BIM for Civil… Not

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 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:

- 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.

Points	Surfaces	Profiles	Cross Sections
Explode Carlson Points Convert Surveyor 1 to CRD	Convert LOD-AEC Contours Convert Civil3D Surface Drawing Export Topcon TIN File Import Quest Import GeoPate Centerline Import GeoPate Centerline Import GeoPate Centerline Import Y 2005 Import Y 2005 Import Splink Centerline Import Y 2005 Import Y 2005 Import Y 2005 Import Splink ALZ Import Y 2016 Import Y 2016 <t< td=""><td>Import Columnar Text Import <u>C</u>aice Import Leica</td><td>Import Columnar Te<u>x</u>t Import <u>Ag</u>tek Import Arkansas DOT</td></t<>	Import Columnar Text Import <u>C</u> aice Import Leica	Import Columnar Te <u>x</u> t Import <u>Ag</u> tek Import Arkansas DOT
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Convert Carlson Points to <u>S</u> oftdesk Convert Softdesk to Carlson <u>P</u> oints		Export <u>S</u> oftdesk Export <u>L</u> eica	Import Bjær Import Bjær Import Softdesg Import Softdesg Import Spanish SC 1 Import Spanish TRV Import Tjerramodel
Convert Carlson Points to C&G Convert C&G to Carlson Points			
Convert Carlson Points to Simplicity Convert Simplicity to Carlson Points			
Convert Leica to Carlson Points Convert Geodimeter to Carlson Points		Import Caice Earthworks Export GeoPak	
Convert Carlson Points To Ashtech GIS Convert PacSoft CRD to Carlson CRD			Export <u>R</u> oadCalc
Convert Carlson Points to EaglePt Convert EaglePt to Carlson Points			

Originally posted on Carlson Connection by Jennifer Dibona