

## Pipe Editor

This function reads the C3D pipe database and displays all the networks and allows you to change:

- inverts
- pipe sizes
- lower/raise the whole network
- sump depths

select the pipes you want to work with; there are a number of selection options

### Save Selection Button

Using this button will prompt you for a name to give to this selection. It will then internally save that name onto each of the pipes that you have selected in the "Selected Pipe Run(s)" list, thus making it easier to reselect again at a later point in time. Important note: The saved selection is only available again within the same network. For example, Lets say you are currently working in the "Storm" network, and you save your selection under a name of "MySelection1", and then later you are working in the "Sewer" network - if you select the to "Load Selection" , you will not be able to see your "MySelection1" because you are not working in the same network that you saved the selection under.

### Load Selection Button

Using this button has the exact same effect as choosing the "By Saved Selection" option from this list.

### Rename Selected Pipes Button

This allows you to rename the pipes that you currently have selected in the "Selected Pipe Run(s)" list. This is useful to organize multiple pipes so that they are similarly named. Pipes that are similarly named may provide a easy means of selecting those pipes, see the information below about "By Run Name" on selecting pipes that have similar names. When you choose to rename the pipes you will be prompted to provide the details of how they should be renamed. **Select From List**

Presents you with a list, and you highlight the Pipes that you want. When you are using this method, there is a "Select.." button available that will allow you to select the pipes from the drawing. This "Select.." button is the same as the "Select From Drawing" method.

### Proximity to Alignment -

will find all pipes within a search toleranceof selected alignment

### Assigned to Alignment -

finds all pipes that have been assigned to selected alignment

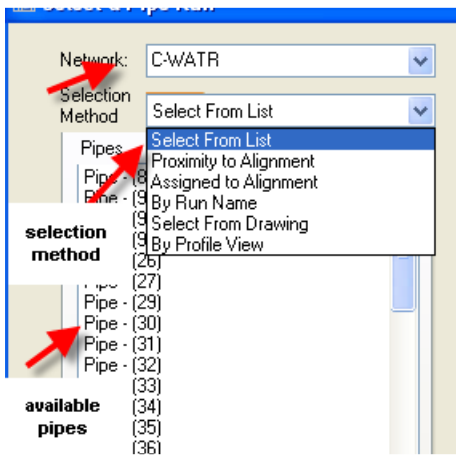
### By Run Name -

when selecting "By Run Name", all similarly named pipes are grouped together and you can select based on the pipe name. When using this method, for each pipe it will look at the name of the pipe up to any dash ("-") in the pipe name. So a pipe named "Street A - (1)" will be part of a run named "Street A". Similarly pipes name "Street A - (2)", "Street A - (3)", "Street A - XXXXXXX" will all be lumped together under a run named "Street A".

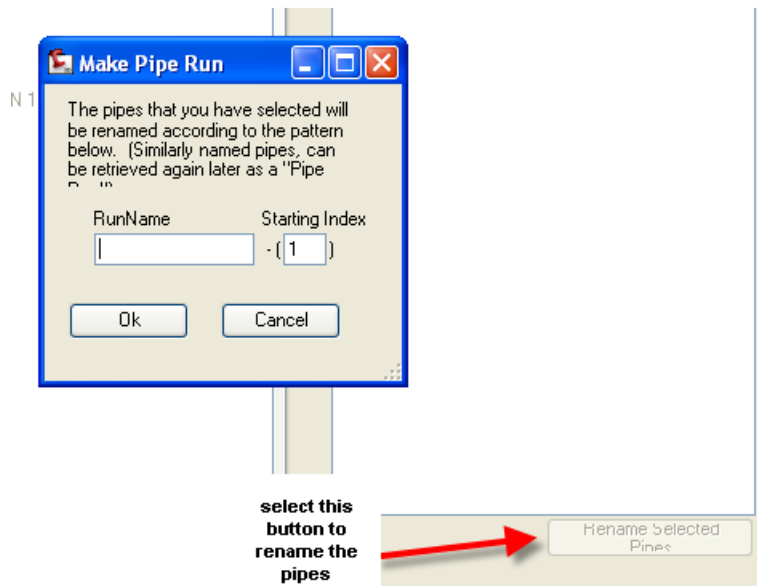
### By Saved Selection -

if you have previously saved a selection of pipes, then using this method will allow you to recall that selection again.

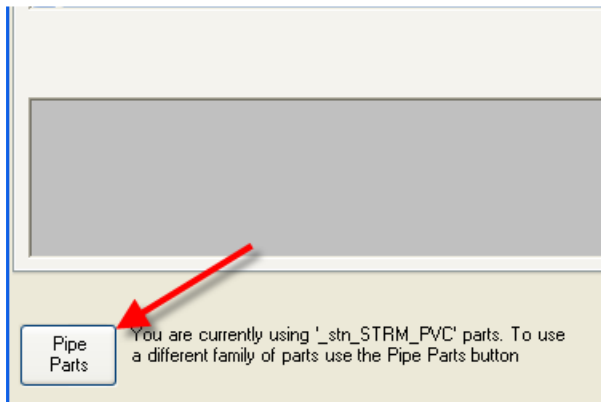
select the network, selection and pipes; you will see a tree and if the pipes are connected they will be part of the tree, otherwise a warning will be dispalyed



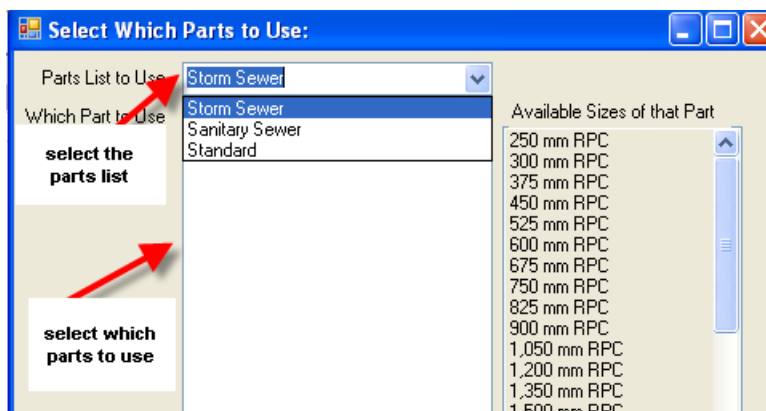
rename the selected pipes :



select the pipe parts button



select the parts list and parts to use, this available sizes will be displayed



modify pipe size, inverts or slope

Pipe Name	From Structure	Endstructname	From Invert	To Invert	Slope	Pipe Length	Diameter
block 16-14	979	112	380.468	379.996	2.999	16.441	0.15
block 16-13	112	111	379.815	378.636	3.001	40.484	0.2
block 16-12	111	110	378.555	378.332	0.501	45.705	0.2
block 16-11	110	109	378.266	377.935	0.500	67.398	0.2
block 16-10	109	101	377.869	377.803	0.502	14.341	0.2

**Changing Multiple Slopes or Pipe Sizes at Once**

It is possible to change the slope or pipe size of several pipes at once. Select several rows at once (using standard windows "Ctrl - click" or "Shift - click") and then right click inside and you will get a menu that will allow you to change all your currently selected rows at once. It will use the slope / size of the current row to update the others. The arrow on the left side indicates which is the current row

Pipe Name	From Structure	Endstructname	From Invert	To Invert	Slope	Drop Across MH	Pipe Length
KIT 7W-15	78	77	377.969	377.024	2.001	0.099	48.425
KIT 7W-14	77	76	376.925	375.878	2.001	0.084	53.529
KIT 7W-13	76	75	375.794	375.39	1.998	0.078	21.418
KIT 7W-12 (1)	75	74	375.312	374.761	1.000	0.072	56.279
KIT 7W-12	74	73	374.689	373.977	1.000	0.087	72.383
KIT 7W-11	73	72	373.89	373.354	1.001	0.087	54.75
KIT 7W-10	72	125	373.267	373.075	1.001		1.983

Current Row Indicator (points to KIT 7W-11)
 Highlighted Rows (points to rows KIT 7W-14 through KIT 7W-11)
 Right click to get this menu (points to context menu)

Copy Current Slope to All Selected Rows  
 Copy Current Diameter to All Selected Rows

use the structure tab is for modifying the sump depth

From Structure	Rim Elevation	Structure Size	Drop Across Manhole	Sump
31	382.899	1.2		0
30	382.665	1.2	0.127	0
6	382.924	2.4		0

set your design criterion on the options page

Pipe Data	Structures	Options
<b>Which way to Work?</b>		
<input type="radio"/>	<b>Up Stream</b>	All upstream nodes will have their invert/obvert changed according to the rules below (Hold Grade Rules Section). If changing the start invert/obvert the slope of the current pipe will change. If changing the end invert/obvert the start invert/obvert will be adjusted
<input checked="" type="radio"/>	<b>DownStream</b>	All downstream nodes will have their invert/obvert changed according to the rules below (Hold Grade Rules Section). If changing the end invert / obvert the slope of the current pipe will change. If changing the start invert/obvert the end invert/obvert will be adjusted.
<input type="radio"/>	<b>No Holding Grade</b>	No Invert/Obverts will change. The slope of the current pipe will change.
<b>Hold Grade Rules</b>		
<input checked="" type="radio"/>	<b>Hold Differences</b>	The existing drops across the manholes are maintained. The upstream or downstream pipes will be moved so that the same drop across the manhole is preserved
<input type="radio"/>	<b>Enforce Minimum Differences</b>	The upstream and downstream pipes will not be adjusted unless the differences between them is less than the minimum amount specified here.
	Min Difference	<input type="text" value="0.15"/>
<b>When Changing Pipe Size</b>		
How to Change Size	<input type="text" value="Adjust Invert (Hold Obvert)"/>	
Resize Other Pipes	<input type="text" value="Resize Upstream and Downstream"/>	Resizing Downstream only occurs when the downstream pipes are smaller than the pipe you are adjusting Resizing Upstream only occurs when the upstream pipes are larger than the pipe you are adjusting
<b>When you adjust the slope</b>		
<input type="radio"/>	<b>Adjust Start Invert / Obvert</b>	When you adjust the slope, this determines whether the start elevation or the end elevation of the pipe will be adjusted.
<input checked="" type="radio"/>	<b>Adjust End Invert / Obvert</b>	
<b>Sumps</b>		
When the invert of a pipe is change then the sump will be:	<input type="text" value="Raised or Lowered to maintain a sump value lower than the bottom pipe."/>	
<input type="button" value="Raise/Lower Network"/>		