

## TAMS Procedures - Asset Register Stormwater Drainage

These procedures are aimed at showing users how stormwater drainage asset data can be entered into TAMS.

The data entry procedure is based upon a 'minimum effort' approach aimed at satisfying immediate requirements for asset register and valuation while still providing a growth path for further extension of the register.

Please note that the procedures do not attempt to explain how a drainage system should be structured in TAMS, how line numbering should be setup or how data should be collected. These aspects are covered in implementation training. It simply shows how the software can be used to setup an asset register for stormwater drainage.

*For convenience, you should ensure that the Audit Prompt has been turned off for the data entry (under Special on the menu bar). It should of course be turned back on following completion of data entry.*

Sample data for the procedures is shown in Appendices A and B. The attached screen printouts show how the data should appear.

### A. Setting up Lookup Tables

Please note that sample values for each of the following lookup tables are contained in Appendix B. Your lookup tables may already be loaded with these values. Before starting you will need to check and if necessary delete existing entries in the Rates, Description and Designation lookup tables (in that order). You may also need to delete existing entries in the Facility and Component lookup tables.

1. Setup facility lookup table.
2. Setup component lookup table.
3. Setup designation lookup table. Ensure that the following details have been entered for the PIPE, CHANN & CULV designations:
  - Dimension Type of 'L' (length)
  - Meter Unit of 'm'
  - Valuation Type of 'E' (estimated replacement cost)

Ensure that the Pipe Asset checkbox is ticked for the PIPE designation.

4. Setup description lookup table. Descriptions should be entered for each designation.
5. Setup the rates lookup table for each designation/description combination, and in the case of pipes, also for each diameter. Ensure that all assets are covered by a unit rate.

## **B. Entry of Reference Codes and Asset Data**

1. Use the Reference Navigator for entry of catchment codes, subcatchment codes and facility codes. Use LINE as the Facility code and the line number as the Facility ID.
2. Use the component table entry system for entry of component codes and asset data. Select fields in the order as follows: Length, Designation, Description, Diameter, Construction date, Valuation date, Depreciation method, Est Replacement Cost, Est Residual Life.
3. Next step is to start entering data for nodes. Click on the Enter Default Values button and enter default values for the following fields: Component Code (NODE), Designation (PIT), Description (I), Construction date (eg 1/1/80), Valuation date (eg 30/6/97), Depreciation method (S). Press the OK button. Select the first catchment, subcatchment and line and move the cursor to the Component ID field of the first blank line. Press the insert key. The first node record should be automatically created including the default values. Enter a Component ID (node number). Amend the Designation if the node is a headwall or gross pollution trap instead of a pit. Use the down arrow key to move the cursor to the next blank line and continue inserting records for the current line. *(Note: When you are entering nodes for each line, do not include the junction node otherwise you will be duplicating this node)*
4. Next step is to apply unit costing to the records that have just been created. Press the Perform Costing button. *(Note: If you get an error message at this stage it probably means that the cursor is on the next blank line ready for insertion of another record. Use Alt-Backspace to rectify and press the perform costing button again).* After the function has been run you will see that replacement costs and residual lives will be calculated for the node assets.
5. Next step is to automatically create pipe assets for those nodes that have just been entered. Enter default values for Component Code (CNDT), Designation (PIPE), Diameter, Construction date (eg 1/1/80), Valuation date (30/6/97), Depreciation method (S). Execute the Create Pipe Assets function, unticking the option of copying the component location field and unticking the option of calculating lengths from coordinates. Conduit records will be created *(note that they may be hidden from view - simply scroll up to see them)*. You will need to manually enter the first downstream pipe on the line (ie where it connects to the junction pit). Enter lengths for each pipe asset.

6. Next step is to apply unit costing to the conduit records that have just been created. Press the Perform Costing button. After the function has been run you will see that replacement costs and residual lives will be calculated for the conduit assets.
7. Repeat steps 3-6 for each facility. (Hint: Use the F3 key to select the next facility instead of using the mouse)

### **C. Entry of Other Asset Data**

Gross pollution traps and retention basins should be entered as facilities thereby allowing for breakdown into components at a later stage. These items should also be referenced by the node number of the associated headwall or outlet. The procedure is as follows:

1. On the reference navigator, choose the appropriate catchment and subcatchment. In the facility column, enter the appropriate facility code (eg GPT). Enter a !!! in the component code column and press the down arrow key to create the asset.
2. Put the cursor on the !!! code and press the Asset Details button.
3. Enter the necessary details. If unit rates are available, execute Perform Costing to obtain a replacement cost and residual life. Press the Close button.
4. Repeat steps 1-3 for the next facility item.

Note that it is highly recommended to use the Unit Costing utility for all assets to record how the residual life was determined. This has two benefits. Firstly it will allow for use of the condition indexing system on these assets in the future, and secondly, it will provide a basis of how the residual life was determined (Note that the calculated residual life figure on the Costing screen can be overrided using the Residual Performance/Design/Economic Life fields). In order to do this, a standard life will be required in the Rates table for all assets.

## APPENDIX A

<b>Line</b>	<b>Nodes</b>	<b>Pipe Dia</b>	<b>Length (m)</b>
A	A01-A02	600	22
	A02-A03	600	64
	A03-A04	600	76
	A04-A05	600	72
	A05-A06	300	87
	A06-A07	300	76
B	A03-B01	150	83
	B01-B02	150	61
	B02-B03	150	42
C	B01-C01	150	55
D	A04-D01	150	36
	D01-D02	150	37
	D02-D03	150	22
E	D01-E01	150	43
F	A05-F01	150	62
	F01-F02	150	55
	F02-F03	150	48

## **APPENDIX B**

### **Catchment Codes**

MACKS (Macksville)  
BOWEN (Bowen)  
SMITH (Smithtown)

### **SubCatchment Codes**

MACKS	PHIL (Phillips Park) WILL (Williams Street) AUST (Austin Park)
BOWEN	ANDER (Anderson Road) CLAYD (Claydon Park)
SMITH	SEYM (Seymour Street) MEADE (Meade Park)

### **Facility Codes**

LINE (drainage line)  
RETEN (retention basin)  
GPT (gross pollution trap)

### **Component Codes**

NODE (node)  
CNDT (conduit)

### **Designations**

PIT (pit)  
HW (headwall)  
PIPE (pipe)  
CHAN (channel)  
CULV (culvert)  
GPT (gross pollution trap)

### Descriptions & Rates

<b>Designation</b>	<b>Description</b>	<b>Details</b>	<b>Rate</b>	<b>Std Life</b>
PIT	I	Inlet pit	\$500	60
PIT	J	Junction pit	\$500	60
HW	300	300 diameter	\$500	60
HW	600	600 diameter	\$500	60
PIPE			\$100	100
CULV	600x300	600 width 300 height	\$200	60

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### Reference Navigator

Catch	SubCatc	Facility	FacilityId	Compnt	Compld	SubComp	AssetId	Qty
BOWEN	ANDER	GPT	A02	CNDT	A01-A02		D000000266	
BRIG1	CLAYD	LINE	A	CNDT	A02-A03		D000000267	
BRIG2		LINE	B	CNDT	A03-A04		D000000268	
COFFS		LINE	C	CNDT	A04-A05		D000000269	
MACKS		LINE	D	CNDT	A05-A06		D000000270	
SMITH		LINE	E	CNDT	A06-A07		D000000278	
		LINE	F	NODE	A01		D000000260	
				NODE	A02		D000000261	
				NODE	A03		D000000262	
				NODE	A04		D000000263	
				NODE	A05		D000000264	
				NODE	A06		D000000265	

Catch Details   SubCatch Details   Facility Details   Asset Details

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### Reference Navigator

Catch	SubCatc	Facility	Facilityld	Compnt	Compld	SubComp	Assetld	Qty
BOWEN	ANDER	GPT	A02	CNDT	A03-B01		D000000276	
BRIG1	CLAYD	LINE	A	CNDT	B01-B02		D000000274	
BRIG2		LINE	B	CNDT	B02-B03		D000000275	
COFFS		LINE	C	NODE	B01		D000000271	
MACKS		LINE	D	NODE	B02		D000000272	
SMITH		LINE	E	NODE	B03		D000000273	
		LINE	F					

Catch Details   SubCatch Details   Facility Details   Asset Details

 Edit   Close