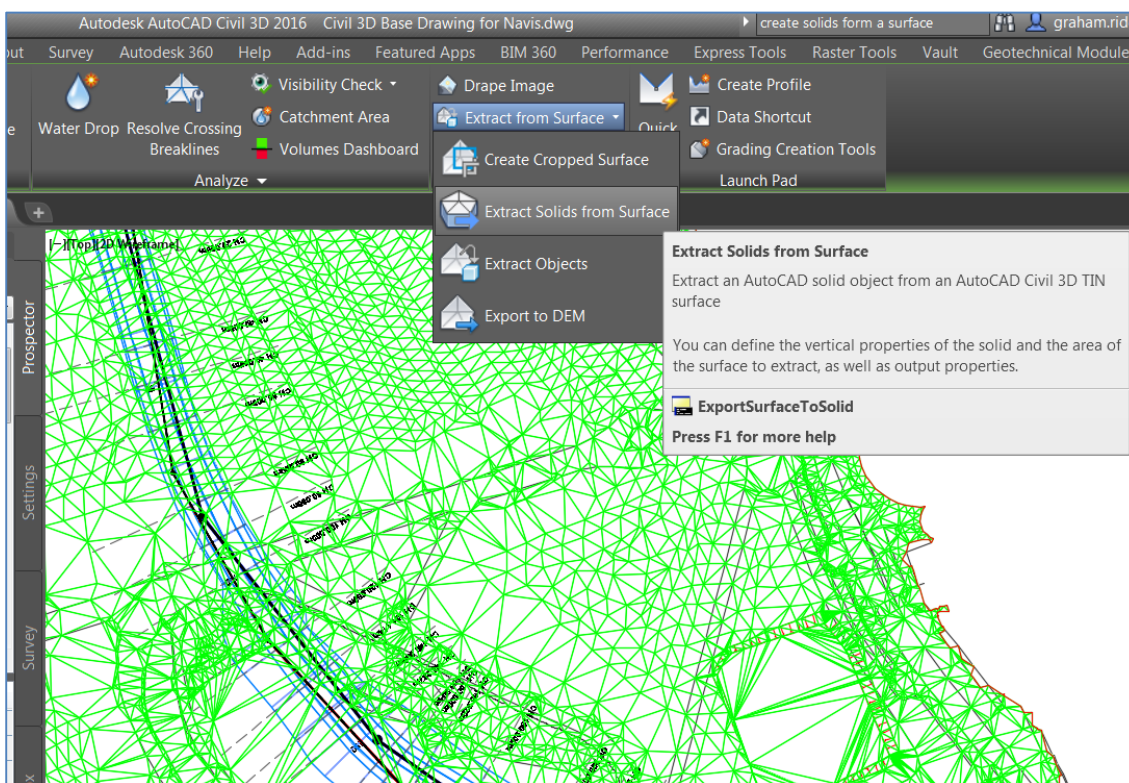# Civil 3D 2016 – Create 3D Solids from Surfaces and Pipe Networks

Introduction

One of the new features in Civil 3D 2016 is the ability to extract AutoCAD solids from Civil 3D Surfaces and Pipe Networks. The solids can then be used for analysis and clash detection in Navisworks or imported to become part of a Revit model
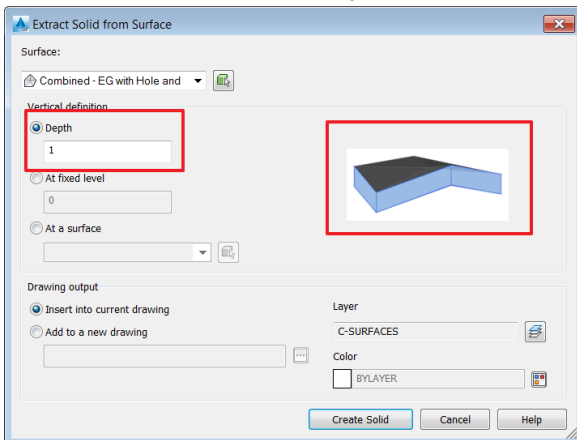
To Create 3D Solids from Civil 3D Surfaces:

Select the surface, then from the **Extract from Surface** menu pick **Extract Solids from Surface.**
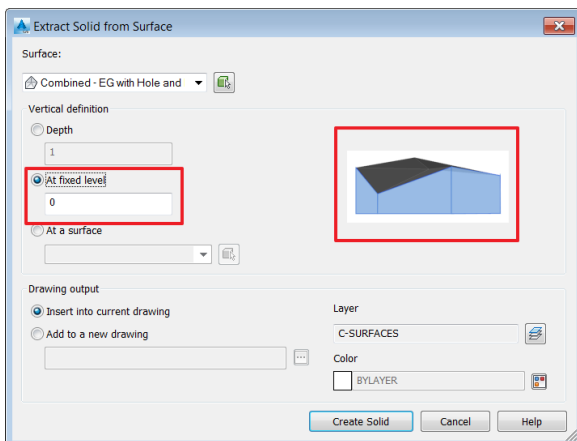

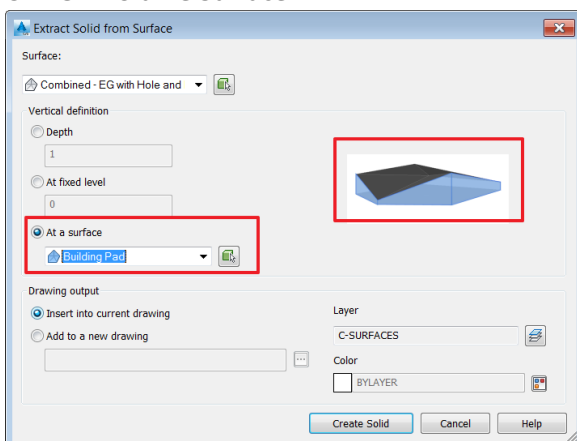This will launch a menu with three options

1. Create a solid with a fixed depth:

2. Create a solid to fixed Level

3. Create a solid between two surfaces. This method is very useful as it effectively creates a solid representing a Civil 3D Volume Surface:
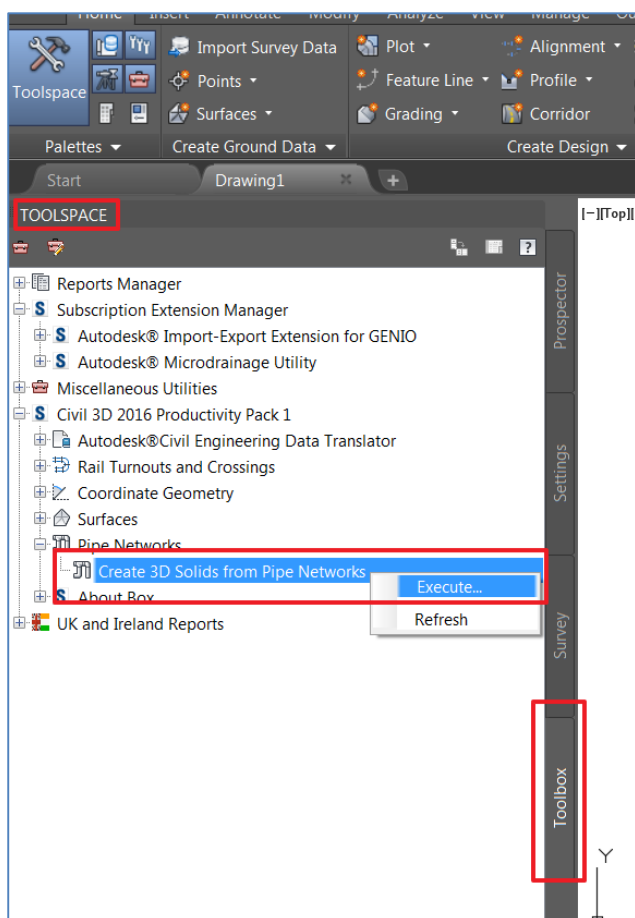

Notice you can save your solids in the current drawing or a new drawing and you also have control over layers.
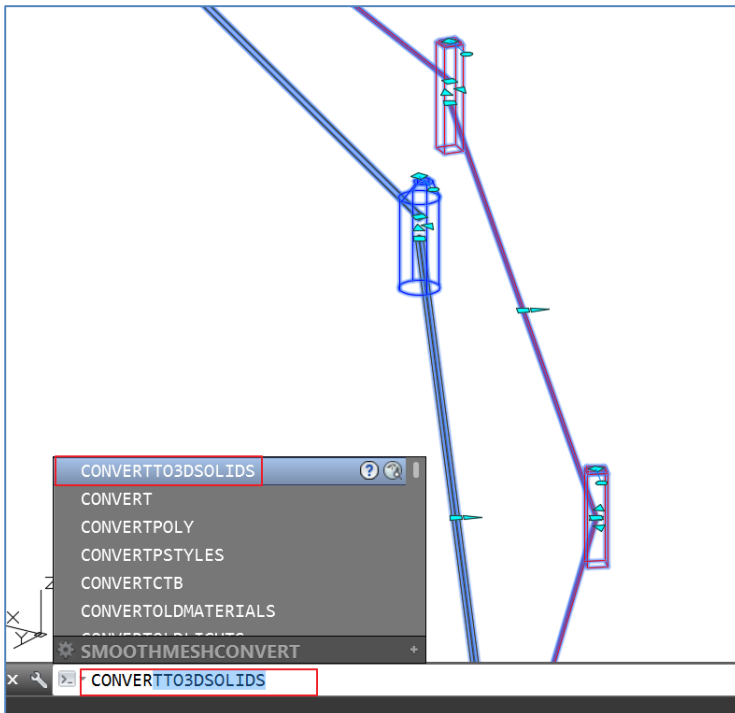
To Create 3D Solids from Civil 3D Pipe Networks:

There is currently no specific ribbon menu for creating solids from pipe networks but if you have installed the Civil 3D 2016 Productivity Pack you can follow this sequence:
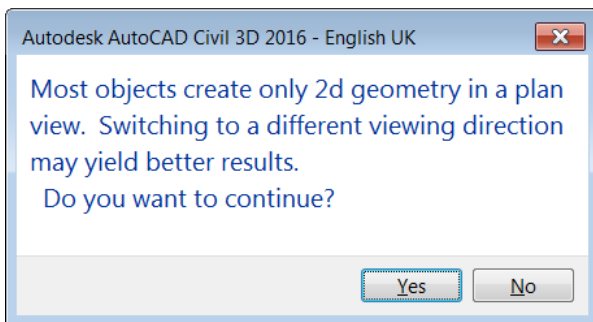
In the **Toolspace**, select the **Toolbox** tab, then expand the **Civil 3D 2016 Productivity Pack 1,** expand **Pipe Networks** then Double-click **Create 3D Solids from Pipe Networks.**
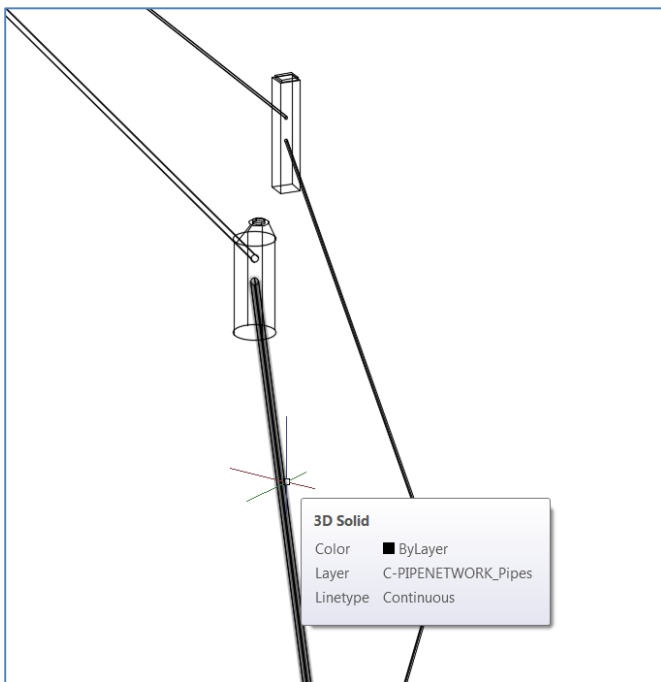
Alternatively, after selecting your pipe network, you could type **Convertto3DSolid** at the command prompt.

If you attempt to create solids from a pipe network while in plan view this message will be displayed:

To produce fully formed 3D Solids from pipe networks change your view to an isometric (3D) view as shown below:

The solids created are placed on the same layer as the original pipes or structures

N.B.

This White Paper is an update to my previous blog: [Create 3D Solids from a Civil 3D Surface or Pipe Network](#)