate Master Preferences.</p>
Net Present Value	<p>The project cash flow (excluding equity) discounted to present value at the nominated discount rate (Target IRR).</p> <p>You can choose whether financing costs, interest expenses and corporate tax are included in the project cash flow to calculate the NPV on the 'Hurdle Rates' tab of the Estate Master Preferences.</p>
NPV of Future Cash Flows	The Net Present Value of all future cash flows from the current period (or the month the forecast was set). It excludes all historical cash flow items.
Benefit Cost Ratio	The ratio of discounted revenue to discounted costs.
Internal Rate of Return	<p>The return on the development or the discount rate at which the NPV equals zero.</p> <p>You can choose whether financing costs, interest expenses and corporate tax are included in the project cash flow to calculate the IRR on the 'Hurdle Rates' tab of the Estate Master Preferences.</p>
Equity IRR	The return on the developer's equity investment into the project. It is calculated from the 'Equity Cash Flow' line on the Cash Flow sheet.
Equity Contribution	The sum of all developer equity contributions (injections) into the project.
Peak Debt Exposure	The maximum cash flow exposure after equity and including capitalised interest.
Equity to Debt Ratio	The ratio of equity funding to debt funding in the project.

Weighted Average Cost of Capital (WACC)	<p>The rate that a company is expected to pay to finance its assets. It is based on the following formula:</p> $\text{WACC} = \frac{D}{(D+E)} * R_D + \frac{E}{(D+E)} * R_E$ <p>Where: D = Total Debt E = Total Equity R_D = Cost of Debt (risk free rate of return plus debt premium based on the credit rating of the company); and R_E = Cost of Equity (required return on equity)</p>
Breakeven Date for Cumulative Cash Flow	<p>The date the cumulative cash flow first turns positive.</p>
Rent Cover	<p>The total Net Development Profit divided by the Current Net Annual Rental expressed as a a number of years/months. It is only applicable for developments with rental income.</p>
Profit Erosion	<p>The period of time post practical completion that it can remain unsold (but leased out) until finance and land holding costs erodes the profit for the development to zero. It is only applicable for developments with rental income.</p>
Return on Funds Invested	
Funds Invested	<p>The total amount of equity/debt funding injected into the project.</p>
Peak Exposure	<p>The maximum cash flow exposure of the equity/debt loan balance (including capitalised interest).</p>
Weighted Average Interest Rate	<p>The weighted average interest rate of the equity/debt facilities, weighted by the size of their loan balances.</p>
Interest and Fees Charged	<p>The total interest, application and line fees that have been charged by the financier to the project.</p>
Profit Share Received	<p>Profit share entitlements to any of the debt financiers for Loans 1, 2 and 3.</p>
Total Profit to Funders	<p>The total repayments less funds invested, including profit share paid or received.</p>
Margin on Funds Invested	<p>Margin is Total Profit to Funder divided by Funds Invested (Cash Outlay).</p>
Payback Date	<p>The last date when total equity/debt is repaid.</p>
IRR on Funds Invested	<p>The IRR of the financier's cash flow.</p> <p>Refer to the Cash Flow sheet to view the cash flow data for each financier that is used to calculate their IRR.</p>
Equity to Debt Ratio	<p>The ratio of equity funding to debt funding in the project.</p>
Loan to Value Ratio	<p>Loan to Value ratio is the Peak Equity/Debt Exposure divided by Total Sales Revenue.</p>
Loan Ratio	<p>Loan Ratio is the total funds invested (cash outlay) divided by the nominated ratio calculation method.</p> <p>Use the Finance Preferences to determine if 'funds invested' includes or excludes capitalised interest for the purposes of this calculation.</p>

Manual Budget

In the first column of the Summary Report, there is a 'Manual Budget'. Essentially, the user can set their own name and date for the budget and enter in their own cost, revenues and performance indicators. Once a Manual Budget has been set, the 'Variance to Manual Budget' will then track the variances between the Current Forecast and this new budget.

COSTS & REVENUES	Manual Budget Apr-2009	Original Jun-2006
REVENUE		
Total Sales Revenue	117,800,000	130,600,000
Residential - 1 Bedroom Units	18,000,000	19,600,000
Residential - 2 Bedroom Units	75,000,000	84,500,000
Residential - 3 Bedroom Units	21,000,000	22,500,000
Retail Shops	3,800,000	4,000,000
Less Selling Costs	5,000,000	(6,006,000)
NET SALE PROCEEDS	122,800,000	124,594,000
Rental Income	-	-
Less Outgoings	-	-
Less Letting Fees	-	-
Less Incentives (Rent Free and Fit Out Costs)	-	-

The user can enter their own budget in this column

In the Estate Master Preferences, the user can hide the Manual Budget from the Summary report, and also prevent users from editing it.

Summary Manual Budget

Show on Report Allow Editing

Other Functions

View as Current

View as Variation

Hide Rows

Show Rows

Print Sheet

You can change the way the Summary Report is displayed by toggling the 'View as Current/Variation' buttons:

- **View as Current:** This will only show the totals and performance indicators for the Current Forecast only.
- **View as Variation:** This will show the totals and performance indicators for all stored budgets and their variations to the Current Forecast.

You can customise the rows that are displayed in the Summary Report:

- **Hide Rows:** This will hide the rows that have been deselected using the checkboxes on the left of the report.
- **Show Rows:** This will unhide all rows on the report. Any rows that were hidden will have their checkbox still deselected.

This will print the active report based on the default print setup.

9.2 Cash Flow Table

Forecast Summary

This is a summary of all budgets stored in the model, and their variances to the Current Forecast. Using the Estate Master Preferences, you can exclude the Budget Transfers and Project Budget columns from being displayed if they are not used.

Forrest View Apartments - FORECAST SUMMARY							
Original Budget Jun-2006	Budget Transfers	Project Budget Aug-2006	Previous Forecast Aug-2007	Current Forecast Sep-2007	Variation to Previous	Variation to Project	Variation to Original
2,000,000	-	2,000,000	2,215,000	2,215,000	-	215,000	215,000
900,000	-	900,000	925,000	925,000	-	25,000	25,000
1,200,000	-	1,200,000	1,150,000	1,150,000	-	(50,000)	(50,000)
100,000	-	100,000	85,670	85,670	-	(14,330)	(14,330)
100,000	-	100,000	85,630	85,630	-	(14,370)	(14,370)
100,000	-	100,000	125,800	225,800	100,000	125,800	125,800
3,000,000	-	3,000,000	3,210,000	3,210,000	-	210,000	210,000
280,000	-	280,000	280,000	280,000	-	-	-
100,000	-	100,000	100,000	-	(100,000)	(100,000)	(100,000)
-	-	-	-	-	-	-	-
7,780,000	-	7,780,000	8,177,100	8,177,100	-	397,100	397,100

In addition, the Forecast Summary displays the 'Current Period Cost', 'Costs to Date' and 'Forecast to Complete' data. Using the Estate Master Preferences, you can decide whether the current period's costs are included in the 'Cost to Date' column or remains in the 'Forecast to Complete' data.

Hide History					
Funds Committed	Current Month Cost Aug-2006	Actual Cost to Date Aug-2006	Accruals	Total Costs to Date	Forecast to Complete
-	738,333	738,333	-	738,333	1,476,667
-	462,500	462,500	-	462,500	462,500
-	383,333	383,333	-	383,333	766,667
-	42,835	42,835	-	42,835	42,835
-	85,630	85,630	-	85,630	-
-	-	-	-	-	225,800
-	1,605,000	1,605,000	-	1,605,000	1,605,000
-	280,000	280,000	-	280,000	-
-	-	-	-	-	-
-	-	-	-	-	-
-	3,597,632	3,597,632	-	3,597,632	4,579,468

The Forecast Summary report can be printed in either Full Detail (each cost and revenue line item) or Summary format. There are also several other reports that can be generated from data in this section using the Print Menu:

- **Original Budget Variance Report:** Prints a report that shows only line items that have an variance to the Original budget, collapsing all other line items.
- **Previous Budget Variance Report:** Prints a report that shows only line items that have an variance to the Previous budget, collapsing all other line items.

Detailed Cash Flow

This is the full periodic cash flow for all costs and revenues. There are several options to choose from when printing this report via the Print Menu :

- **Full Cash Flow:** Prints this report for each cost and revenue line item.
- **Cash Flow + Current Forecast:** This is a full cash flow report, with the Current Forecast as the first column in the report.
- **Cash Flow + Forecast Summary:** This is a full cash flow report, with the Forecast Summary section as the first set of columns in the report.

Forrest View Apartments - CASH FLOW						
0	1	2	3	4	5	6
Jun-2006	Jul-2006	Aug-2006	Sep-2006	Oct-2006	Nov-2006	Dec-2006
-	-	-	-	-	-	-
-	-	-	33,333	33,333	33,333	33,333
1,500	1,500	-	5,000	-	7,000	-
-	-	-	-	-	5,000	5,000
-	-	-	6,000	2,000	-	7,333
-	-	-	-	-	3,500	3,500
-	-	-	-	5,000	5,000	5,000
-	-	-	-	6,000	6,000	6,000
-	30,000	-	-	-	-	-
-	-	12,000	-	9,000	9,000	-
-	-	5,000	-	-	-	-

Cash Flow Summary

This is a summary version of the full cash flow report.

Project Summary					
REVENUE					
9000	Gross Sales Revenue	-	-	-	-
8000	Selling Costs	-	(896,364)	(161,364)	(41,364)
12000	Gross Rental Income	-	-	-	-
13000	Leasing Costs	-	-	-	-
9100	Other Income	-	-	-	-
11001	Interest Received	-	-	-	-
11003	GST Expense	-	-	-	-
	TOTAL NET REVENUE	-	(896,364)	(161,364)	(41,364)
COSTS					
1000	Land and Acquisition	17,000,000	-	-	-
2000	Project Contingency (Reserve)	-	-	-	-
3000	Professional Fees	121,500	54,500	253,560	106,526
4000	Construction Costs (inc Contingency)	-	-	-	-
5000	Statutory Fees and Contributions	-	-	7,951,300	-
-	Miscellaneous Costs	-	-	-	-
-	Miscellaneous Costs	-	-	-	-
6000	Miscellaneous Costs	-	-	180,000	-
7000	Land Holding Costs	-	-	130,000	-
10000	Financing Costs (exc Fees)	780,000	8,636	8,636	8,636
0	Pre-Sale Commissions	-	-	-	-
11002	GST Input Credits	-	-	-	-
	TOTAL NET COSTS	17,901,500	63,136	8,523,497	115,162
	Net Cash Flow (before Interest & Corporate Tax)	(17,901,500)	(959,500)	(8,684,860)	(156,526)
	Cumulative Cash Flow	(17,901,500)	(18,861,000)	(27,545,860)	(27,702,386)
	Corporate Tax	-	-	-	-
	Net Cash Flow (before Interest & after Corporate Tax)	(17,901,500)	(959,500)	(8,684,860)	(156,526)
	Cumulative Cash Flow	(17,901,500)	(18,861,000)	(27,545,860)	(27,702,386)

Stock Summary

The Stock Summary is located on the Cash Flow sheet between the Detailed Cash Flow and the Cash Flow Summary. It reports on stock that has been 'Sold' and 'Handed Over' via the revenue inputs from the Sales section and the Capitalised Sales calculated from the Rental Income section.

- Stock is **'Sold'** at the defined 'Pre-Sale Exchange' date for a sale item, or if no pre-sale is nominated, then at the defined 'Settlement' date.
- Stock is **'Handed Over'** at the defined 'Settlement' date for a sale item.

Stock Summary						
SALES SUMMARY						
Units Sold		5.00	5.00	-	-	-
	Cumulative Units Sold	20.00	25.00	25.00	25.00	25.00
	% Units Sold	80.0%	100.0%	100.0%	100.0%	100.0%
SqM Sold		400.00	100.00	-	-	-
	Cumulative	400.00	500.00	500.00	500.00	500.00
	% SqM Sold	80.0%	100.0%	100.0%	100.0%	100.0%
AUD Sold		375,000	375,000	-	-	-
	Cumulative	1,500,000	1,875,000	1,875,000	1,875,000	1,875,000
	% AUD Sold	80.0%	100.0%	100.0%	100.0%	100.0%
HANDOVER SUMMARY						
Units Handed Over		-	-	5.00	5.00	5.00
	Cumulative Units Handed Over	-	-	5.00	10.00	15.00
	% Units Handed Over	-	-	20.0%	40.0%	60.0%
SqM Handed Over		-	-	100.00	100.00	100.00
	Cumulative	-	-	100.00	200.00	300.00
	% SqM Handed Over	-	-	20.0%	40.0%	60.0%
AUD Handed Over		-	-	375,000	375,000	375,000
	Cumulative	-	-	375,000	750,000	1,125,000
	% AUD Handed Over	-	-	20.0%	40.0%	60.0%

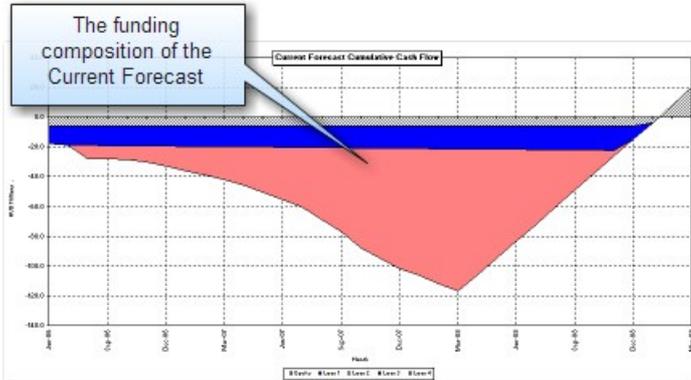
Sales Summary displays the stock that has be sold at pre-sale, or on completion

Handover Summary displays when the stock has been settled and ownership has been transferred to the purchaser

9.3 Cash Flow Charts

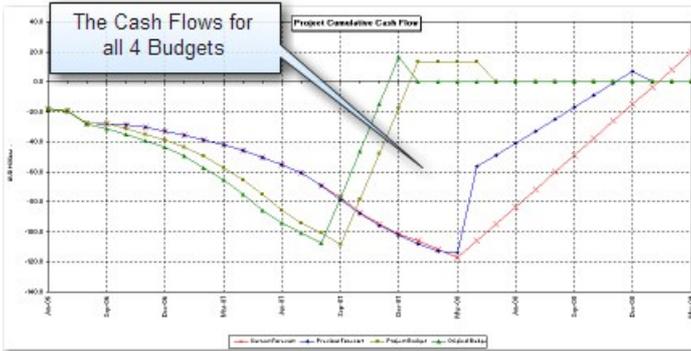
Current Forecast Cash Flow

Highlighting the position of equity and debt draw downs and repayments through the project life.



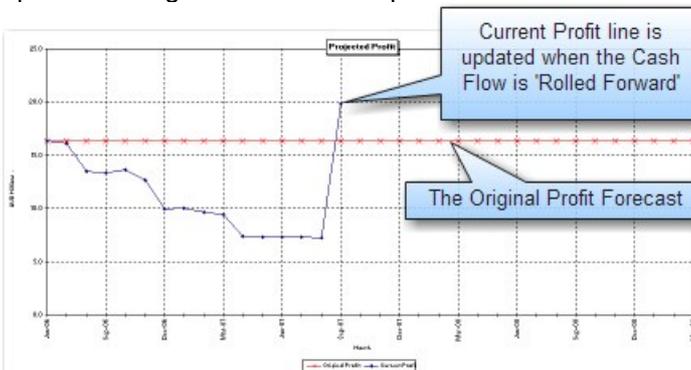
Project Cumulative Cash Flow

This chart depicts the Cumulative Net Cash Flow for each budget/forecast stored (e.g Original, Previous, etc) as well as the Current Forecast.

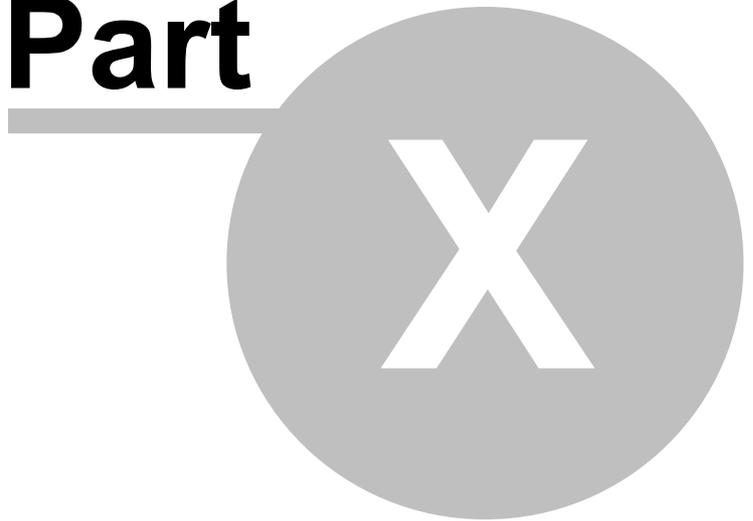


Projected Profit Report

This chart tracks the Current Forecasted profit against the profit line of the Original Budget. It is updated during the Roll Forward process.



Part



10 Financial Reporting

10.1 Revenue Recognition

REVENUE RECOGNITION CALCULATION					
Development Costs for WIP Calculation					
Land and Acquisition (WIP)	1,000,000	1,000,000	-	-	-
Professional Fees (WIP)	61,608	-	-	-	-
Construction Costs (inc Contingency) (WIP)	2,400,000	-	-	57,143	57,143
Statutory Fees (WIP)	-	-	-	-	-
Miscellaneous Costs 1 (WIP)	-	-	-	-	-
Miscellaneous Costs 2 (WIP)	-	-	-	-	-
Miscellaneous Costs 3 (WIP)	-	-	-	-	-
Project Contingency (Reserve) (WIP)	-	-	-	-	-
Land Holding Costs (Operating)	1,208,557	-	-	28,072	28,072
Pre-Sale Commissions (WIP)	-	-	-	-	-
Financing Costs (exc Fees) (Expensed)	15,543	-	-	12,059	-
Total Development Costs Incurred	4,683,709	1,000,000	-	97,275	85,215
Cumulative Total Development Costs Incurred		1,000,000	1,000,000	1,097,275	1,182,490
Other Costs					
Selling Costs (WIP)	-	-	-	-	-
Leasing Costs (Operating)	69,159	-	-	-	-
Interest (Expensed)	429,650	-	4,167	4,184	4,607
Funding Application and Line Fees (Expensed)	6,400	-	-	-	100
Total Costs	5,188,918	1,000,000	4,167	101,459	89,322
Cumulative Total Costs		1,000,000			
Directly Expensed through P&L	451,594	-	-	-	4,707
Operating Costs	69,159	-	-	-	-
Going through to WIP	4,668,165	4,668,165	-	-	85,215
Current Projected WIP	4,668,165	4,668,165	-	-	4,668,165
Accruals/Adjustments (Cumulative)					
Accruals	-	-	-	-	-
Retentions	-	-	-	50,000	-
Prepayments	-	-	-	-	-
Total Accruals/Adjustments	-	-	-	50,000	-

A breakdown of all costs, showing how each are treated i.e 'Expensed', an 'Operating Cost' and 'Works in Progress'

A summary of total costs, showing the total being 'Expensed', the total allocated to 'Operating Cost' and the total flowing through to 'Works in Progress'

Accruals and Adjustments are manually entered by the user on a cumulative basis.

Costs for WIP Calculation

This section summarises all the costs in the development and determines if they are treated as Work In Progress, Expensed or Operating Costs, as selected in the Estate Master Preferences.

Works in Progress, Expensed or Operating Cost

Land and Acquisition	WIP	Land Holding Costs	WIP
Professional Fees	WIP	Leasing Costs	WIP
Construction Costs	Expensed	Pre-Sale Commission	WIP

- **Expensed:** Directly expense the cost at the date it is incurred in the 'Cost of Sales' section of the Profit and Loss statement, impacting how the Project Margin is calculated.
- **WIP:** Add it to the Work in Progress. This defers the recognition of the cost in the Profit and Loss statement until such time that the defined threshold levels are reached. Until the thresholds are reached, these costs appear as a 'Current Asset' in the Balance Sheet called 'Work in Progress'.
- **Operating:** Define the cost as an Operating Cost. These are expensed to the Profit and Loss statement in the 'Operating Expenses' section. The difference between an Operating expense and a Cost of Sales expense (as defined above) is that an Operating expense is not included in the Project Margin calculation. It is however included in the overall Profit and Loss calculation.

If Land and Acquisition is included in the '% Completed' Revenue Recognition method through the Estate Master Preferences, then it will be summarised under the 'Development Costs for WIP Calculation heading, otherwise it will be under 'Other Costs'.

Revenue Recognition

Type: % Completed Include Land

% Sold Method: Based on % of Revenue Sold

Accrual/Adjustments

This section allows the user to manually input any Accruals, Retentions or Prepayments to adjust the '% Completed' to reflect actual work completed as opposed to cash expended.

Ultimately this will impact:

- Work in Progress, Account Payables and Prepayments in the Balance Sheet.
- Revenue Recognition will also be affected if using the '% Completed' basis.

Adjustments in this section will need to be entered on a cumulative basis and reversed out by adjusting the cumulative amounts entered. At the end of the project all numbers in the section should be zero.

10.2 Profit Realisation

% Complete Calculations

% COMPLETE CALCULATIONS	TOTAL				
Total Development Costs Post Adjustments (Includes Land)	3,733,709	50,000	50,000	147,275	232,490
Total Expected Development Costs	3,733,709	3,733,709	3,733,709	3,733,709	3,733,709
% Cumulative Development Costs Incurred		1.34%	1.34%	3.94%	6.23%
Total Expected Revenue		4,688,126	4,688,126	4,688,126	4,688,126
Total Expected Area Sold		301	301	301	301
Total Sold based on Revenue Sold		4,688,126	4,688,126	4,688,126	4,688,126

These are the calculations that are used when the '% Completed' Revenue Recognition method through the Estate Master Preferences is adopted. If the 'On Completion' method is adopted, then this section will be hidden.

- **Total Expected Development Costs:** These are the development costs as defined in the 'Revenue Recognition section.
- **Total Expected Revenue:** This is the sales revenue collected, as per the 'Handover Summary' on the Cash Flow sheet.
- **Total Expected Area Sold:** This is the area of all sales settled, as per the 'Handover Summary' on the Cash Flow sheet.
- **Total Sold based on Area / Revenue Sold:** This line will change depending on whether the user has selected the '% Sold Method' for Revenue Recognition purposes to be based on either Revenue or Area in the Estate Master Preferences.

Thresholds

PROFIT REALISATION	TOTAL	Threshold Inputs			
Revenue Collected Threshold					
Revenue Collection Threshold	30.00%				
Cumulative Cash Collected	4,261,933				
Collections as a % of Total Revenue		0.00%	0.00%	0.00%	0.00%
Threshold Achieved		FALSE	FALSE	FALSE	FALSE
% Sold Threshold					
% Sold based on % Revenue Sold	30.00%				
Threshold Achieved		0.00%	0.00%	12.25%	24.51%
		FALSE	FALSE	FALSE	FALSE
Construction Completion Threshold					
Total Cumulative Development Costs ex Interest	50.00%				
% Complete	3,733,709	50,000	50,000	147,275	232,490
Threshold Achieved		1.34%	1.34%	3.94%	6.23%
		FALSE	FALSE	FALSE	FALSE
Profit Realisation Thresholds OK		FALSE	FALSE	FALSE	FALSE
Profit Realisation Analysis					
% Sold based on % Revenue Sold		0.00%	0.00%	12.25%	24.51%
% Cumulative Development Costs Incurred		1.34%	1.34%	3.94%	6.23%
Profit Realised		0.00%	0.00%	0.00%	0.00%
Cumulative Profit Realised		0.00%	0.00%	0.00%	0.00%

Thresholds can be set to effectively delay the recognition of revenues until the project is substantially sold or under construction.

- If a **Revenue Collection Threshold** is utilised the model will delay the recognition of revenue until the specified % of revenue is collected.
- If a **% Sold Threshold** is utilised the model will delay the recognition of revenue until the specified % of sales have been achieved.
- If a **Construction Completion Threshold** is utilised the model will delay the recognition of revenue until the specified % of construction is completed.

10.3 Profit and Loss Statement

The Profit and Loss Statement (P&L) is a financial statement that summarises the revenues, costs and expenses incurred during a specific period of time. The P&L statement is also known as a "statement of profit and loss", an "income statement" or an "income and expense statement".

Both 'Revenue' and 'Cost of Sales' are treated in accordance with Preference settings set by the user.

PROFIT AND LOSS STATEMENT	TOTAL				
Revenue	4,462,148	3,167	3,177	2,863	56,589
Sales Revenue	4,247,846	-	-	-	-
Rental Income	97,045	-	-	-	-
Other Income	-	-	-	-	-
Interest Income	-	-	-	-	-
Interest on Surplus Cash	63,257	3,167	3,177	2,863	2,589
Profit on Sale of Fixed Assets	54,000	-	-	-	54,000
Cost of Sales		1,000	1,000	1,000	1,000
Development Costs (WIP)	4,713,257	-	-	-	-
Development Costs (Expensed)	-	-	-	-	-
Loss on Sale of Fixed Assets	-	-	-	-	-
Depreciation Expense	4,000	1,000	1,000	1,000	1,000
Margin		2,167	2,177	1,863	55,589
Operating Expenses		-	-	-	-
Profit / (Loss)	314,026	2,167	2,177	1,863	55,589

This line will expand to show the detail for which costs are being 'Expensed'

This line will expand to show the detail for which costs are 'Operating Expenses'

Fixed Assets

This section allows the user to manually add inputs to cater for items that are capitalised as 'Fixed Assets' (i.e. held and not sold on completion). All inputs are to be entered exclusive of GST/VAT/ Sales Tax. Fixed Assets appear on the Balance Sheet.

- **Additions:** Fixed Assets are added to model (at cost) when they are completed and are ready to be used. Amounts entered in the Tangible Fixed Assets 'Additions (Cost)' line will reduce the Work in Progress by the same amount and will also impact on the Revenue Recognition calculations.
- **Disposal:** If a fixed asset item is subsequently sold, the cost of the item sold needs to be input into the Tangible Fixed Assets 'Disposal (Cost)' line and the area of the item sold into the Tangible Fixed Assets 'Disposals (Area)' line. In addition, the 'Proceeds of Sale' need to be manually input into the respective line so the model can calculate the profit or loss on the sale of the fixed asset.
- **Depreciation :** 'Depreciation Expense' is manually entered (we suggest that that the user adds in a depreciation schedule through the use of a user inserted worksheet to assist with these calculations) and flows directly to the Profit and Loss statement as a non-cash item. In addition, the accumulated 'Depreciation Recovered' on an item sold needs to be manually inputted into the respective line so the model can calculate the profit or loss on the sale of the fixed asset.
- **Profit (Loss):** Proceeds of Sale of Fixed Asset *less* Disposal (Cost) *plus* Depreciation Recovered on Fixed Asset Disposal

Fixed Asset Example

In the below example:

- A Fixed Asset with an area of 50sqm and a cost of \$100,000 is added in Period 1.
- This is depreciated at \$1,000 per month.
- In Period 4, the Asset is sold for \$150,000

FIXED ASSETS						
Tangible Fixed Assets						
Additions (Cost)	100,000	100,000	-	-	-	-
Disposal (Cost)	100,000	-	-	-	-	100,000
Disposal (Area - SqM)	50	-	-	-	-	50
Depreciation Expense		1,000	1,000	1,000	1,000	1,000
Depreciation Recovered on Fixed Asset Disposal		-	-	-	-	4,000
Proceeds of Sale of Fixed Asset	150,000	-	-	-	-	150,000
Profit (Loss) of Sale of Fixed Asset	54,000	-	-	-	-	54,000

10.4 Corporate Tax

CORPORATE TAX STATEMENT		TOTAL				
Profit Before Tax & Depreciation	308,428	2,167	2,175	1,859	55,583	
Depreciation	-	-	-	-	-	
Profit Before Tax	308,428	2,167	2,175	1,859	55,583	
Tax Rate	30.00%					
Tax Liability	92,528	650	653	558	16,675	
Profit After Tax	215,900	1,517	1,523	1,301	38,908	

The model allows the user to calculate Corporate Tax, assumed to be paid on profits on an as realised basis (i.e. monthly). To calculate Corporate Tax, there are two inputs:

- **Corporate Tax Rate:** Enter in a single tax rate to calculate tax on profits after depreciation.

- **Depreciation:** In this line, the model defaults to the 'accounting' depreciation (as per the Profit and Loss statement). However if your 'tax' depreciation is different to your 'accounting' depreciation, the user can overwrite these amounts to estimate the tax.

Funding Tax through the Project Cash Flow

Any tax liability is calculated on the Financials sheet is carried through to the Project Cash Flow, allowing it to be funded by either Equity or a Debt facility, just like any other project cost.

Net Cash Flow (before Interest & Corporate Tax)	556,110	(85,215)	(85,215)	(85,215)
Cumulative Cash Flow		1,067,402	982,187	896,972
Corporate Tax	92,528	2,670	2,589	2,508
Net Cash Flow (before Interest & after Corporate Tax)	463,582	(87,886)	(87,804)	(87,723)
Cumulative Cash Flow		989,182	901,378	813,655

10.5 Cash Flow and IRR

CASH FLOW & IRR STATEMENT		TOTAL				
Project Cash Flow before Interest, Finance Costs and Tax		573,208	(50,000)	-	(84,009)	(85,215)
	IRR	11.70%				
Finance Costs		(17,098)	-	-	(13,265)	-
Interest Earned		60,769	-	3,167	3,175	2,859
Interest Paid		(305,470)	-	(4,167)	(4,184)	(4,201)
Finance Application and Line Fees		(6,200)	-	-	-	-
Project Cash Flow after Interest and before Tax		305,209	(50,000)	(1,000)	(98,284)	(86,558)
	IRR	6.17%				
Tax Calculation		(92,528)	-	(650)	(653)	(558)
Project Cash Flow after Interest and Tax		212,681	(50,000)	(1,650)	(98,936)	(87,115)
	IRR	4.32%				
Equity Cash Flow		365,919	(1,000,000)	-	-	-
	IRR	8.73%				

The Cash Flow and IRR Statement summarises the following cash flows, and calculates their respective IRR:

- Project Cash Flow before Interest, Finance Costs and Corporate Tax
- Project Cash Flow after Interest and before Corporate Tax
- Project Cash Flow after Interest and Corporate Tax
- Equity Cash Flow

10.6 Balance Sheet

The Balance Sheet is a financial statement that summarises a company's assets, liabilities and shareholders' equity at a specific point in time to give investors an idea as to what the company owns and owes, as well as the amount invested by the shareholders.

The balance sheet follows the following formula: Assets - Liabilities (called Net Assets) = Shareholders' Equity

BALANCE SHEET				
ASSETS				
Current Assets				
Cash and Bank	950,000	952,517	857,765	774,851
Accrued Income	-	-	-	-
Work In Progress	50,000	-	55,625	145,042
Prepayments, Deposits and Other Receivables	-	-	-	-
GST Receivable	-	-	-	-
Total Current Assets	1,000,000	952,517	913,390	919,893
Long Term Assets				
Tangible Fixed Assets - Cost (Owned Assets)	-	100,000	100,000	100,000
Less - Acc.Dep (Owned Assets)	-	(1,000)	(2,000)	(3,000)
Long Term Assets Total	-	99,000	98,000	97,000
TOTAL ASSETS	1,000,000	1,051,517	1,011,390	1,016,893
LIABILITIES				
Current Liabilities				
Accounts Payables	-	-	-	-
Deferred Income	-	-	-	-
Accrued Expenses	-	50,000	8,351	12,552
GST Payable	-	-	-	-
Total Current Liabilities	-	50,000	8,351	12,552
Long Term Liabilities				
Long Term Loans	-	-	-	-
Intercompany Loans	-	-	-	-
Total Long Term Liabilities	-	-	-	-
TOTAL LIABILITIES	-	50,000	8,351	12,552
NET ASSETS	1,000,000	1,001,517	1,003,039	1,004,341
SHAREHOLDERS' EQUITY				
Project Capital	1,000,000	1,000,000	1,000,000	1,000,000
Dividends	-	-	-	-
Retained Earnings (Accumulated Deficit)	-	-	-	-
P&L - Current Year	-	1,517	3,039	4,341
TOTAL SHAREHOLDERS' EQUITY	1,000,000	1,001,517	1,003,039	1,004,341
Check Balance	-	-	-	-

The user should always check that the Balance Sheet balances. The totals in this row should all be zero.

Shareholders' Equity

Depending on preference selected by the user for Project Equity Treatment in the Estate Master Preferences, the Shareholder's Equity section will appear in the Balance Sheet as one of the below:

- **Shareholders Equity (Project Capital):** Developer's equity contributions appear as 'Project Capital' in the 'Shareholders Equity' section of the Balance Sheet.

SHAREHOLDERS' EQUITY				
Project Capital		1,000,000	1,000,000	
Dividends		-	-	
Retained Earnings (Accumulated Deficit)		-	-	
P&L - Current Year		1,517	3,039	4,341
TOTAL SHAREHOLDERS' EQUITY		1,000,000	1,003,039	1,004,341

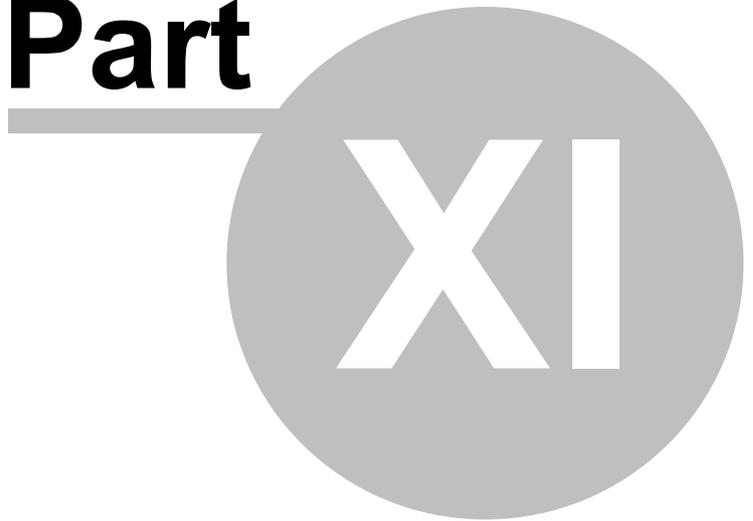
Developer's equity contributions appear here when treated as 'Project Capital'

- **Long Term Liabilities (Intercompany Loan):** If using this option, the Developer's equity contributions are treated as an Intercompany Loan and appear in the Balance Sheet under the 'Long Term Liabilities' section. If this option is selected, the user will also need to input in the Balance Sheet the paid up Share Capital of the company.

SHAREHOLDERS' EQUITY				
Share Capital		100	100	100
Dividends		-	-	-
Retained Earnings (Accumulated Deficit)		-	-	-
P&L - Current Year		-	1,517	4,341
TOTAL SHAREHOLDERS' EQUITY		100	1,617	5,681

Enter the companies authorised Share Capital here when Project Equity is treated as a long term liability.

Part



11 Risk Assessment

11.1 Sensitivity Analysis

The Sensitivity Analysis is a risk assessment mechanism and allows the user to examine the impact on development performance indicators resulting from changes in a series of input variables.

There are 3 Sensitivity Analysis features available in the Estate Master DM program:

1. Scenario Analysis
2. One-Way What-If Analysis
3. Two-Way What-If Analysis

Rules About Sensitivity Analysis in Estate Master DM	
The Sensitivity Analysis tool does not apply variations in the following areas:	
<ul style="list-style-type: none"> • Manual Overrides in the Cash Flow. • Historical Data. 	
Basically, only data that is generated by the 'Input Assumptions' and has not been manually overridden in the cash flow and is either in the current time period or in the future will be tested in the analysis.	

Scenario Analysis

On the 'Sensitivity' sheet, the 'Scenario Analysis' allow you to input variations to each of the variables listed on the table. The 'Variation' column in the 'Scenario Analysis' table affects the calculation cells in the cash flow. You can put any combination of variations and hit the F9 key to recalculate the workbook and see their impact on the various performance indicators. No function is required to be run as this alters the model directly.

Variable	Variation	Base + Variation	Performance Indicator *	Result
Land Acquisition Costs	0.0%	1,100,000	Development Profit	169,391
Construction Costs	5.0%	1,386,000	Development Margin	4.35%
Construction Period	0.0%	Months 2 to 19	Maximum Debt Exposure	1,928,449
End Sale Values	-5.0%	4,457,023	Date of Peak Exposure	Sep-2009
Capitalisation Rate	0.0%	8.00%	Breakeven Date of Cash Flow	Jan-2012
Sales Span Period †	0.0%	Months 35 to 36	Project NPV	(824,032)
Rental Levels	0.5%	105,525	Project IRR	6.87%
All Debt Interest Rates	0.0%	5.00%	Equity IRR	8.08%

Before commencing with further work, the values in the variations should be set back to zero. When you run the 'Sensitivity Analysis' function, the values in the 'Variation' column will return to zero automatically.

One-Way What-If Analysis

In the One-Way What-If Analysis table, put low, mid and high forecast variations for each of the variables. Using the tick boxes, select the variables you wish to test before running the sensitivity procedure.

Sensitivity to Changes in:	Enable	Warnings	Low	Mid	High	
Land Acquisition Costs	<input checked="" type="checkbox"/>		-5.0%	-3.0%	3.0%	5.0%
Construction Costs	<input checked="" type="checkbox"/>		-10.0%	-5.0%	5.0%	10.0%
Construction Period	<input checked="" type="checkbox"/>		-20.0%	-10.0%	10.0%	40.0%
End Sale Values	<input checked="" type="checkbox"/>		-5.0%	-3.0%	3.0%	5.0%
Capitalisation Rate	<input checked="" type="checkbox"/>		-0.5%	-0.2%	0.2%	0.5%
Sales Span Period	<input checked="" type="checkbox"/>		-30.0%	-20.0%	20.0%	30.0%
Rental Levels	<input checked="" type="checkbox"/>		-20.0%	-10.0%	10.0%	20.0%
All Debt Interest Rates	<input checked="" type="checkbox"/>		-2.0%	-1.0%	1.0%	3.0%
Developer's Discount Rate	<input checked="" type="checkbox"/>		18.0%	19.0%	20.0%	21.0%

Note that this table does not affect the cash flow - only the outputs on the Sensitivity Table, which is generated when the 'Sensitivity Analysis' function is run.

	Change %	Net Dev. Profit	NPV	Dev. Margin	Project IRR	Equity IRR
Base Case (No Variation)	0.0%	477,089	(391,926)	12.83%	11.83%	13.03%
Land Acquisition Costs	-5.0%	522,838	(348,234)	14.27%	12.61%	13.71%
	-3.0%	504,546	(365,711)	13.69%	12.29%	13.44%
	3.0%	446,466	(419,329)	11.87%	11.36%	12.41%
	5.0%	428,148	(436,803)	11.32%	11.06%	12.14%
Construction Costs	-10.0%	590,570	(313,907)	16.51%	13.43%	14.67%
	-5.0%	533,852	(352,891)	14.63%	12.63%	13.86%
	5.0%	420,300	(431,006)	11.09%	11.03%	12.18%
	10.0%	283,476	(470,124)	9.47%	10.24%	11.34%

Exceeding Time Periods During Sensitivity

If you put too high a variation for construction and/or sale span period you will get an error message just to the right of the input cells. This occurs where the variation causes the cash flow to exceed the maximum time periods (the maximum number for the purpose of sensitivity analysis). You will need to reduce the variation (high forecast percentage), select a longer rest period (eg quarters instead of months) or insert more time periods by using the 'Resize Model' function.

Two-Way What-If Analysis

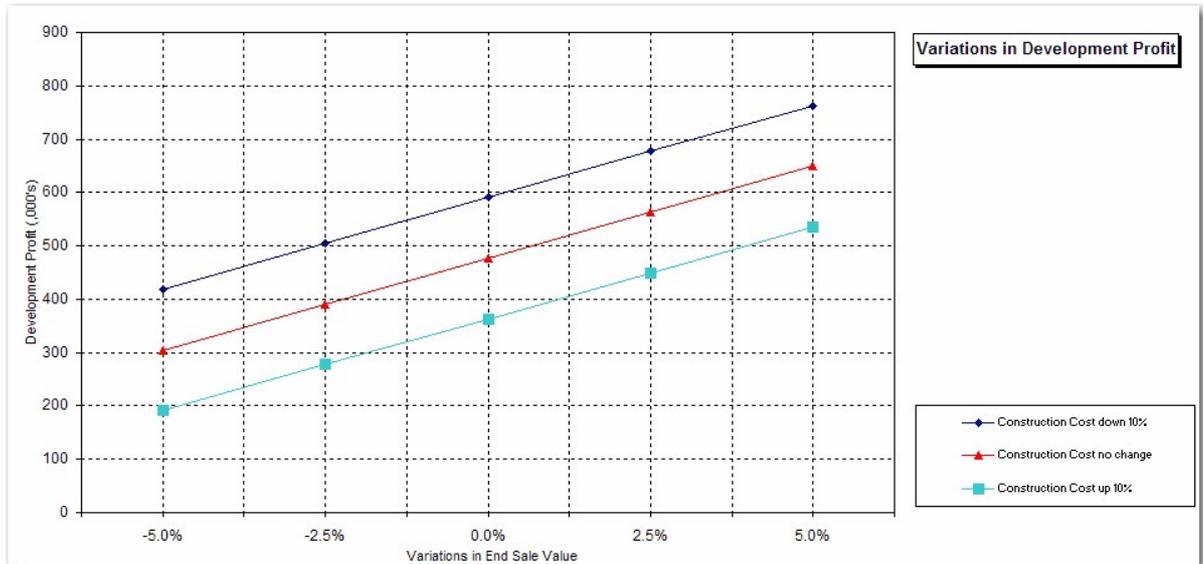
In the 'Two-Way What-if Analysis' section there are drop down boxes for setting parameters.

	CHART 1	CHART 2
Performance Indicator	Development Profit <input type="button" value="v"/>	Development Margin <input type="button" value="v"/>
Variable 1 (X-Axis)	End Sale Value <input type="button" value="v"/>	Construction Period <input type="button" value="v"/>
Variable 2	Construction Cost <input type="button" value="v"/>	End Sale Value <input type="button" value="v"/>

There are two charts each with three drop down boxes:

- **Performance Indicator:** Select either "Development Profit" or "Net Present Value" for Chart 1 and either "Project IRR", "Equity IRR" or "Development Margin" for Chart 2;
- **Variable 1:** Select either Construction Costs, End Sale Values, Construction Period, Selling Span Period, Rental Income, Debt Interest Rates, and Discount Rate (only relevant for Chart 1 if selecting net present value as your performance indicator); and
- **Variable 2:** Select either Construction Costs, End Sale Values or Rental Income.

These are translated into charts on the 'Sensitivity' sheet when the 'Sensitivity Analysis' function is run.



Running the Sensitivity Function

Once you have finished making all input entries, click the **Run Sensitivity** button on the 'Sensitivity' sheet or via the Estate Master Menu. The sensitivity function performs four functions:

1. It resets the values in the 'Variation' column of the 'Scenario Analysis' to zero.
2. It updates the One-Way What-If sensitivity table on the developer's and land owner's (in the case of a joint venture) 'Sensitivity' sheets;
3. It generates the Two-Way What-If charts on the developer's 'Sensitivity' sheet;
4. It resizes the time scale on the developer's and land owner's (in the case of a joint venture) cash flow chart to the life of the project; and

The length of the operation will be dependant on the memory and speed of your PC, and may take from 30 seconds to 5 minutes to complete. You can improve waiting time by keeping as much memory free and closing unnecessary applications.

Variations to Time

The sensitivity analysis varies the period/span variables by adjusting the timing of the cash flow.

Varying the time for the Construction Period has the following impact on the cash flow:

- **Construction Costs, Professional Fees, Statutory Contributions and Miscellaneous Costs:** Extends their starting period (exc Construction) and extends their span time periods.
- **Land Holding Costs:** Extends their span periods.
- **Sales and Rental Income:** Delays the starting date for settlements and the lease start for rentals.
- **Land Costs and Financing Costs:** No direct changes, except for any indirect impact on interest costs by varying debt exposure and funding requirements.

Varying the Sale Span Period only affects the span periods for pre-sale exchanges and settlements, but not the starting dates for each sale item.

Reports

The Sensitivity Report consists of two sections:

1. **One-Way What-If Analysis Table:** The sensitivity table shows the effects on Equity IRR, Project IRR, NPV, Profit and Development Margin to the high, mid and low variations (as selected in the Sensitivity settings towards the top of the sheet) for the various variables.
2. **Two-Way What-If Charts:** The two charts below the sensitivity table illustrate the sensitivity of the performance indicators to changes in the combinations of two variables as selected by the user in the relevant drop down boxes.



11.2 Monte Carlo (Probability) Analysis

The Probability Analysis provides a further tool for undertaking risk assessment and perhaps re-assessment of the hurdle rates.

Whilst the sensitivity testing provides a range of returns based on different scenarios it does not tell you the likelihood (or probability) of those returns or the effect of several scenarios occurring. The probability analysis overcomes this limitation by assigning probability profiles to the variables in the One-Way What-If table ('Sensitivity' sheet) and running multiple simulations to derive a probability range for the Development Margin and the IRR.

Running the Probability Function

To run the simulations, click on the [Run Monte Carlo Simulations](#) button on the 'Probability' sheet or from the Estate Master Menu. A message box appears asking you how many simulations you wish to run. The higher the number of simulations the more statistically significant the results will be. However the more simulations the longer it will take to generate the results. The length of the operation will also be dependant on the memory and speed of your PC.

When you run the analysis, the model assigns an approximate normal distribution curve for each of the variables in the 'Scenario Analysis' table (Construction Costs, End Sale Values, Construction Period, Selling Span Period, Rental Income, Debt Interest Rates, and Discount Rate). It assumes that there is a 10% chance the low forecast that you assigned in the One-Way What-If table will occur and that there is a 10% chance the high forecast will occur. You can scroll down the 'Probability' sheet to see the 'Probability Profiles of Variable Inputs'. In some cases the profiles will be skewed depending upon your inputs in the One-Way What-If table.

Probability Profile No. 2
Construction Costs

Prob(%)	Values
5%	-15%
10%	-10%
20%	-5%
30%	0%
20%	5%
10%	10%
5%	15%
0%	
TOTAL	100%

Normal Distribution
It assumes that there is a 10% chance the low forecast that you assigned in the One-Way What-If table will occur and that there is a 10% chance the high forecast will occur

You can change the low and high forecasts in the One-Way What-If table on the 'Sensitivity' sheet before running the Probability Analysis. Alternatively, you can assign your own probability profile to each of the risk variables.

Probability Profile No. 2
Construction Costs

Prob(%)	Values
3%	-15%
5%	-10%
10%	-5%
35%	0%
30%	5%
12%	10%
5%	15%
0%	
TOTAL	100%

Custom Distribution
The Probability Profile has been customised so that there is a higher chance (12%) that the higher forecast will be achieved than the lower forecast (5%)

After the simulations are run you can scroll down to view the statistics and charts of the probability distribution of the Development Margin and the IRR. Note that in many cases the average Development Margin and IRR levels may be different from the development margin and IRR results on the 'Summary' Sheet.

Please note that despite its more sophisticated methodology there are limitations with the probability analysis. Firstly there is the limitation with the assigning of the probability profiles to the variables. Secondly the methodology assumes that the variables are totally independent.

Advanced Probability Users

The program provides an additional probability profile for advance users of Excel. Here the user can link input cells to each other and to the random value (MyProb) of the table in the 'Summary of Probability Variables'. Having done that you will need to provide a most likely estimate for the variable and assign a probability profile to the variable in the tables in the 'Probability Profile of Variable Inputs'. Before running the simulator you can elect to select which variables to set the random generator to.

1. Go to the 'Summary of Probability Variables' table. This will show a table for all the variables.
2. In the last row of the table it will have an item marked 'For Advanced Excel Users'. It will consist of:
 - **Profile Name:** Type in the description of the custom variable you want to add in the Probability function.
 - **Most Likely Estimate:** This allows you to enter a specific % variation, rather than randomly select a % in a specified range.
 - **Random Generator:** This allows you to select if you want to apply the random generator to the variable, and thus include it in the analysis. If the variable is not applicable or is assumed to be fixed, the check-box for that variable should be deselected.
 - **Random Value:** This is the random % variation that will be applied to the variable. It is a fixed field that is dependant on the 'Probability Profile' that is set for a variable. The name for this cell is **MyProb**

Profile	Profile Name	100%?	Random Generator		Random Value
1	Land Acquisition Costs	OK	<input checked="" type="checkbox"/>	ON	2.5%
2	Construction Costs	OK	<input checked="" type="checkbox"/>	ON	-5.0%
3	End Sale Values	OK	<input checked="" type="checkbox"/>	ON	0.0%
4	Construction Period	OK	<input checked="" type="checkbox"/>	ON	-10.0%
5	Sales Span Period	OK	<input type="checkbox"/>	ON	15.0%
6	Capitalisation Rate	OK	<input type="checkbox"/>	ON	-0.3%
7	Rental Income	OK	<input type="checkbox"/>	ON	10.0%
8	All Debt Interest Rates	OK	<input type="checkbox"/>	ON	-3.0%
9	For Advanced Excel Users	OK	<input type="checkbox"/>	ON	0.0%

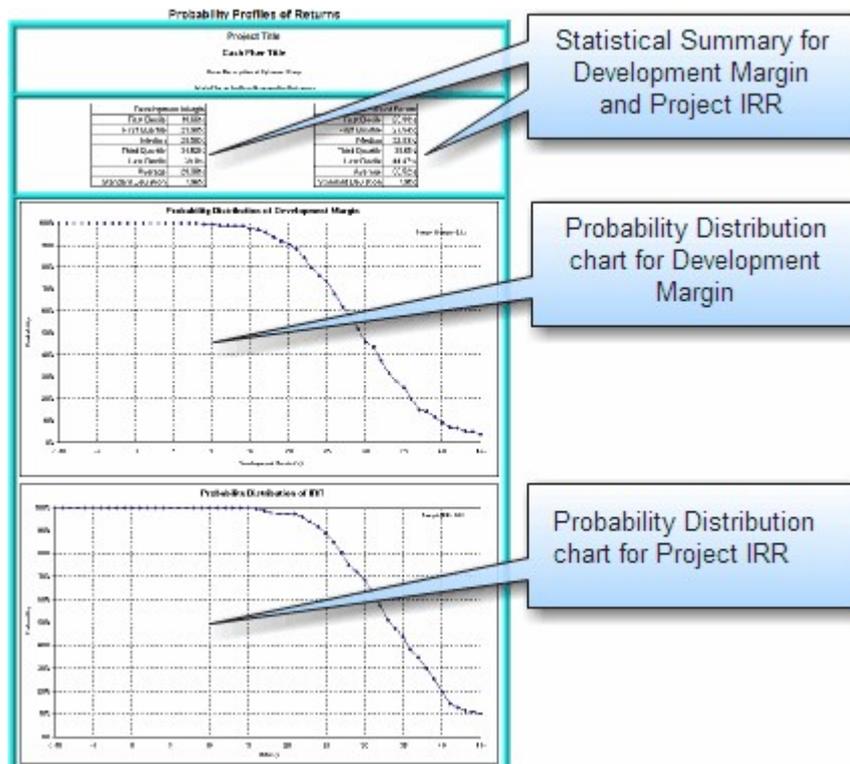
MyProb

3. Go to the actual input variable that you want to include in the analysis.
4. If the input variable has been initially entered as a number (rather than a formula), then you will have to turn it into a formula to include the random variable value. For Example: If you have an amount of 1,000,000 entered in the Construction Cost section for a particular input, you would edit the cell so it would read: =1000000*(1+MyProb)
5. This shows that the 1,000,000 input would vary according to the random value being applied. So if in one probability scenario, -5% was the Random Value for that variable, then by editing the cell to include the formula as above, then it would affectively reduce the 1,000,000 by 5% for that scenario.
6. Once the input cell is linked to the Random Value, you can then edit the probability profile for that variable. Each variable has its own probability profile and includes the following fields:
 - **Prob(%)**: This is the probability of the certain % variation being applied (indicated by the 'Values' column) to that variable when it runs a simulation.
 - **Values**: This is the Random Value that is being applied to the variable. The probability of this % value being applied is based on the first column (Prob(%)).
7. When amending the probability profiles, you must ensure that the % in the Prob(%) total to 100.
8. Once the profiles have been set, scroll down to the 'Run Monte Carlo Simulations' button, and click it and it will perform the probability analysis function with your custom variable included in the analysis.

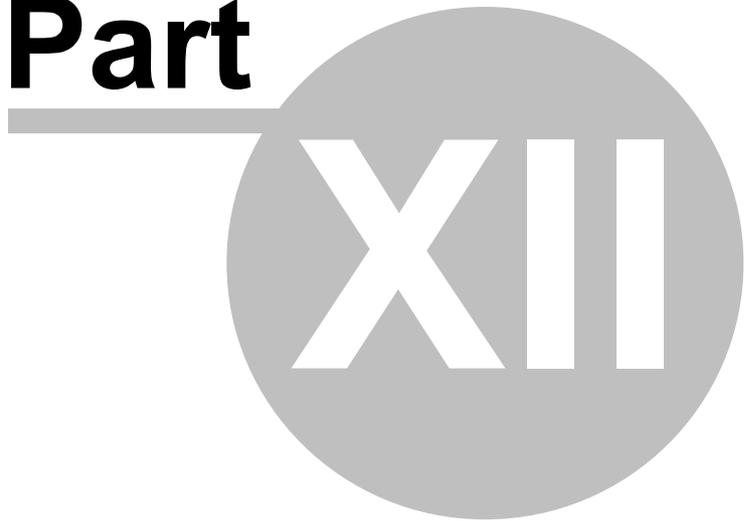
Reports

The Probability Report consists of three sections:

1. **Statistics Tables:** For both the Development Margin and Project IRR, the following is summarised:
 - **First Decile:** This is the result where the lowest 10% of data in the simulation results gathered is cut-off. Also known as the the 10th percentile.
 - **First Quartile:** This is the result where the lowest 25% of data in the simulation results gathered is cut-off.
 - **Median:** The median is the value that has just as many values above it as below it. If there are an even number of values, the median is the average of the two middle values. The median is a measure of central tendency. The median can also be defined as the 50th percentile.
 - **Third Quartile:** This is the result where the lowest 75% of data in the simulation results gathered is cut-off.
 - **Last Decile:** This is the result where the lowest 90% of data in the simulation results gathered is cut-off. Also known as the the 90th percentile.
 - **Average:** This is quite simply the average of the probability distribution results.
 - **Standard Deviation:** This is a measure of the variability or dispersion of the probability distribution. A low standard deviation indicates that the data points tend to be very close to the same value (the mean), while high standard deviation indicates that the data are “spread out” over a large range of values.
2. **Probability Distribution for Development Margin:** This shows the probability of achieving a certain Development Margin, based on the results from the simulations performed.
3. **Probability Distribution for Project IRR:** This shows the probability of achieving a certain Project IRR, based on the results from the simulations performed.



Part

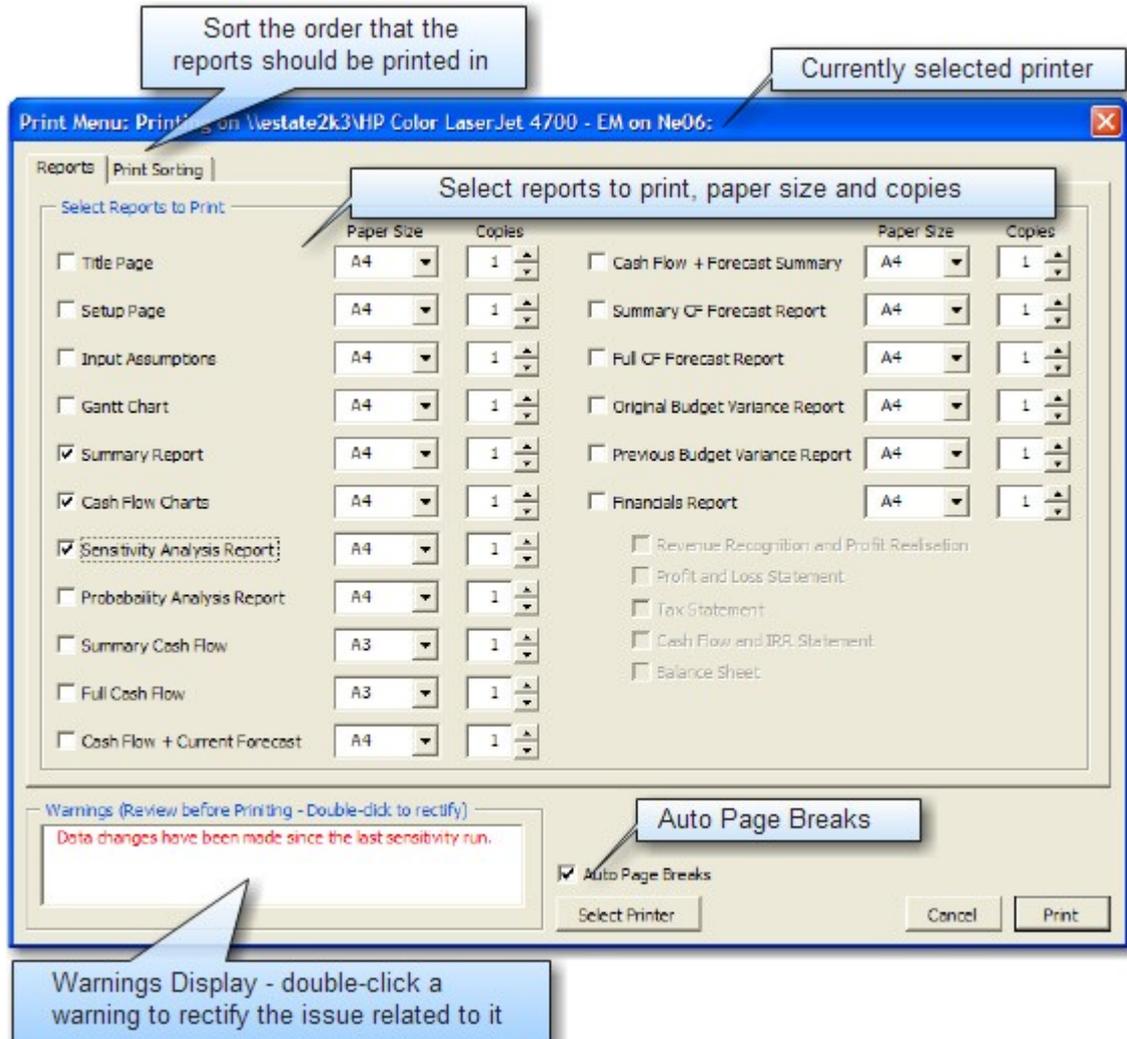


XII

12 Printing Reports

There are two methods to print reports in the Estate Master DM program:

1. Use the 'Print Sheet' buttons on the individual sheets,
2. Click on  or 'Print Report Options' on the Estate Master Menu. That will load the following menu.



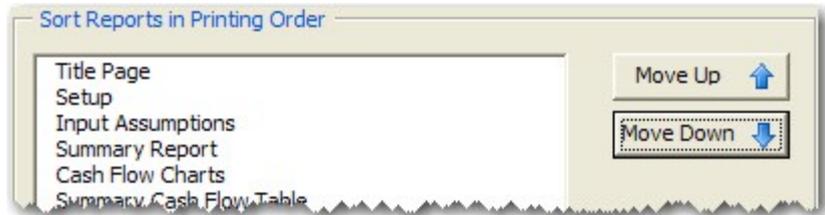
Print Menu Features

Select Reports to Print

Select the reports that you wish to print, the paper size and the number of copies, and then click 'Print'.

Print Sorting

Using the 'Move Up/Down' buttons, the user can sort the printing order of the selected reports.



Warnings Display

A warning may appear if it relates to data that needs to be updated on any of the selected reports. The program will provide a warning in the following circumstances:

- Input changes have been done since the last sensitivity run.
- Variations in the Scenario Analysis are affecting the cash flow.
- The cash flow exceeds the maximum time periods or if the variations in the sensitivity test will extend the cash flow beyond the maximum time periods.
- The current set of inputs has not been stored and that the 'Consolidate' sheet is not up to date.

To rectify any of the issues related to the warning, just double-click the warning.

Auto Page Breaks

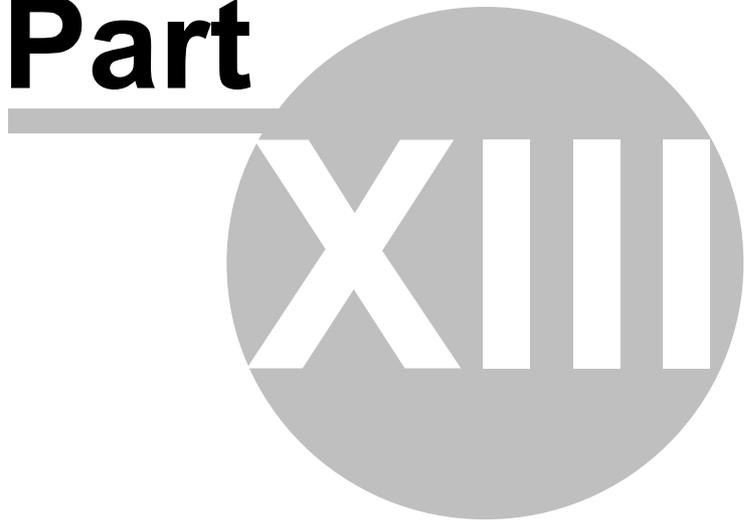
Auto Page Breaks can be set to apply page breaks at the start of certain cash flow sections so they start on a new page rather than have a continuous flow. Using Auto Page Breaks will provide neater report layouts, but may print out on more pages. If selected, they will be applied to the following reports:

- Input Assumptions
- Full Cash Flow reports (eg. Full Cash Flow, Cash Flow + Current Forecast, Full CF Forecast Report, etc)
- Gantt Chart

Conducting a Check Before Printing

There is numerous output report sheets in the Estate Master DM program that provide you with the performance indicators upon which the project's feasibility is assessed. You should do a reality check of these to make sure that there are no errors. For example, in the cash flow make sure the selling period follows the construction period, which follows acquisition. Check the graphs to make sure that they look reasonable and make sure there are no numbers in the cash flow or summary table, which appear to be unrealistic or wrong. If there are obvious errors, amend them in the inputs sheet and re-run the sensitivity analysis.

Part



13 Using the Estate Master Enterprise Database

13.1 Introduction to the Enterprise Database

The Estate Master Enterprise Database is a central data management tool that allows the user to archive development cash flows created in the Estate Master DF (Development Feasibility) and DM (Development Management) software.

It is available to all users of Estate Master DF and DM version 3.xx and above.

When using it in conjunction with Estate Master CC (Corporate Consolidation), it allows users to generate consolidate or comparison reports for selected cash flows, projects or portfolios to calculate forecasted and actual investment returns including, development profit, internal rate of return and net present value.

The Estate Master Enterprise Database can be used to:

- Archive all input and cash flow data from Estate Master DF and DM files (ver 3.1 or later);
- Generate comparison summary and cash flow reports for an unlimited number of development options (when used with EM CC).
- Generate consolidated summary and cash flow reports for an unlimited number of development stages (when used with EM CC).

13.2 Preparing Data for Exporting

The Estate Master Enterprise Database is a powerful data repository and a robust framework for high level reporting. It is therefore recommended that the data that is exported to it is accurate and meaningful.

Before exporting your DF or DM project into the Enterprise Database, please ensure that the following key areas are set:

Intro Sheet

1. Project Introduction

This is information that will be used in the Enterprise Database to identify your Project, please insure it is completed. The 'Project Number' and 'Project Title' are distinctive: This will be the most unique identifier of this Project that the cash flow belongs to. Any cash flows with the same Project Number and Project Name will grouped together in the Enterprise Database.

ESTATE MASTER Project Introduction			
Project Title	Burnwood Estates		
Address	1060 West Addison		
City/Suburb	Jannali	Zip/Post Code	226
State/County	NSW	Country	Australia
Account Code	255-060	Project Number	J1200
Prepared By	Bill Hill	Developer	Mike White
Prepared For	Phil Gill	Land Owner	ABC Pty Ltd

Input/Setup Sheets

1. Options/Stages (DF Only)

In DF, you can only export cash flows that have been stored as Options/Stages. You will note, DF will not allow you to store any cash flows as Options/Stages if they have the same Cash Flow Title in the Input/Setup Sheet. The Cash Flow Title is what distinguishes the cash flows within the same project, so please ensure that this is unique compared to other cash flows (e.g. options, stages, etc) in that project.

Preliminary		
Cash Flow Title	Burnwood Estate Stage	
Date of First Period:	Jan-2007	
Cash Flow Rest Period:	Monthly	
Enter Project Size (a)	150.0	Apartments
Enter Project Size (b)	20,000.0	GFA (sqm)
Enter Site Area	10,000.0	SqM

2. 'Type' and 'Status' Fields

The Type and Status fields will also be referenced in the Enterprise Database and used as search filters, so please take note of your choices and update them accordingly.



3. Revenue Data

For more feature-rich and detailed reporting, it is advised that revenue data is entered in detail and categorised using the 'Land Use Codes'.

Sales Revenue to be entered Inclusive of GST											
Code	Description	No. Units	Total Area SqKm	Current Sale Price	Settlements				GST Included	Land Use Code	Sale Rate
					Month Start	Month Span	Date Start	Date Finish			
9001		-	-	-	0	-	-	-	Y	-	Per Unit
9002	Sale of Units	1.00	-	10,000,000.00	24	12	Jan-09	Dec-09	Y	RS1	Per Unit
9003		-	-	-	0	-	-	-	Y	-	Per Unit

Easier data entry, but lacks detail !

Sales Revenue to be entered Inclusive of GST											
Code	Description	No. Units	Total Area SqM	Current Sale Price	Settlements				GST Included	Land Use Code	Sale Rate
					Month Start	Month Span	Date Start	Date Finish			
9001		-	-	-	0	-	-	-	Y	-	Per Unit
9002	1 Bedroom Units	3.00	195.00	515,000.00	24	12	Jan-09	Dec-09	Y	RS1	Per Unit
9003	2 Bedroom Units	7.00	665.00	715,000.00	24	12	Jan-09	Dec-09	Y	RS2	Per Unit
9004	3 Bedroom Units	3.00	450.00	1,150,000.00	24	12	Jan-09	Dec-09	Y	RS3	Per Unit
9005		-	-	-	0	-	-	-	Y	-	Per Unit

Recommended Option: More input detail leads to more meaningful and effective reporting.

13.3 Exporting to the Database

To export all the input data in your Estate Master DM file to the Enterprise Database, follow these steps:

1. Ensure that a Project Title and Project Number is entered in the Intro sheet of the DF or DM file.

ESTATE MASTER Project Introduction			
Project Title	Project Title		
Address	Address		
City/Suburb	City/Suburb	Zip/Post Code	Zip/Post Code
State/County	State/County	Country	Country
Account Code	Account Code	Project Number	P100000
Prepared By	Report Prepared By	Developer	Enter Developer Name
Prepared For	Report Prepared For	Land Owner	Enter Land Owner Name

2. Either through the Estate Master Menu or the Toolbar, click on the 'Export to Enterprise Database' button  Export to Database .

3. If the database configuration file (EMDB.ini) is not found on the system (and hence a connection to the Enterprise Database cannot be established), then the following error message will appear. It will prompt the user to run the Enterprise Database Management Utility to assist in setting up a connection. Please refer to the Enterprise Database Operations Manual for more information about configuration.



4. Once the connection is successful, an Export Wizard will appear.

Step 1 - Project Allocation

1. Using the Project Name and Project Number on the Intro sheet of the DM file, it will attempt to find any records of that Project Name or Number in the database. If the project is already in the database, it will skip Step 2 and continue to Step 3. Otherwise, the following messages may appear on the wizard:

- **Project Number and Name Doesn't Exist**

 Project Number 'P100000' and Project Name 'Project Title' do not exist in the database. Add a new project or append cash flow(s) to an existing project.

- **There is a mismatch between the details on the file and in the database**

 The Project Name 'Title' in DM does not match the Project Name in the database for Project Number 'C06069'.

2. If any of these messages appear, two options are available to the user:

- **Add New Project to Database:** If this option is selected, by default, it will use the details on the Intro sheet of the DM file as the Project Number and Name. The user can edit this if necessary directly in the wizard, and the Intro sheet will be automatically updated.

Add new project to database Append to existing project

Project Number:

Project Name:

- **Append to Existing Project:** If this option is chosen, the Project Number and Name fields are disabled, and the user is required to select a project that is already in the database. Once selected, the Intro sheet will be automatically updated.

Add new project to database Append to existing project

Project Number:

Project Name:

Database Projects

Project Number	Project Name
C06068 Mid Case	Cockle Creek Masterplan Area A (No BGR) Mid Case
P00000	Cockle Creek Masterplan Area A with BGR High Case
C06069	Kurnell Land Fill B10

Step 2 - Confirm Export Details

1. If the project is already in the database, it will go then the following messages may appear. The user has the ability to change the project the cash flow is being exported to if required. It will also inform the user if this is a new cash flow being exported, or if the cash flow already exists in the database.

 There are new cash flow(s) being exported. Please check.

Project Details _____

Project Number: - c06069

 Project Name: - Kurnell Land Fill B10

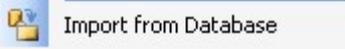
 Cash flow(s) being exported match cash flow(s) in the database.

Step 3 - Export Data

1. Once satisfied with the details, click 'Export' to begin the data transfer process.

13.4 Importing from the Database

To import input data in your Estate Master DM file from the Enterprise Database, follow these steps:

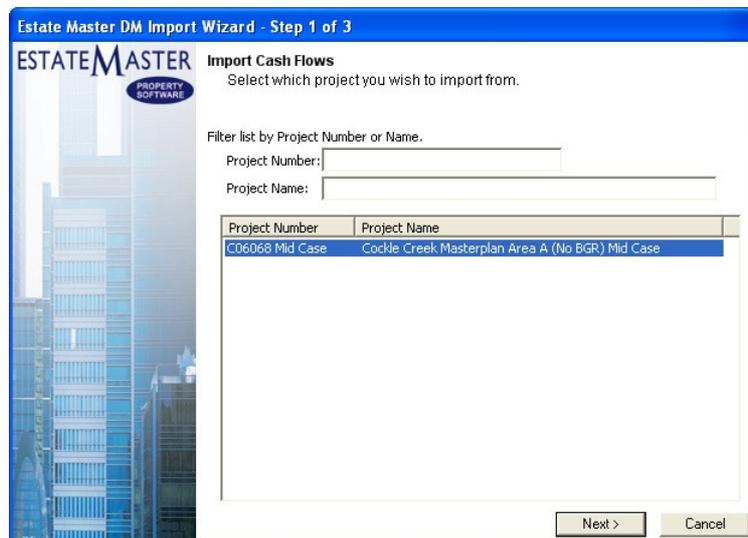
1. Either through the Estate Master Menu or the Toolbar, click on the 'Import from Enterprise Database' button  .
2. If the database configuration file (EMDB.ini) is not found on the system (and hence a connection to the Enterprise Database cannot be established), then the following error message will appear. It will prompt the user to run the Enterprise Database Management Utility to assist in setting up a connection. Please refer to the Enterprise Database Operations Manual for more information about configuration.



3. Once the connection is successful, an Import Wizard will appear.

Step 1 - Select Project

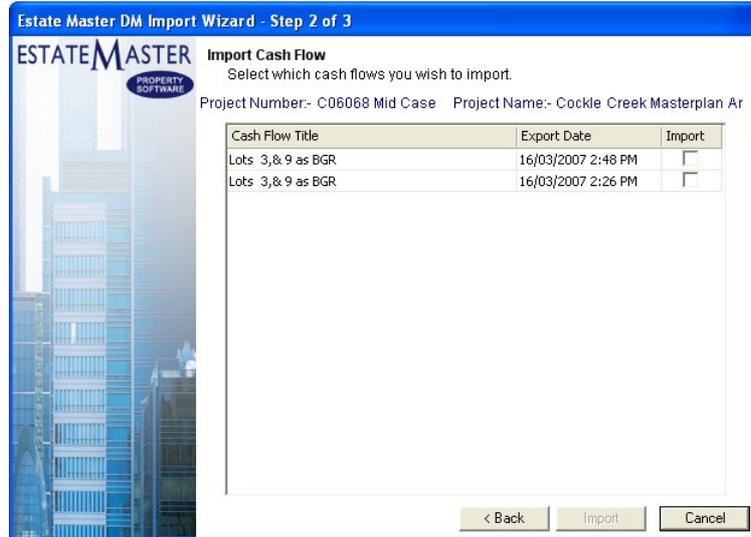
1. The first step will display a list of the Projects that exist in the Enterprise Database. If there is an extensive list, you can filter it either by Project Number or Name.



2. Select the appropriate project and click on 'Next'.

Step 2 - Select Cashlow

1. The next step will display all the cash flows that exist in the selected Project in the database. You can sort the list by clicking on the column headers.



2. In the 'Import' column, select the cash flows you wish to import. There is a maximum of 1 cash flows you can import into a DM file from the database.

Step 3 - Import

1. Once the Options/Stages have been set, click on 'Import' to begin the file transfer process.

13.5 Exporting when Setting Budgets

When setting the Original, Project or Previous Budgets in a DM model, the user may be prompted each time to also store the budget into the Enterprise Database at that point in time.



If the user decides to export and clicks 'Yes', then data export wizard will appear, and once all data is exported into the database, the cash flow will be mark it accordingly in the database with the budget type (ie Previous Budget, Original Budget, etc).

If the user clicks 'No', then if they ever export to the Enterprise Database manually through the Estate Master Menu or Toolbar, then the cash flow will be marked as 'Current Budget' in the cash flow.

To select whether you wish this prompt always appears when setting budgets or not, go to the Estate Master Preferences in the General tab.

Part



14 Troubleshooting

14.1 Macros are Disabled

A macro is a series of commands and instructions that are grouped together as a single command to accomplish a task automatically. Estate Master uses these in all of its functions such as Sensitivity Analysis, Probability Analysis, Printing, etc. If a warning appears when you open the file or when you try and run a macro function in the program, stating that 'Macros are Disabled', you will have to change the macro security setting of Excel to 'Medium' by clicking on Tools - Macro - Security and reopen the program.

It is recommended that you 'Always trust macros from this source' and/or 'Enable Macros' if asked, otherwise the functions in the model will not operate.

14.2 Maximum Cash Flow Periods

For every payment and revenue item it is necessary to put a start date and span period else the program will not add the payment to the cash flow. The start date must be a number between zero (0) (which represents the first or current period) and the maximum time periods as shown on the bottom of the 'Setup' sheet. The span period must be one (1) or more.

The start and span numbers must not add up to more than the maximum time periods. If you exceed the maximum time periods a warning will be displayed.

If you find that the number of time periods are not enough for the project, re-examine the interval period nominated and adjust it to a greater interval period eg from months to quarters or insert more time periods by using the 'Resize Model' function.

If you put too high variation for construction and/or sale span period in the sensitivity input table you will get an error message just to the right of the input cells. This occurs where the variation causes the cash flow to exceed the maximum number for the purpose of sensitivity analysis (15 more time periods than the cash flow depicts). You will need to either reduce the variation (high forecast percentage) or else select a longer interval period (eg quarters instead of months).

14.3 Entering the Correct Data

If you find that once all data has been entered and calculated, the performance indicators in the financial summary are returning a #VALUE or #NUM value. The reasons for this could be either of the following:

1. Incorrect data entered in the input cells. There is a safeguard built into the program against entering text in a cell that requires a numerical entry. If this is the case the cell will return 'Error Input' in red font or the cell will have a red background. The contents of the cell should be examined and edited appropriately.
2. The estimate of IRR in the 'Hurdle Rates' section of the 'Setup' sheet may be too far off and should be adjusted to a rate closer to the expected IRR.

14.4 Cut & Move Commands

Do not use the Cut or Move commands, as this will corrupt the formulae in the model. If you do cut or move cells, they will lose their white background and turn red, generally as a result of this #REF! values will appear in the financial summary sheet.

If this happens you must immediately 'Undo' before anything else using the Excel - Edit - Undo command - or click on the Undo button in the toolbar.

If you can't use the UNDO feature it is recommended that you:

1. Save the file under a different file name;

2. Print a copy of the inputs for record;
3. Open an earlier saved model without the reference errors; and
4. Re-enter all inputs into this model.

If you do not have an earlier saved file without reference errors it is recommended that you open the template and enter the information into a fresh model. It may be necessary to reinstall the template file if a user has corrupted the template file (i.e. it also has reference errors in it).

Copy and Fill Down commands are safe to use. Do not use Fill Right since different columns have different format types.

14.5 Importing Data from Previous Versions

After installing new versions of the software, it is recommended that any job files that were created in previous versions of the software be transferred to the new version.

1. Ensure the Microsoft Excel program is closed.
2. Open the Estate Master template file from the Programs list in the Start menu.
3. Once loaded, check the version numbers on the 'Intro' sheet to see if they are the latest versions.
4. If the Engine Version hasn't updated, you have not uninstalled the previous version and installed the new version correctly.
5. If the Sheet Versions hasn't updated, you did not open the new master file.
6. If both version numbers do not match, try installing the new version again.
7. Once the version has been verified, you are now ready to import data from previous versions.

Using the Enterprise Database Import function

1. If you have used the Enterprise Database software to store your previous DM cash flows, then use the Import function to import data to your new DM template file.
2. If you are not a Enterprise Database user, you can use the 'Import From Previous Version' function (below).

Using the Automatic Import from Previous Version Feature

1. Open the latest master file that has the above version numbers and go to the 'Estate Master' menu.
2. Go to 'Technical Support and Updates' and select 'Import Data from Previous Version'.
3. The program will then prompt you to select the working file created in the previous version and it will import the relevant data from it into the new master file.
4. Follow the prompts to complete the process and take note of any warnings or messages.
5. If a message appears claiming that the file is not compatible for importing, you must manually import data (below).

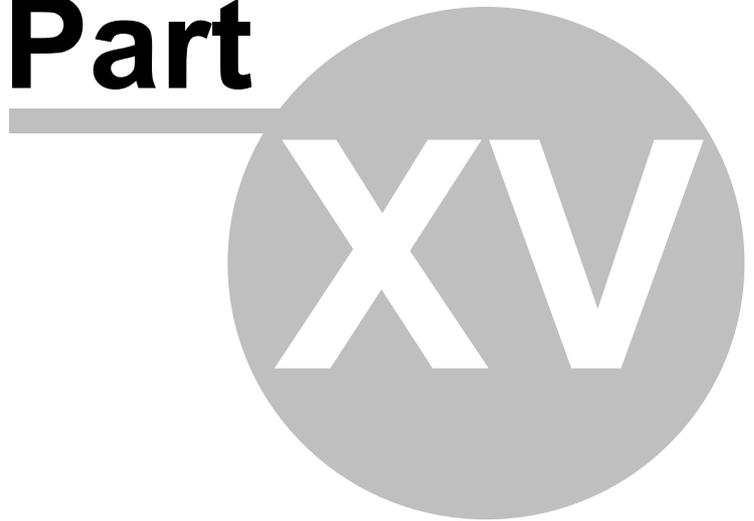
Manually Importing Data

1. Open the new master file and any job file that was created in previous versions of the software.
2. While having both files opened (new version and old version) you can manually copy inputs from the old version and paste them into the new version (using Paste Special-Formulas only). It is recommended to set the input preferences and resizing of the model before transferring

the data across.

3. Remember that you may need to transfer data from the following sheets: Setup, Cash Flow (manual equity injections, principal repayments, rate interest variations) and any user-inserted worksheets.
4. Once all the data for one file is transferred, save it under a new file name and rename the old file to avoid confusion (eg. Project - OLD.xls).
5. Complete this process for all existing working files. Once it is satisfied that all data has been successfully transferred, it is recommended that you delete/archive any old files.

Part



15 Licence Agreement

1. Acceptance of Terms

- 1.1 Permission to use this Software is conditional upon you reading and accepting all the terms of this licence agreement. By clicking "I Accept", you accept all of the terms. If you do not wish to accept the terms, you must not click "I Accept" and you may not use the Software.
- 1.2 If you are using the Software on behalf of a company or an organisation, in clicking the "I Accept" button during installation you warrant that you are authorised by the company or organisation to agree the terms on its behalf.

2. Licence

- 2.1 We grant you a non-exclusive, non-transferable licence to use:
 - (a) the Software, on equipment owned and used by you at the Site:
 - (i) on the number of computers equal to the number of User/PC Licences that you have purchased; or
 - (ii) by the number of concurrent users equal to the number of CAS Licences that you have purchased; and
 - (b) the Documentation,on the terms of this agreement.
- 2.2 You acknowledge that there is no transfer to you of any right in the Software or the Documentation other than the licence granted in clause 2.1.

3. Your obligations

- 3.1 You must not and must not allow any other person to:
 - (a) except as expressly permitted by law, copy, alter, modify, tamper with, decompile, reverse engineer or attempt to reverse engineer, the Software, or use the Software to develop other software;
 - (b) copy the Documentation;
 - (c) permit the Software to be combined with or incorporated in other software; or
 - (d) use the Software to supply hosting services or bureau services to any person.
- 3.2 You must:
 - (a) use the Software only in accordance with the Documentation;
 - (b) ensure that the Software is used only by people trained to use it;
 - (c) establish and carry out reasonable backup procedures for the Software;
 - (d) comply with our support and operating procedures current from time to time; and
 - (e) comply with all reasonable directions issued by us regarding use of the Software.
- 3.3 You must keep records in sufficient detail to enable compliance with your obligations under this agreement to be verified. We, or our auditors, after giving you at least 48 hours notice may examine your records during your usual business hours to verify that you have complied, and are complying, with those obligations.
- 3.4 You indemnify us and our officers, employees and agents from and against any loss (including reasonable legal costs and expenses) or liability reasonably incurred or suffered by any of those indemnified where such loss or liability was caused by:
 - (a) your breach of your obligations under this agreement; or
 - (b) your wilful, unlawful or negligent act or omission.

4. Evaluation Period and Activation

- 4.1 You may use the Software for the purpose of evaluation for a period of up to 30 days from the date of installation of the Software. After the evaluation period has expired, you must either:
 - (a) input an activation key and register the Software in accordance with the installation and registration instructions provided with the Software; or
 - (b) stop using the Software and uninstall it so that it is deleted from all computer equipment.
- 4.2 If, after evaluation, the Software is not registered in accordance with clause 4.1(a),
 - (a) the licence granted in clause 2.1 terminates; and
 - (b) the Software will disable itself and become unusable.
- 4.3 The Software is matched to the computer equipment on which the Software is first activated for use and the Software will disable itself and become unusable if you attempt to use it on another computer. However, on request we will issue a further activation key to you to allow you to install the Software on another computer, provided that you satisfy us that you have uninstalled the Software from the original computer.

5. Documentation

You acknowledge that the Documentation contains sufficient information for the adequate use of the Software, except to the extent we have notified you of any omission or deficiency or of any variation that we consider necessary for the proper use of the Software.

6. Initial and Ongoing Fees

- 6.1** You must pay the Licence Fee and the Support Fee for the first 12 months in accordance with our standard payment requirements before we will issue an activation key for the Software.
- 6.2** If you dispute any invoice, you must pay any undisputed amount and must notify us in writing within seven days after receipt of the invoice of the reason for the dispute. The dispute will then be dealt with under clause 16. If the outcome of the dispute resolution process is that some or all of the disputed amount should properly have been paid, you must pay that amount together with interest at the rate prescribed from time to time for unpaid judgments of the Supreme Court of NSW, calculated from the original due date.
- 6.3** All fees, charges and other amounts referred to in this agreement are exclusive of Government Charges.
- 6.4** If any supply under this agreement is a taxable supply or results in Government Charges, the party making the supply:
- (a) may, in addition to any payment for the supply, recover the amount of the Government Charges applicable to the supply; and
 - (b) must issue a tax invoice to the recipient within 28 days after making the taxable supply.

7. Security

You are responsible for the use, supervision, management and control of the Software and Documentation. You must ensure that the Software is protected at all times from misuse or any form of unauthorised use.

8. Support Services, Upgrades and New Releases

- 8.1** Except to the extent specified in this agreement, we are not obliged to support the Software, whether by providing advice, training, error-correction, modifications, upgrades, new releases or enhancements or otherwise.
- 8.2** We will provide support for the Software for a period of 12 months after the date of activation. After 12 months, support is available on our standard terms on payment of the Support Charge. Our standard terms for support are available on our website.
- 8.3** If we offer an upgrade or new release and you accept:
- (a) the charge for the upgrade or new release will be at our then current rate for existing customers;
 - (b) this agreement will continue to apply to the upgrade or new release; and
 - (c) you must return to us all copies of the original Software or otherwise deal with all copies of the original Software in accordance with our directions.

9. Software performance

- 9.1** We do not guarantee that the Software is or will be error free for all possible systems, combinations of software and input variations.
- 9.2** It is a condition of this agreement that you test the Software for compatibility with your systems, existing software and input permutations. You must audit the output results of the Software on a regular basis to ensure the ongoing suitability and integrity of the Software.

10. Warranty

- 10.1** We warrant that:
- (a) for the duration of the Warranty Period, the Software will operate in conformity with the Documentation in all material respects;
 - (b) the Software and Documentation does not infringe the Intellectual Property Rights or moral rights of any person; and
 - (c) we have all necessary rights to grant the licence under clause 2.1.
- 10.2** If, during the Warranty Period, you consider there is a defect in the Software such that the Software does not conform with, or cannot be used in accordance with, the Documentation, you must notify us. We will investigate any defects so notified and, upon verification of the existence of the defect, rectify the defect without additional charge to you.

11. Limitation of Liability

- 11.1** You acknowledge that:
- (a) the Software or the Documentation may contain errors or inaccuracies;

- (b) results produced by the Software may contain errors or inaccuracies; and
- (c) you rely on your own professional skill and judgement in using the Software and in determining its suitability for any purpose.

11.2 We do not exclude or limit the application of any provision of any statute (including the *Trade Practices Act 1974*) where to do so would contravene that statute or cause any part of this agreement to be void, including any provision implying any condition, warranty or providing for an indemnity. In this clause an implied condition or warranty the exclusion of which from a contract (including a contract with a consumer as defined in the *Trade Practices Act 1974*) would contravene any statute or cause part or all of this clause to be void is called a **Non-excludable Condition**.

11.3 Our total liability to you for a breach of any express term of this agreement, or for a breach of any Non-excludable Condition (other than one implied by section 69 of the *Trade Practices Act 1974*), is limited, at our option, to any one of supplying, replacing or repairing, or paying the cost of supplying, repairing, or replacing the goods or supplying again, or paying the cost of supplying again, the services in respect of which the breach occurred.

11.4 We exclude:

- (a) from this agreement all conditions, warranties and terms implied by statute, general law or custom, except any Non-excludable Condition;
- (b) except for liability in relation to a breach of a Non-excludable Condition, all liability to you in contract for consequential or indirect damages arising out of or in relation to the Software or Documentation, any delay or other failure in supplying the Software or Documentation, even if we knew they were possible or they were otherwise foreseeable, including lost profits and damage suffered as a result of claims by any third person; and
- (c) all liability in negligence.

12. Confidentiality

12.1 Each party:

- (a) may use Confidential Information of the other party solely for the purposes of this agreement;
- (b) except as permitted under clause 12.1(c), must keep confidential all Confidential Information of the other party; and
- (c) may disclose Confidential Information of the other party only:
 - (i) to persons who:
 - (A) are aware and agree that the Confidential Information of the other party must be kept confidential; and
 - (B) either have a need to know (and only to the extent that each has a need to know), or have been specifically approved by the other party; or
 - (ii) as required by law or stock exchange regulation.

12.2 Even though information is the Confidential Information of a party, the other party is not obliged to comply with clause 12.1 in relation to that Confidential Information if:

- (a) the Confidential Information has become public knowledge; or
- (b) the other party became aware of that Confidential Information from a third person,

in circumstances where there was no breach of any obligation of confidence.

12.3 You must not make any public statement:

- (a) about the performance of;
- (b) about the operation of; or
- (c) benchmarking,

the Software without our prior written consent.

13. Intellectual Property Rights

13.1 In the event that proceedings are brought or threatened by a third party against you alleging that your use of the Software constitutes an infringement of Intellectual Property Rights, we may at our option and own expense conduct the defence of such proceedings. You must provide all necessary co-operation, information and assistance to us in the conduct of the defence of such proceedings.

13.2 If the Software is found to infringe a third party's Intellectual Property Rights, we may at our option:

- (a) procure for you the right to continue using the Software;
- (b) modify the Software so that it becomes non-infringing; or
- (c) replace the Software with other software with similar functionality.

14. Term and Termination

14.1 This agreement continues until:

- (a) a party terminates the agreement in accordance with clause 14.2; or
- (b) you give us at least 30 days notice.

14.2 A party may terminate this agreement with immediate effect by giving notice to the other party if:

- (a) that other party breaches any material term of this agreement not capable of remedy;
- (b) that other party breaches any material term of this agreement capable of remedy and fails to remedy the breach within 30 days after receiving notice requiring it to do so; or
- (c) any event of insolvency happens to that other party (whether or not notified).

15. On Termination

15.1 On termination of this agreement other than for our breach or insolvency, the licence granted under clause 2.1 terminates and you must immediately:

- (a) stop using the Software;
- (b) return to us all copies of the Software and Documentation in your possession or control; and
- (c) ensure that all of the Software has been deleted or permanently removed from any equipment on which it is stored.

15.2 You acknowledge that if this agreement is terminated other than for our breach or insolvency, in addition to any other remedies we may have, we may:

- (a) retain all fees paid under this agreement;
- (b) charge a reasonable sum for work performed in respect of which work no sum has been previously charged; and
- (c) if you do not return to us all Software and Documentation in your possession or control in accordance with clause 15.1, at your cost, enter any of your premises during working hours to repossess them.

16. Dispute Resolution

16.1 Neither party may start arbitration or court proceedings (except proceedings seeking interlocutory relief) in respect of a Dispute unless it has first complied with this clause.

16.2 A party claiming that a Dispute has arisen must notify the other party within 10 working days after the event occurring that has given rise to the Dispute.

16.3 Within 7 working days after a notice given under clause 16.2 each party must nominate in writing to the other party a representative authorised to settle the Dispute on its behalf.

16.4 During the 20 working day period after a notice is given under clause 16.2 (or if the parties agree a longer period, that longer period) each party must use his or her best efforts to resolve the Dispute.

16.5 If a Dispute is not resolved within that time, the Dispute must be referred:

- (a) for mediation, in accordance with the Australian Commercial Disputes Centre (ACDC) Mediation Guidelines; and
- (b) to a mediator agreed by the parties, or if the parties do not agree on a mediator, a mediator nominated by the then current chief executive officer of ACDC or the CEO's nominee (or if no such person is available or willing to nominate a mediator, by the then President of the Law Society of New South Wales).

17. Force Majeure

17.1 Neither party is liable for any delay or failure to perform its obligations pursuant to this agreement if such delay is due to Force Majeure.

17.2 If a delay or failure of a party to perform its obligations is caused or anticipated due to Force Majeure, the performance of that party's obligations will be suspended.

17.3 If a delay or failure by a party to perform its obligations due to Force Majeure exceeds sixty days, either party may immediately terminate the agreement on providing notice in writing to the other party.

17.4 If this agreement is terminated pursuant to clause 17.3, we will refund moneys previously paid by you for any goods or services not supplied to you.

18. Entire Agreement

This agreement, including the Invoice, constitutes the entire agreement between the parties and supersedes all prior representations, agreements, statements and understandings, whether verbal or in writing.

19. Assignment

You may not assign the benefit of this agreement without our written consent.

20. Variation

This agreement may be varied only by a document signed by both parties that states expressly that it varies this agreement.

21. Severability

If any provision of this agreement is held invalid, unenforceable or illegal for any reason, the agreement remains otherwise in full force apart from such provision, which is deemed to be deleted.

22. Governing law

22.1 This agreement is governed by the law applicable in New South Wales, Australia and each party irrevocably and unconditionally submits to the non-exclusive jurisdiction of the courts of that State.

23. Notices

23.1 Notices under this agreement must be in writing and may be delivered by hand, by mail or by facsimile to the addresses specified on the Invoice.

23.2 Notice will be deemed given:

- (a) in the case of hand delivery, upon written acknowledgment of receipt by an officer or other duly authorised employee, agent or representative of the receiving party;
- (b) in the case of posting, three days after dispatch;
- (c) in the case of facsimile, upon receipt of transmission if received on a business day or otherwise at the commencement of the first business day following transmission.

24. Definitions

24.1 The following definitions apply unless the context requires otherwise:

CAS License means Client Access Session, being the number of users that can use the Software at any one time on a network via a terminal server. For example, 20 people might have access to use the Software via a terminal server network, but a single CAS means that only one may use it at a time.

Confidential Information of a party means all confidential information (including trade secrets and confidential know how) relating to that party or a corporation related (as that term is used in the *Corporations Act 2001* (Cth)) to that party from time to time, of which the other party becomes aware.

Documentation means any operating manuals and other printed materials including users' manuals, programming manuals, modification manuals, flow charts, drawings and software listings that are designed to assist or supplement the understanding or application of the Software.

Force Majeure means a circumstance beyond the reasonable control of the parties which results in a party being unable to observe or perform on time an obligation under this agreement. Such circumstances include:

- (a) acts of God, lightning strikes, earthquakes, floods, storms, explosions, fires and any natural disaster;
- (b) acts of war, acts of public enemies, terrorism, riots, civil commotion, malicious damage, sabotage and revolution; and
- (c) strikes.

Government Charges means any taxes, duties or government charges arising out of or in connection with entering into this agreement or making a supply under it, including GST.

Intellectual Property Rights means all intellectual property rights, including:

- (a) patents, copyright, rights in circuit layouts, registered designs, trade marks and the right to have confidential information kept confidential; and
- (b) any application or right to apply for registration of any of those rights.

Invoice means our invoice received by you in relation to this agreement.

Licence Fee means the fee specified on the Invoice, payable to us for the use of the Software.

Software means the software specified on the Invoice that you are licensed to use under this agreement, including any enhancement, modification, upgrade or new release of that software.

Site means the physical address for the use of the Software specified at the time of installing the Software.

Support Charge means a charge for support in accordance with our standard rates in effect from time to time.

User/PC License means the licence for a single person to install, register and operate the Software on a single computer.

Warranty Period is the period of 90 days from the date of installation of the Software.

We, including its different grammatical forms such as **our** and **us**, means Estate Master Pty Limited, ABN 76 102 232 593, of Level 6, 234 George Street, Sydney, NSW, Australia.

You means the person installing the software or, where it has been installed on behalf of a company or organisation under clause 1.2, that company or organisation.

24.2 The following rules of interpretation apply unless the context requires otherwise:

- (a) any use of the verb **includes**, or of words such as **for example** or **such as**, do not limit anything else that is included in general speech; and
- (b) unless otherwise stated, monetary references are references to Australian dollars.