

That CAD Girl

BIM for Civil... Not

August 6, 2009

Several months have passed since I made my original post [BIM This, BIM That... What is BIM?](#). In that time, I have asked a lot more questions, read a lot more on the internet and had a lot of discussions with [Ladd](#) and [Felicia](#) and also read the post by one of our commenters. I think I've developed a more concrete idea about BIM and how it applies, or doesn't, to the civil/survey world and where the various software packages stand in regard to their "BIM-ability".

Now, after all this additional information has percolated in my brain, I'm drawing two main conclusions:

1. It's a fact that the term BIM as it's always been used applies to actual **BUILDINGS** – the noun form of the word. But, more specifically, it starts with construction drawings/design data but then incorporates the as-built data and, over time, continues to grow and collect data through the entire lifespan of the building.

Nothing in all this discussion of "BIM for Civil" gets beyond

That CAD Girl

construction drawings and design data of a civil project. Autodesk is trying to stretch the definition of BIM to cover Civil 3D even though they never move beyond the design process with it either.

Remember, we do not talk about “BM” or Building Modeling. And, we don’t work with “GS” or Geographic Systems. The “I” is THE critical factor. And the “I”, or Information, piece of BIM is so valuable because it chronicles and helps manage the building through its lifespan.

To be able to legitimately call what we’re doing with our Civil programs “BIM”, we would need to have a mechanism to attach some sort of database or information to the objects in our drawings.

I know, I know... that’s why Civil 3D is so great – you can attach data to the objects. But, remember, we’re talking about attaching **AS-BUILT** data to these objects. Even though we could attach data using Carlson GIS or AutoCAD Map or ESRI, it’s simply not part of our current project scope to go back into our construction drawings and update them with as-built data so that:

That CAD Girl

- maintenance schedules are attached to roadway template surfaces based on asphalt type,
- model numbers are associated to pump stations or
- inspection reports and flow rates are attached to fire hydrant blocks.

My conclusion here is that neither of these products – Carlson nor Civil 3D – meet the true definition of a BIM for civil. Until we start addressing the Information piece for the lifetime of a project, starting with the as-built data, using the term BIM is wrong.

In my opinion, if anyone has the lead on this in the civil arena, it's ESRI.

2. Just because we don't yet attach as-built data to our objects doesn't mean that the data we do attach to our objects isn't valuable. But, leading to my 2nd conclusion, why is it valuable? It's only valuable if it can be shared. And this is where I believe Carlson has the undisputed edge. The image below shows the number of formats and other programs that Carlson is able to import data from and export data to.

That CAD Girl

Points	Surfaces	Profiles	Cross Sections
Egplode Carlson Points Convert Surveyor 1 to CRD	Convert LDD-AEC Contours Convert Civil3D Surface Drawing Export Topcon TIN File	Import Columnar Text Import Calce Import Leica Import MOSS Import Softdesk Import Sokkia/SDR Import Spanish ALZ Import Spanish RAS Import Terramodel Export Softdesk Export Leica	Import Columnar Text Import Gtek Import Arkansas DOT Import Geal Import GeoPak Import Georgia DOT Import GRDS Import MOSS Import NC DOT Import Elzer Import RoadCalc Import SMI Import Softdesk Import Spanish SC1 Import Spanish TRV Import Terramodel Import Calce Earthworks Export GeoPak Export GRDS Export RoadCalc
Convert CRD to TDS CR5 Convert TDS CR5 to CRD			
Convert CRD to LDD MDB Convert LDD MDB to CRD Convert Land Desktop to Carlson Points Convert Civil 3D to Carlson Points	Centerline/Alignments Import Geodimeter Import GeoPak Centerline Import GeoPak Road File Import Leica Import MOSS Import SDMS Import Softdesk Import Sokkia/Leitz Import Spanish ISPOL Import Spanish CLIP Import TDS RD5 File Import Terramodel		
Convert Carlson Points to Softdesk Convert Softdesk to Carlson Points	Export Leica Export SMJ Chain Export Softdesk Export Sokkia/Leitz Export TDS		
Convert Carlson Points to CBG Convert CBG to Carlson Points			
Convert Carlson Points to Simplicity Convert Simplicity to Carlson Points			
Convert Leica to Carlson Points Convert Geodimeter to Carlson Points Convert Carlson Points To Ashtech GIS			
Convert PacSoft CRD to Carlson CRD			
Convert Carlson Points to EaglePt Convert EaglePt to Carlson Points			

Originally posted on **Carlson Connection** by Jennifer Dibona