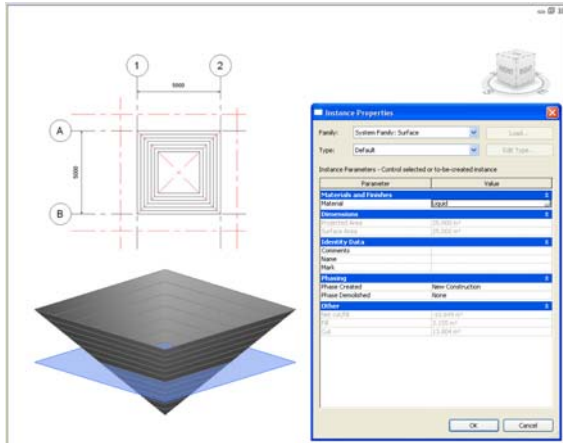# LRUG Bug Watch!

Toposurface

I was asked the question about Revit being able to do cut and fill calculations by one of the Partners at work. He wanted to model a car park, then establish how much it will flood and the maximum depth with a certain volume of water.

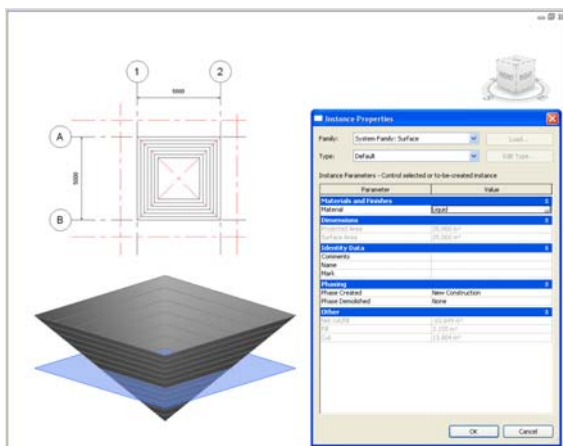So not actually cut and fill more like fill and flood!

I made a small scale trial/example to see if I could get the information out of Revit. I picked a square pyramid shape because I could easily verify the answer by hand calculation.

Toposurface

Revit reports the values by making a comparison between a surface of one phase and, from a later phase, another surface whose boundary lies within the earlier surface.

Toposurface

The example left shows a square pyramid with a 5000x5000 base x 3000 high

The water level topo is set at 1500 high

Base Area /3 x height should be (2.5 x 2.5)/3 X 1.5 = 3.125m3 but Revit gives me 3.155m3
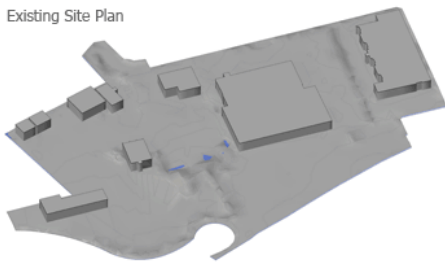
Toposurface

This is approximately a 1% error

For true cut and fill by time an allowance has been made for bulking etc we are talking peanuts, but it's the principle, if your going to give figures to 3 decimal places they should be correct.
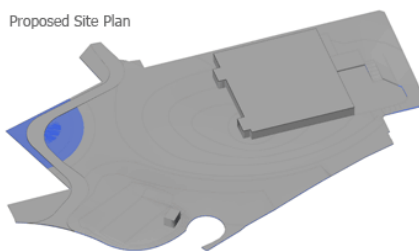
There is not a default view called "site" in the metric template supplied with RST2010 called Structural Analysis_DefaultGBRENU.rte

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Cut and Flood
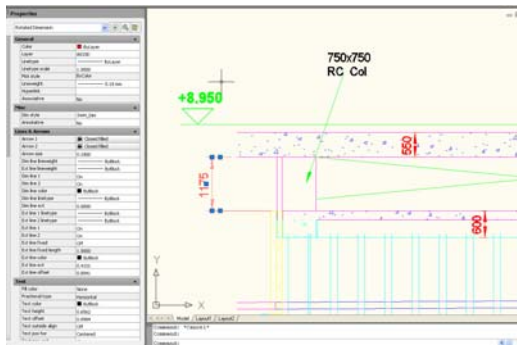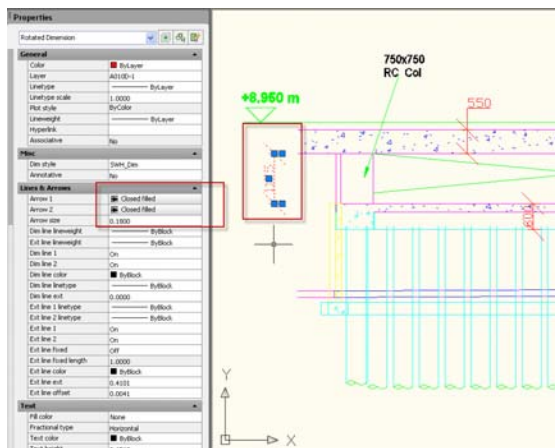

Using Revit, we were able to provide the Environmental Agency with drawings at set levels of flood water. We also provide them with the volumes of water held on the site for each 100mm increment of depth of the flood water for the existing and proposed site layouts.

Dimension Arrow Bug in Exported dwg file after Service Pack 3

Before Service Pack 3 was installed into Revit, when we exported or saved as a dwg file the arrows on the dimensions were set up the same in the dwg as the Revit model i.e. closed filled arrows.

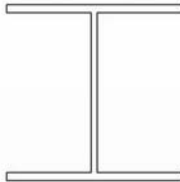# Dimension Arrow Bug in Exported dwg file after Service Pack 3

After Service Pack 3 was installed and the closed filled arrows translate as architectural ticks even though when inspected they think they are closed arrows!

And you can't seem to make them turn into closed arrows.

Light Gauge Sections 10x Overweight!

Universal Beam

Light Gauge Steel Purlin

UKB 127x76x13
0.013 tonne /m

P145/130
0.029714 tonne /m

**10 x
Overweight!**

Specify Types

Family: UKB-UK Beams.rfa

Types:

Type	W	A
(all)	(all)	(all)
UKB254x102x22	0.022	0.003 m²
UKB203x133x30	0.03	0.004 m²
UKB203x133x25	0.0251	0.003 m²
UKB203x102x23	0.0231	0.003 m²
UKB178x102x19	0.019	0.002 m²
UKB152x89x16	0.016	0.002 m²
UKB127x76x13	0.013	0.002 m²

Select one or more types on the right for each family listed on the left

Specify Types

Family: Light Gauge-C Purlin.rfa

Types:

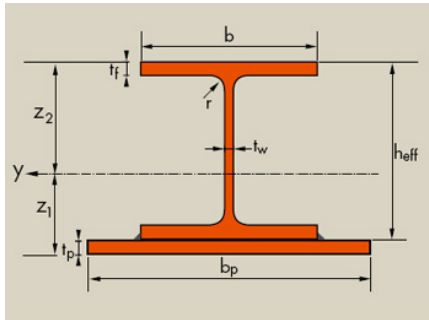| Type	W	D
(all)	(all)	(all)
P145/130	0.029714	145.0
P145/145	0.033146	145.0
P145/130	0.0355	145.0
P145/170	0.038932	145.0

Light Gauge Sections 10x Overweight!

Autodesk Support Update .... *Error in the txt file confirmed, currently no indication when a fix will be released, instruction on how to edit the txt file to correct the error provided!*

About as useful as a pushbike is to a Goldfish!

Errors reported in the weights
of other sections!

CSC Software & SFB Beam Families

We recently designed a structure in CSC Fasttrack using SFB Beams and when the CSC to REVIT program was run it was reported that:-

Warning Type `305SFB197' needs to be created in Family SFB-Beams'
Warning Type `305SFB259' needs to be created in Family SFB-Beams'
Warning Type `305SFB218' needs to be created in Family SFB-Beams'

CSC Software & SFB Beam Families

Slimflor Beams SFB

Serial Size SFB Mass per metre of compound section found under Metric Library:-

\ Structural \ Framing \ Steel ~ SFB-Beams \<\< CSC Looks Here!

And

\ Structural \ Framing \ Steel \ Corus Advance ~ SFB-Beams

CSC Software & SFB Beam Families

Slimflor Beams SFB

Serial Size SFB Mass per metre of compound section found under Metric Library:-

  \ Structural \ Framing \ Steel ~ SFB-Beams << CSC Looks Here!

And

  \ Structural \ Framing \ Steel \ Corus Advance ~ SFB-Beams

LRUG Bug Watch
Any More out there?