

Getting Up To Speed With AutoCAD 2018

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 AUTODESK
UNIVERSITY

Welcome!

1. No, I'm *not* Lynn – did you notice?
2. Some of you might know me already, right?
3. Yes, that *IS* me in the photo
4. And yes, I do wear a scarf (often)

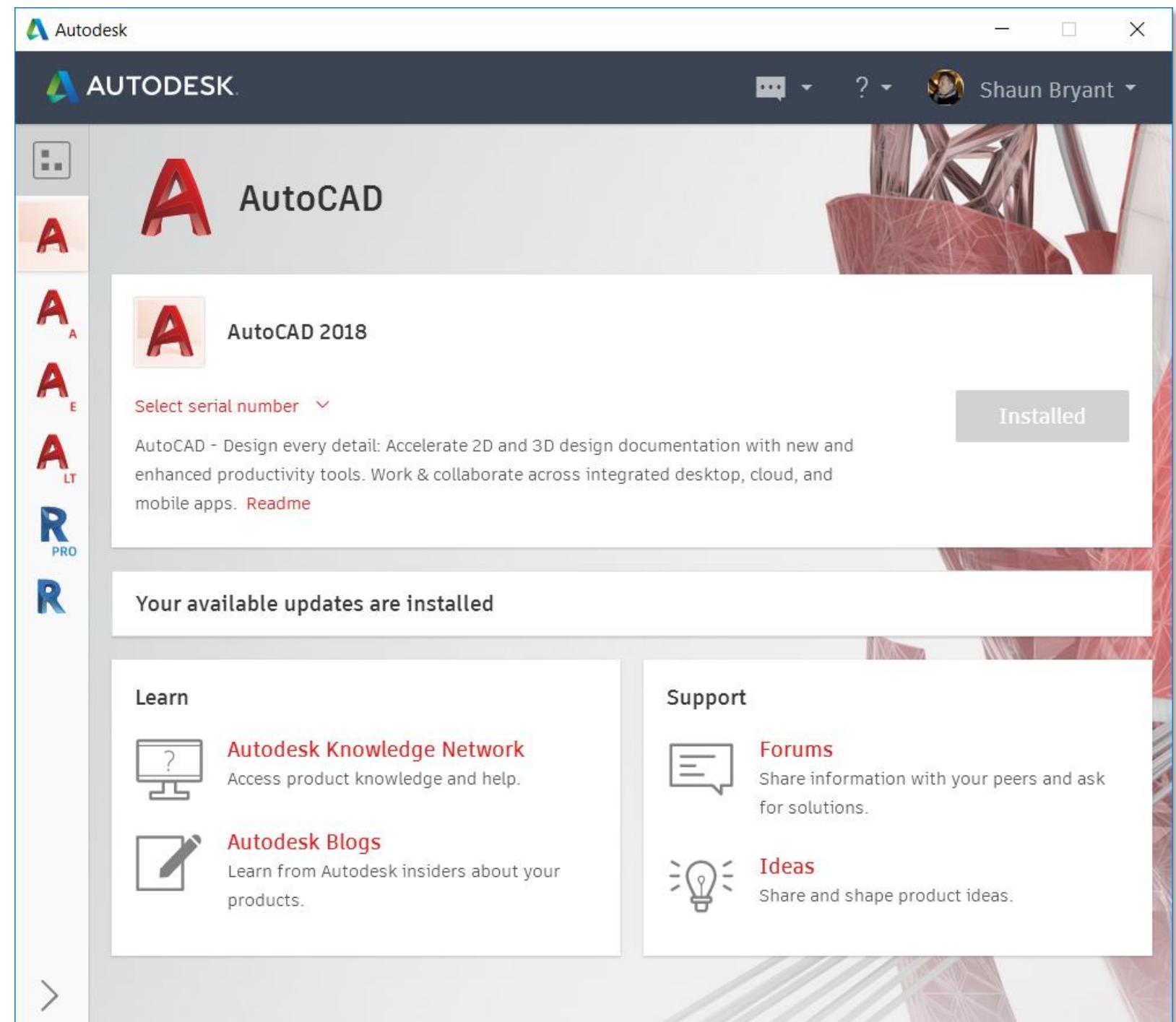


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SMARTER

New Features - DISCLAIMER

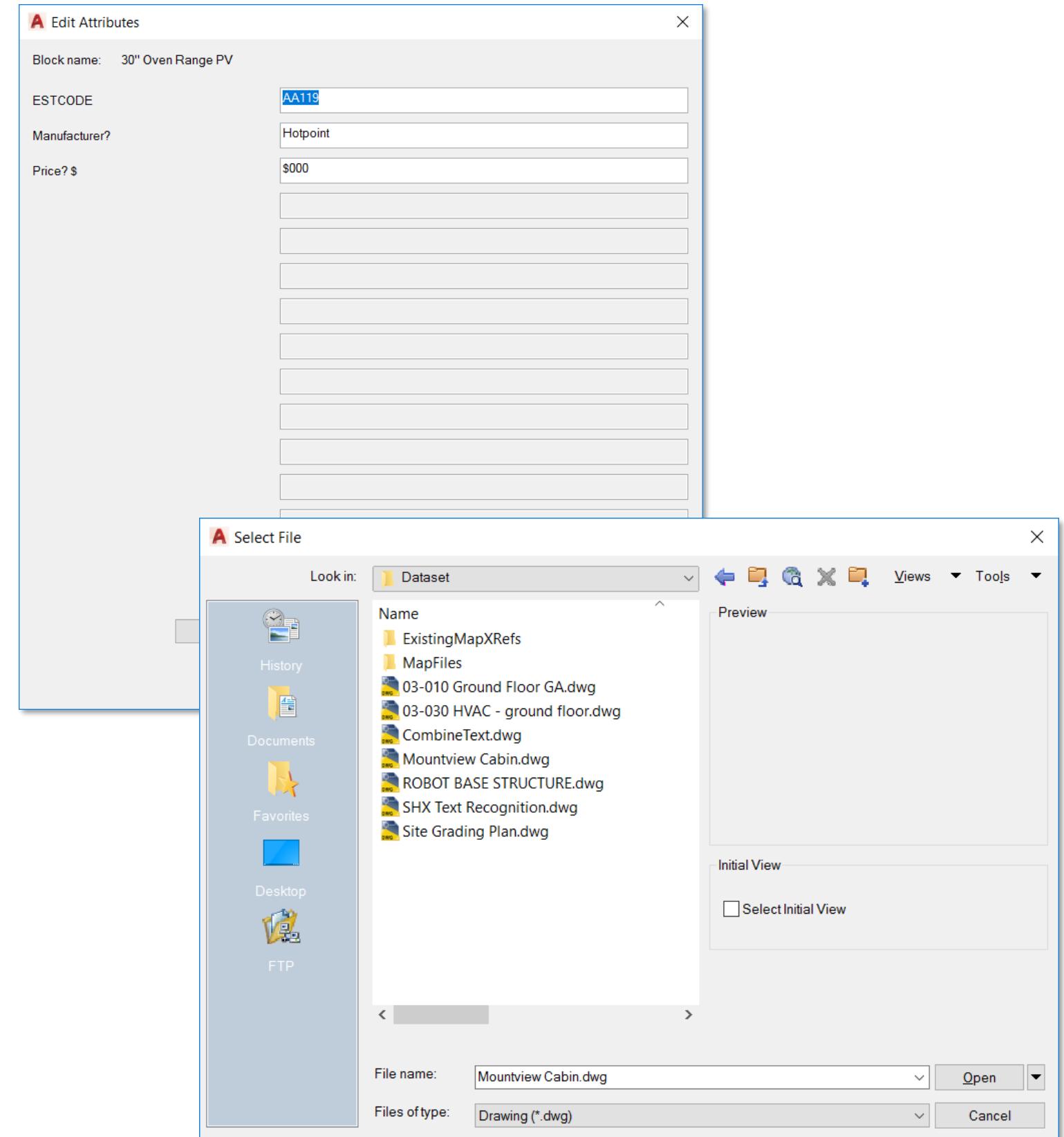
- This list of new features is NOT exhaustive. Due to the nature of the Autodesk subscription model, new features and updates are added at regular intervals!
- I am only a human. These updates seem to be appearing all the time via the Autodesk Desktop App! ☺



User Interaction & User Interface

Dialog Boxes

1. **Size** – bigger by default and resizable (#3 on the AUGI Wish List)
2. **ATTEDIT** – Edit Attributes now has a default 15 item list (was 8 items)
3. **File Navigation**– now remembers the previous sort order

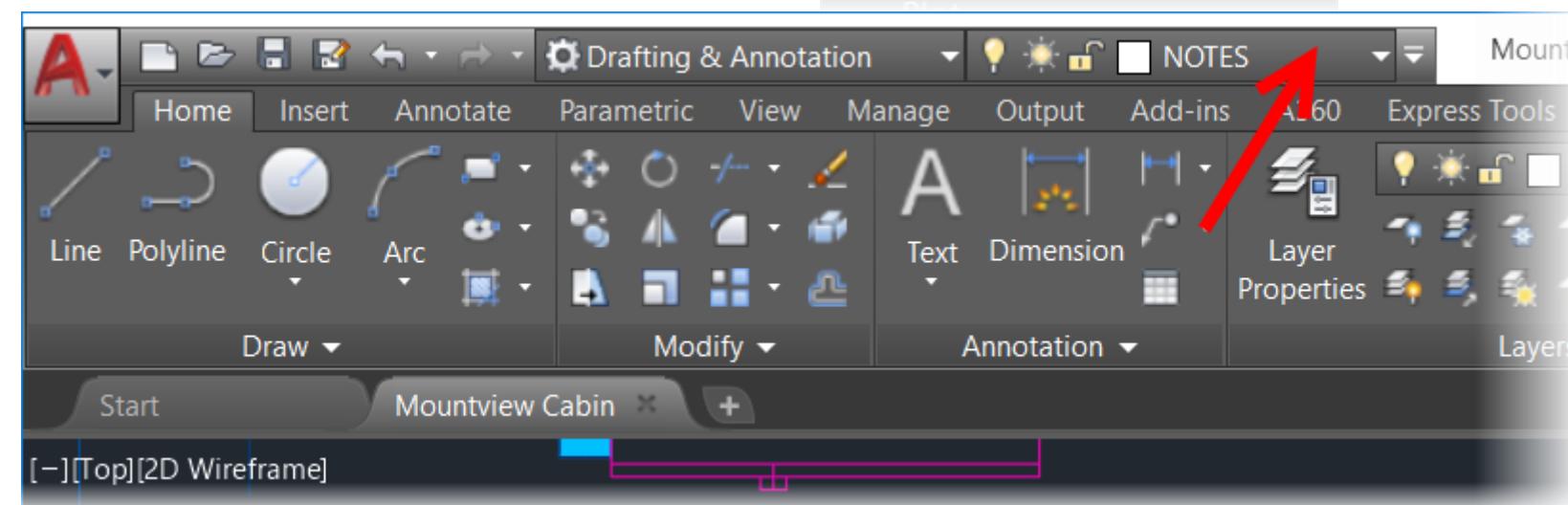
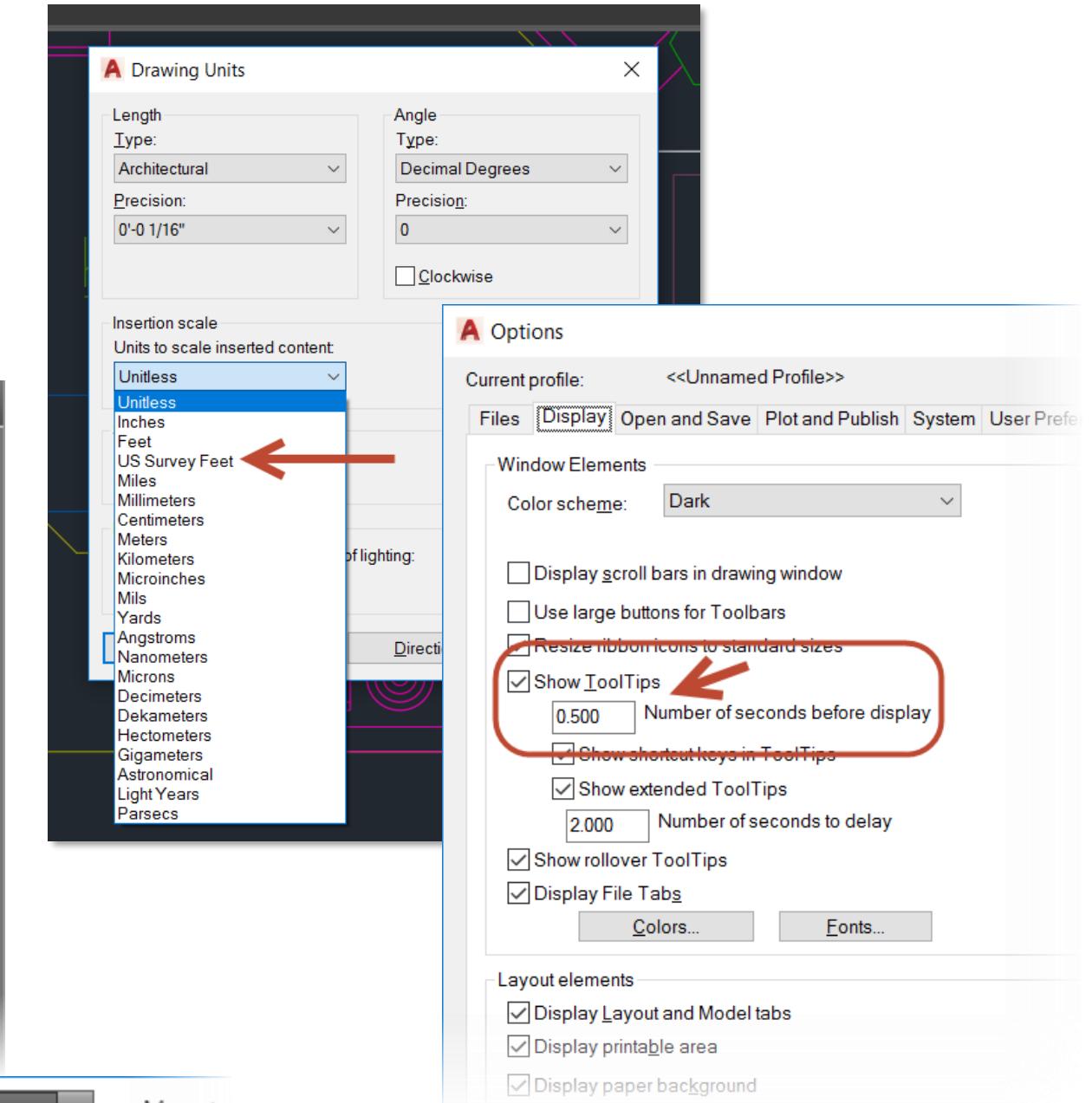
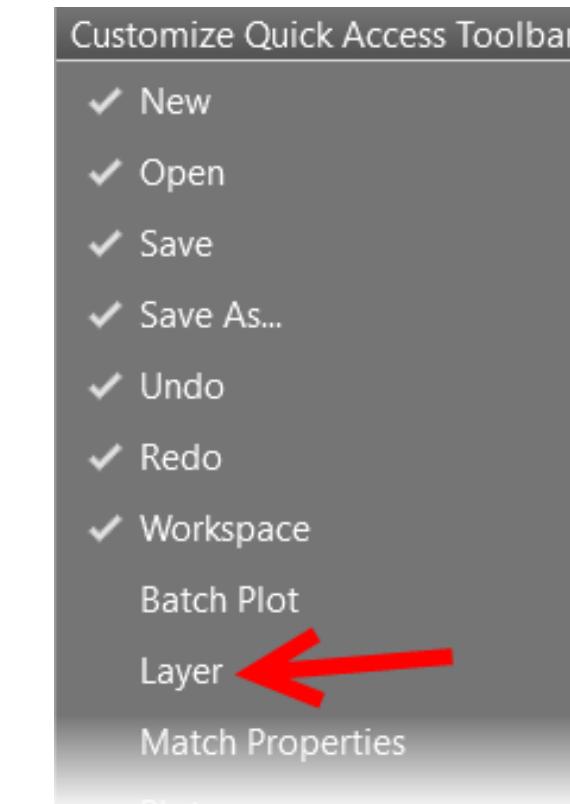


Interface Tools 1

1. Units – US Survey Units now included. Just what we need in the UK? (UNITS)

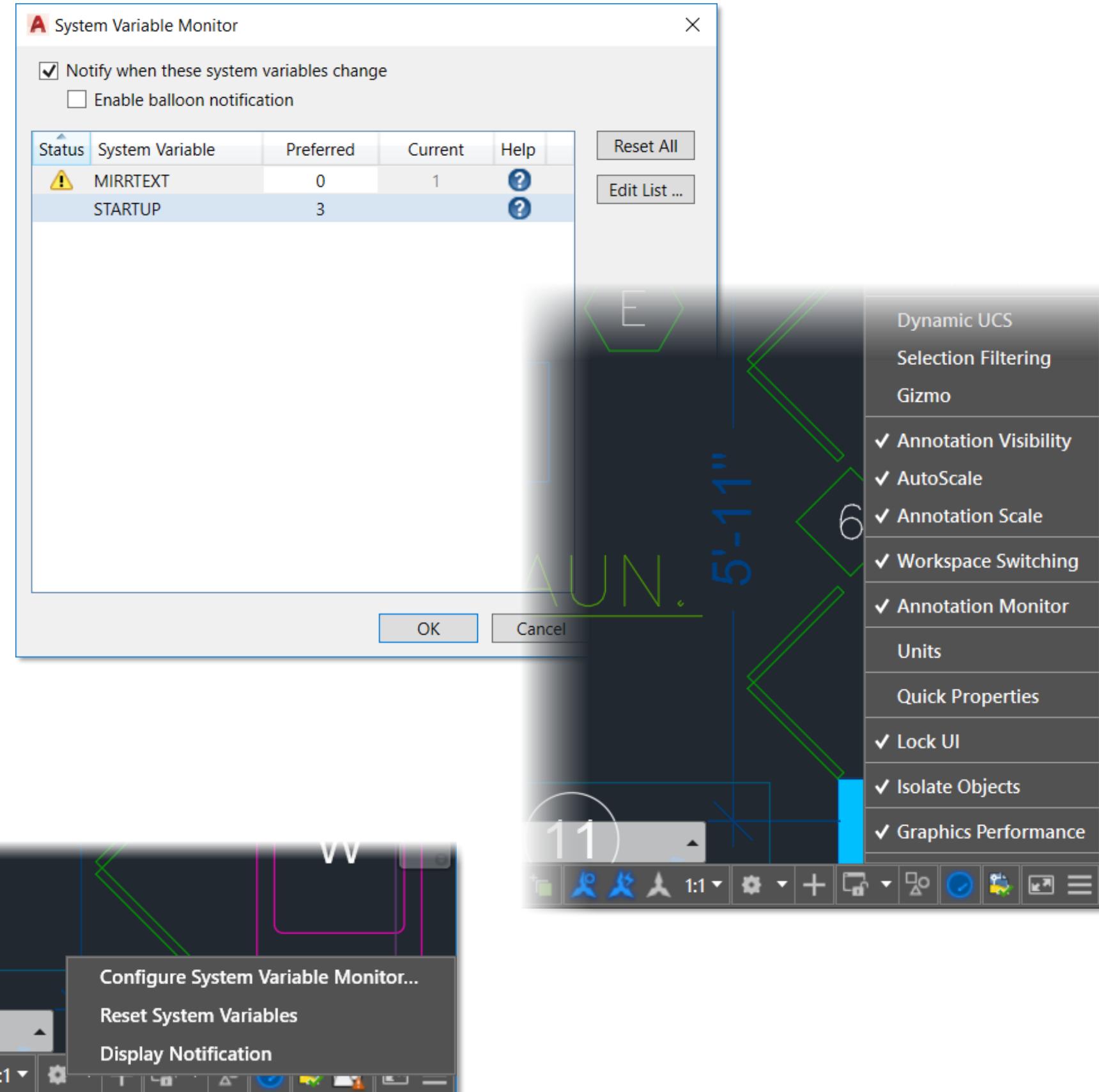
2. Tooltips – timing can now be changed (OPTIONS)

3. QAT – Layers can now be added to the Quick Access Toolbar



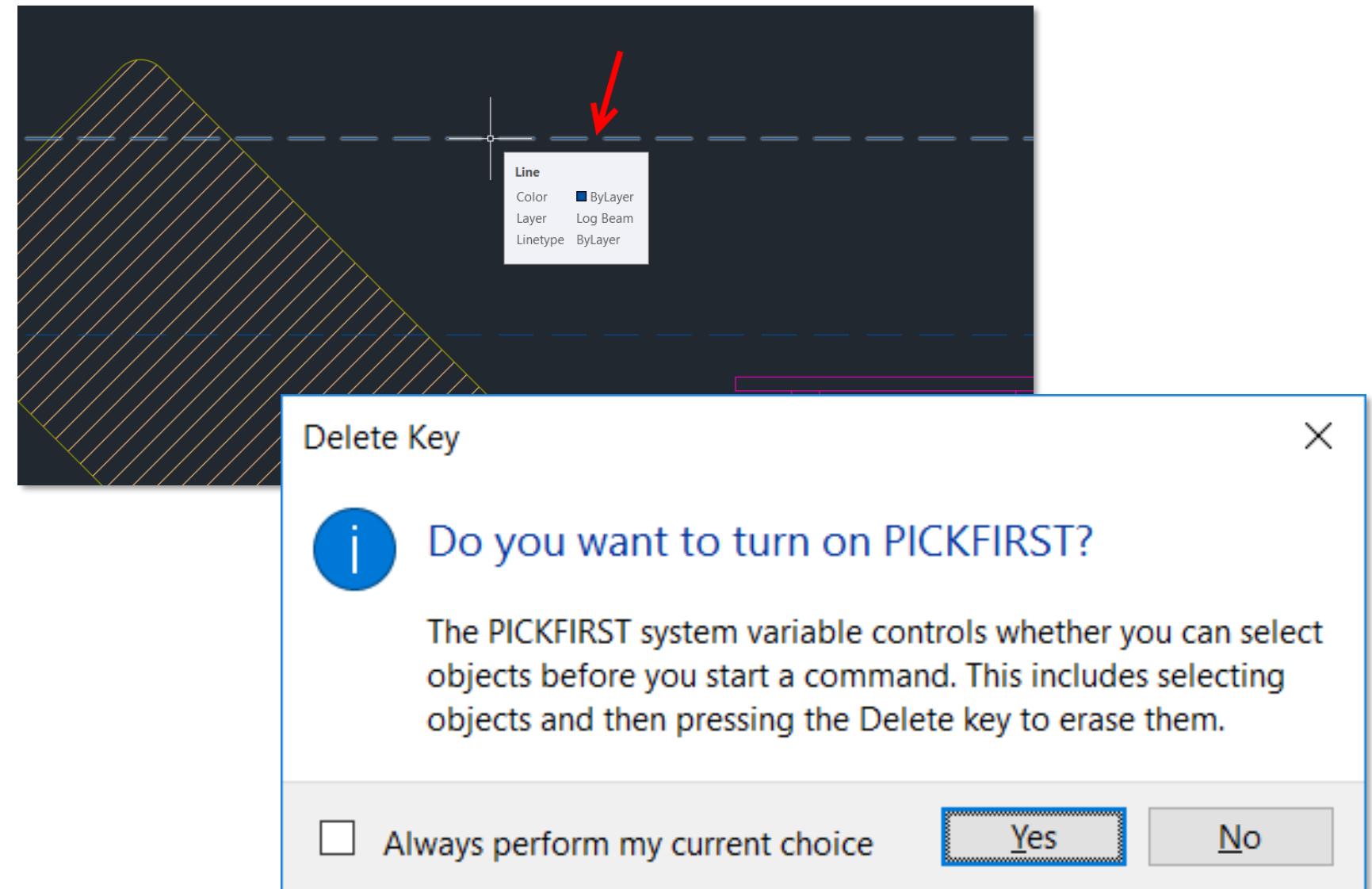
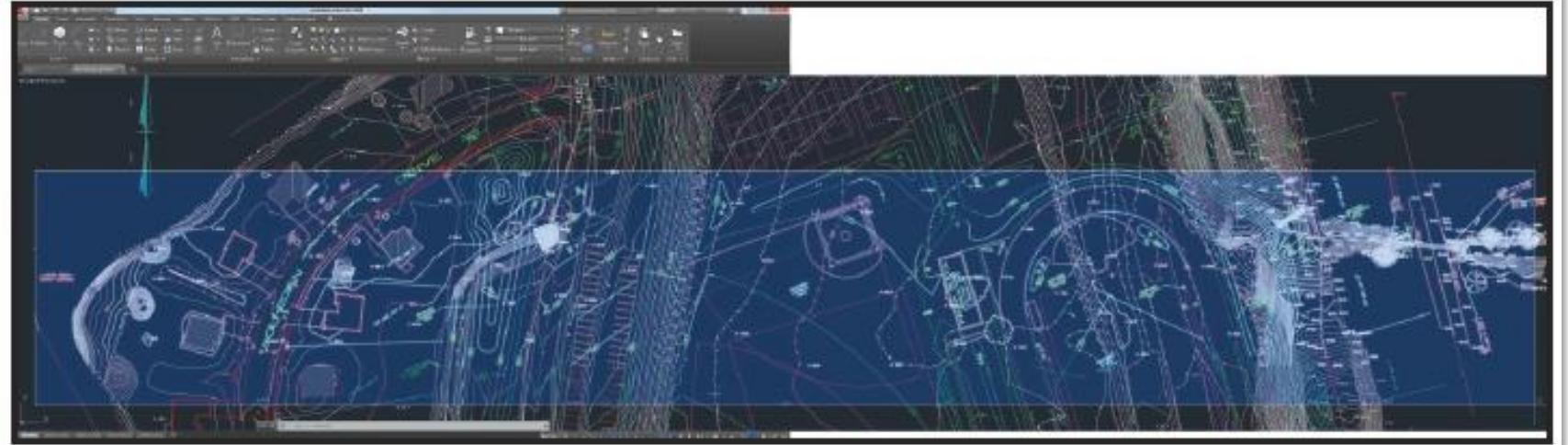
Interface Tools 2

- 1. Status Bar 1** – use the “hamburger” button to add tools to the status bar
- 2. Status Bar 2** – the status will automatically go to 2 lines if there are more tools
- 3. System Variables** – can be reset to preferred values (SYSVARMONITOR)



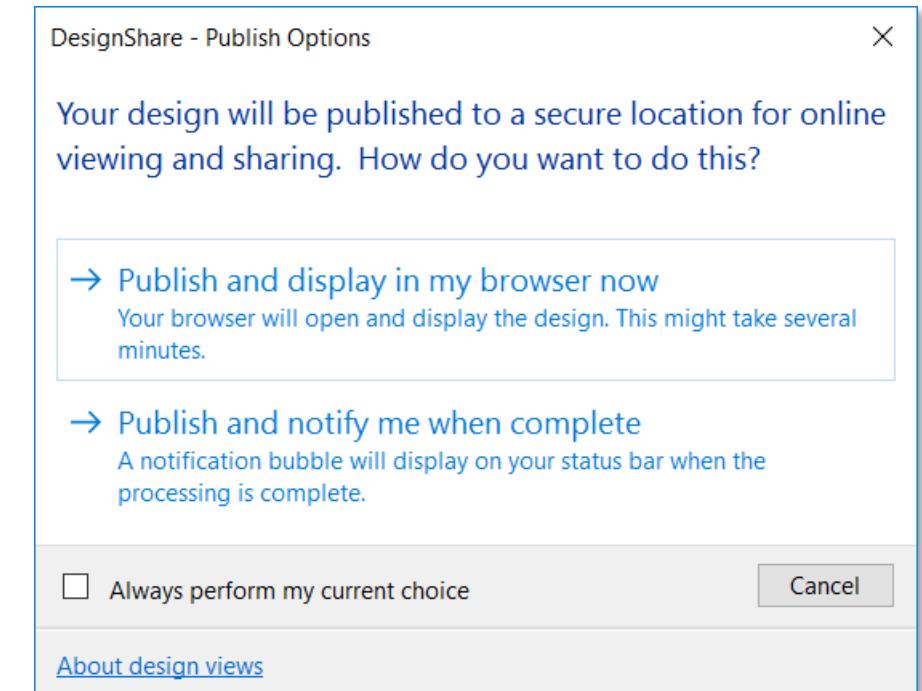
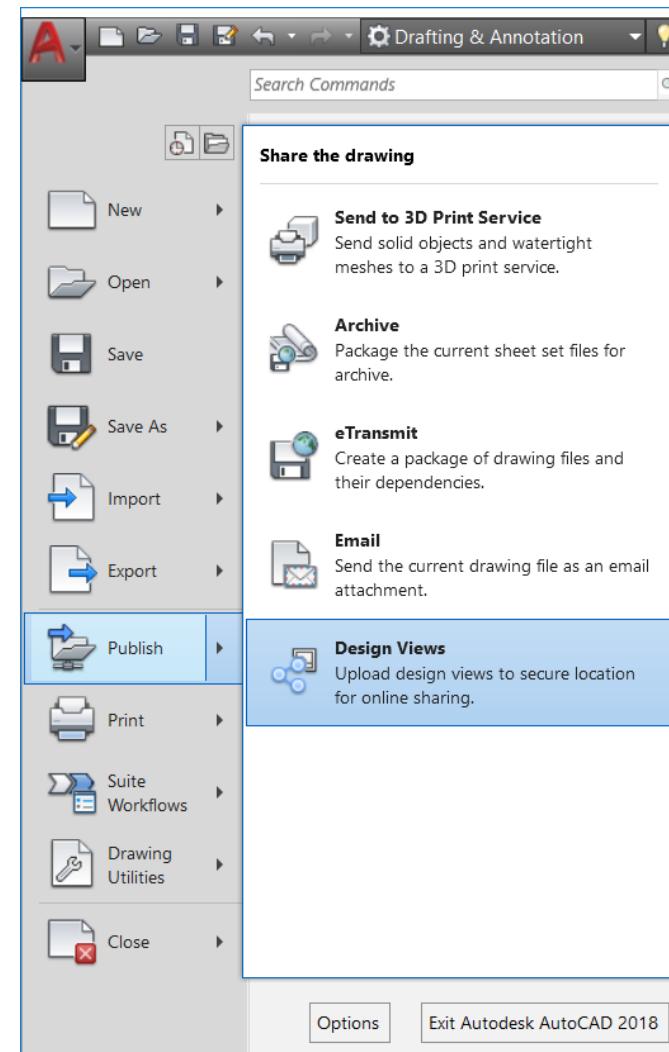
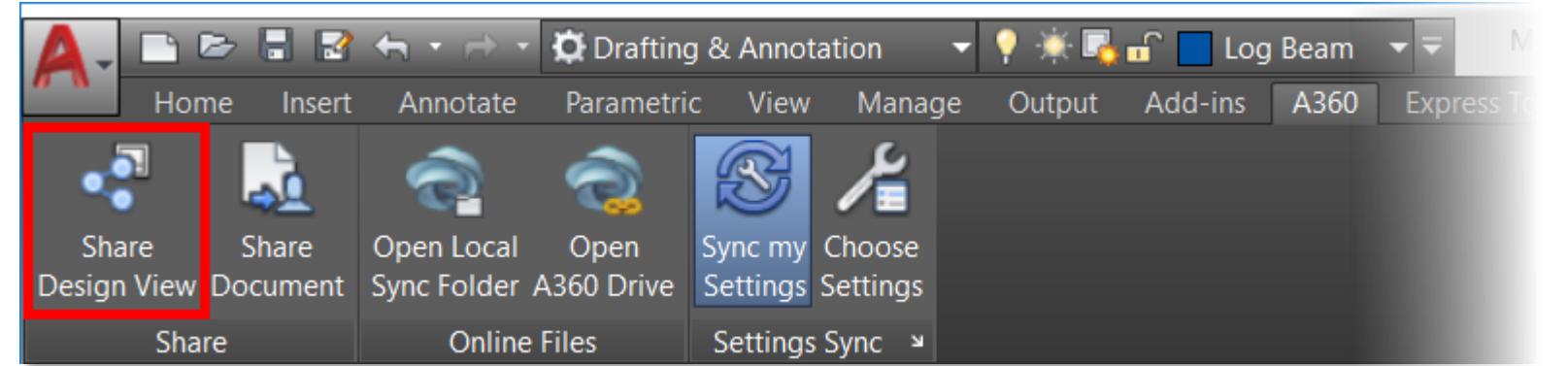
Selecting Objects

- 1. Off Screen Selection** – use the `SELECTIONOFFSCREEN` variable (set to 1). Great for those longer drawings!
- 2. Snapping to gaps** – don't you just hate clicking on a gap in a dashed line? Use `LTGAPSELECTION` to solve it!
- 3. Can't DELETE?** – check that pesky `PICKFIRST` variable!



Share Design View

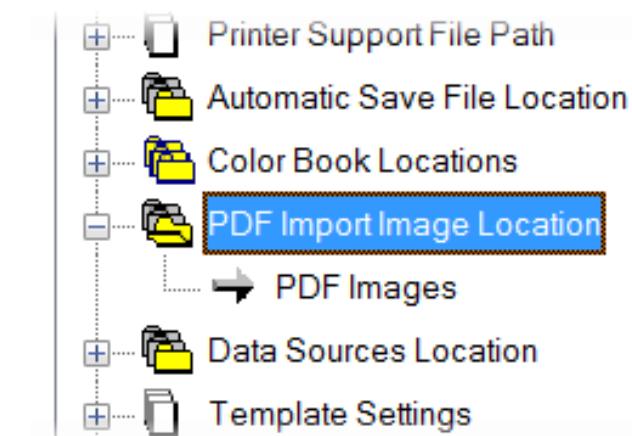
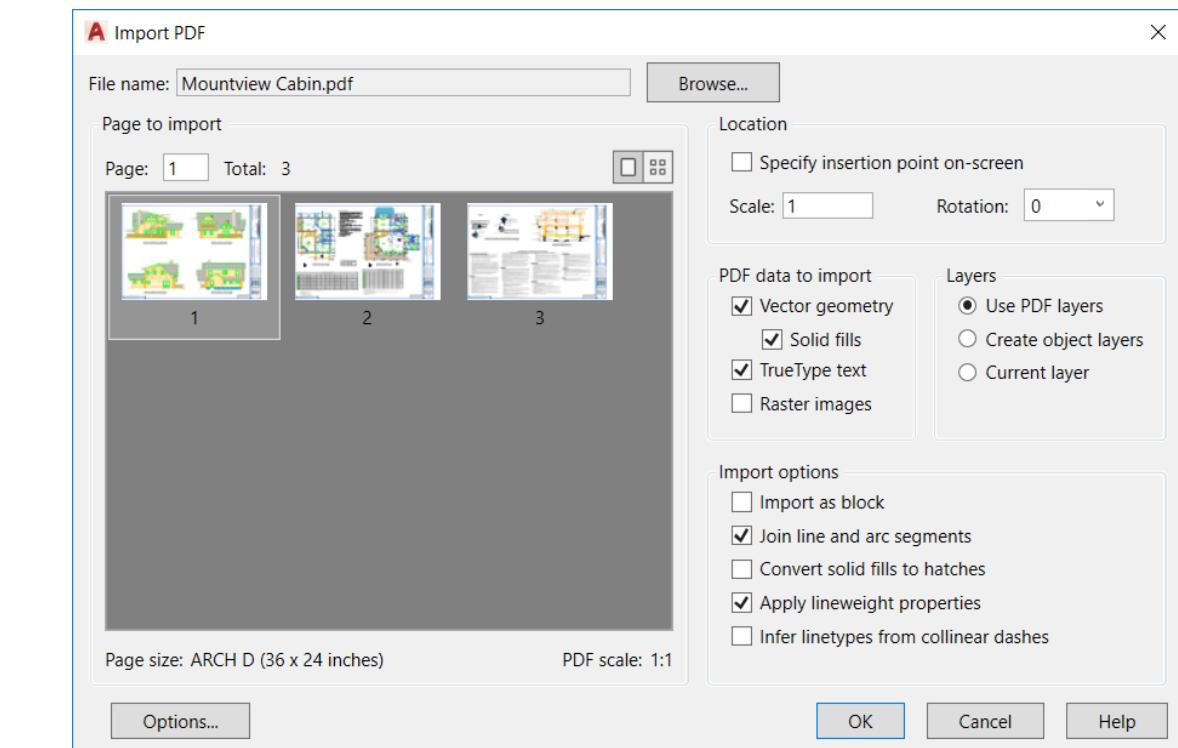
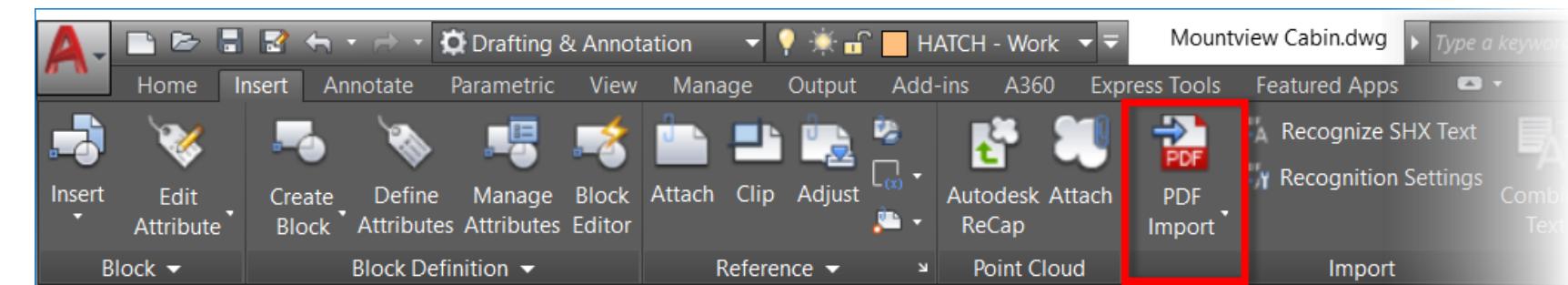
1. Autodesk ID – you must be signed in to share!
2. Application Menu – look under Publish to find Design Views
3. A360 Tab – look in the Share panel in the A360 tab on the AutoCAD 2018 ribbon
4. Browser – you can publish immediately or be notified when the shared design is ready



PDF Enhancements

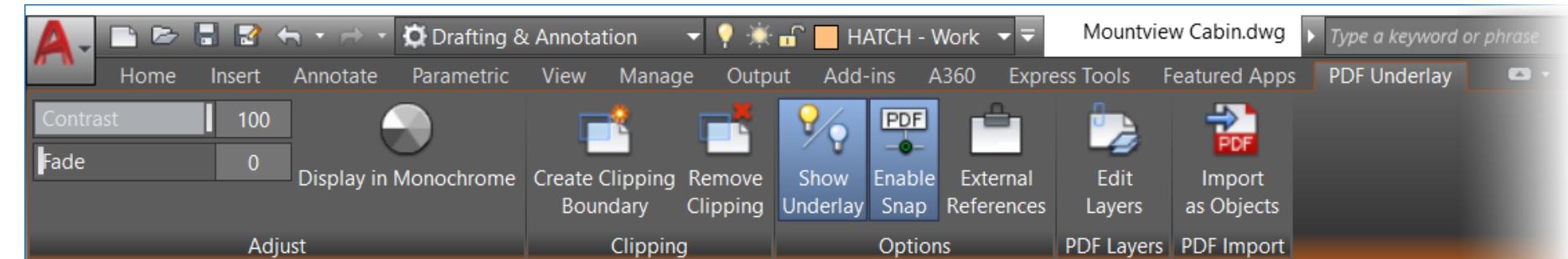
Importing PDF Files

1. **PDF Import tool** – use PDF Import on the Insert ribbon tab (it's also on the Application Menu)
2. **Choose a page** – define scale, rotation, insertion point and what data you want to import
3. **Raster images** – imported as PNG files. You can specify where they go in the Options dialog box (Files tab)

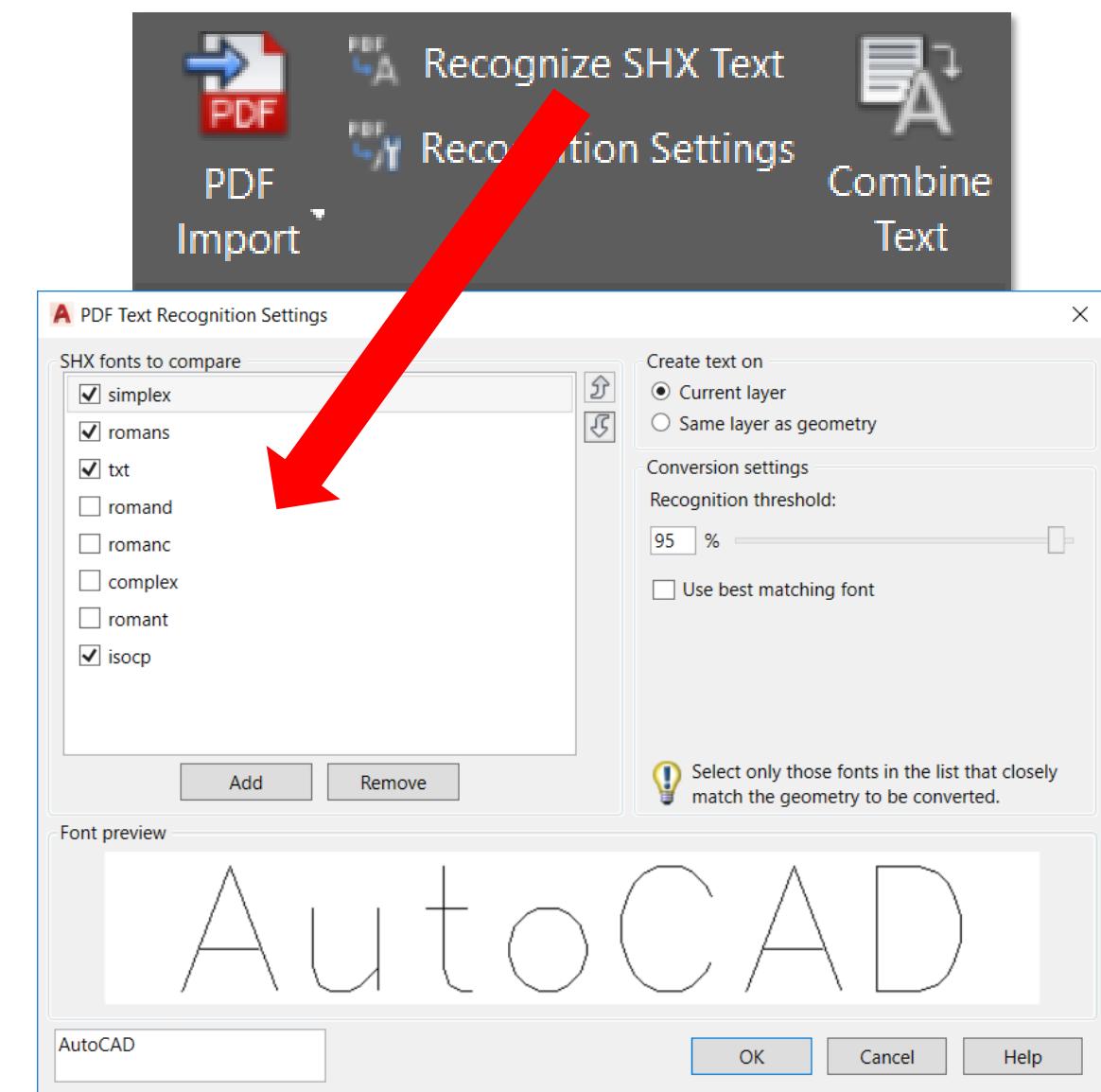


PDF Underlays and Text

- 1. Importing PDF Underlays –**
The PDFIMPORT command offers you the option of selecting an existing PDF underlay (contextual PDF Underlay ribbon tab)

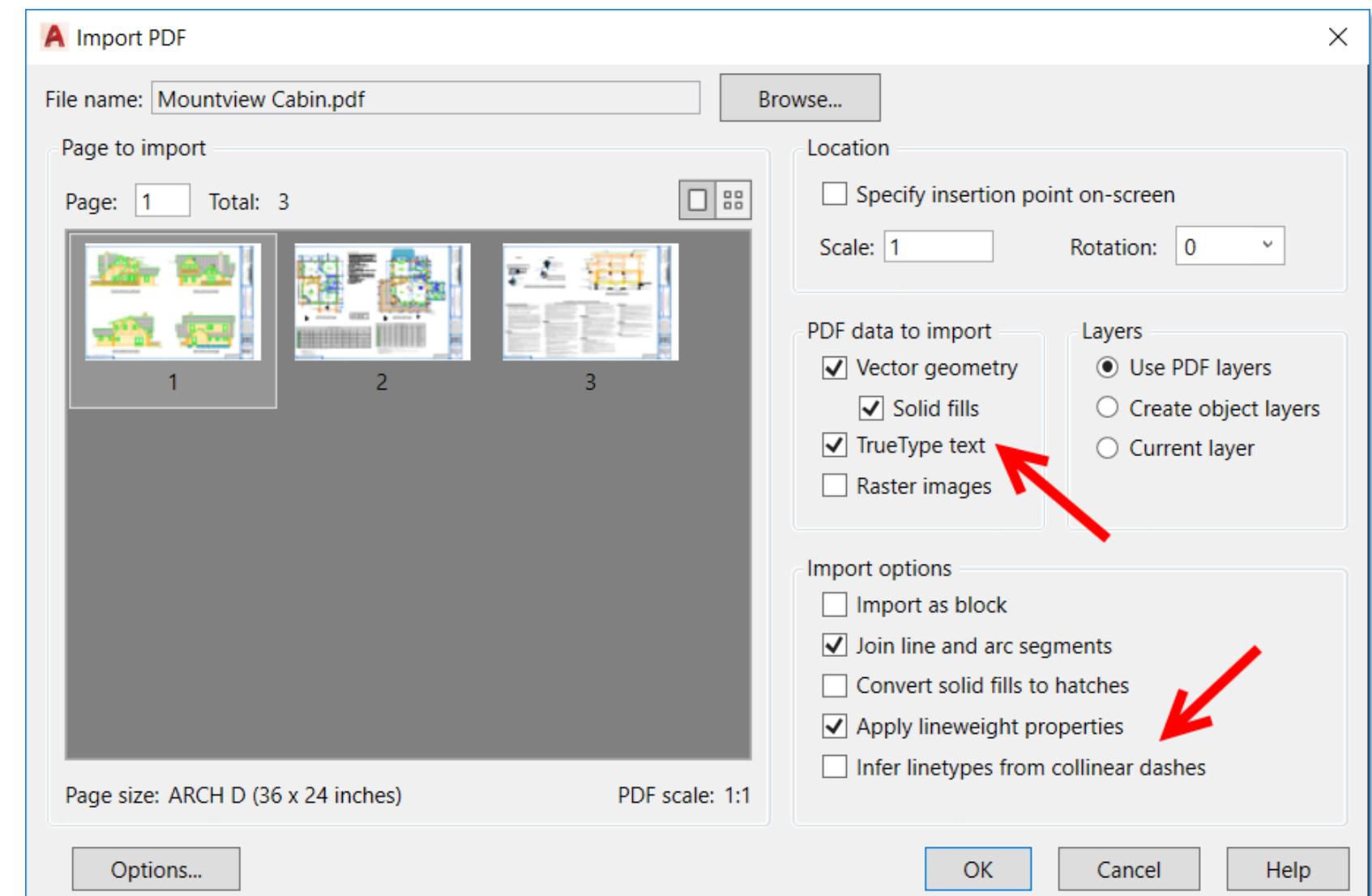


- 2. SHX Text Recognition –** PDF does not recognize SHX text, so it comes out as AutoCAD objects, this is where PDFSHXTEXT comes in!



Linetypes and Text

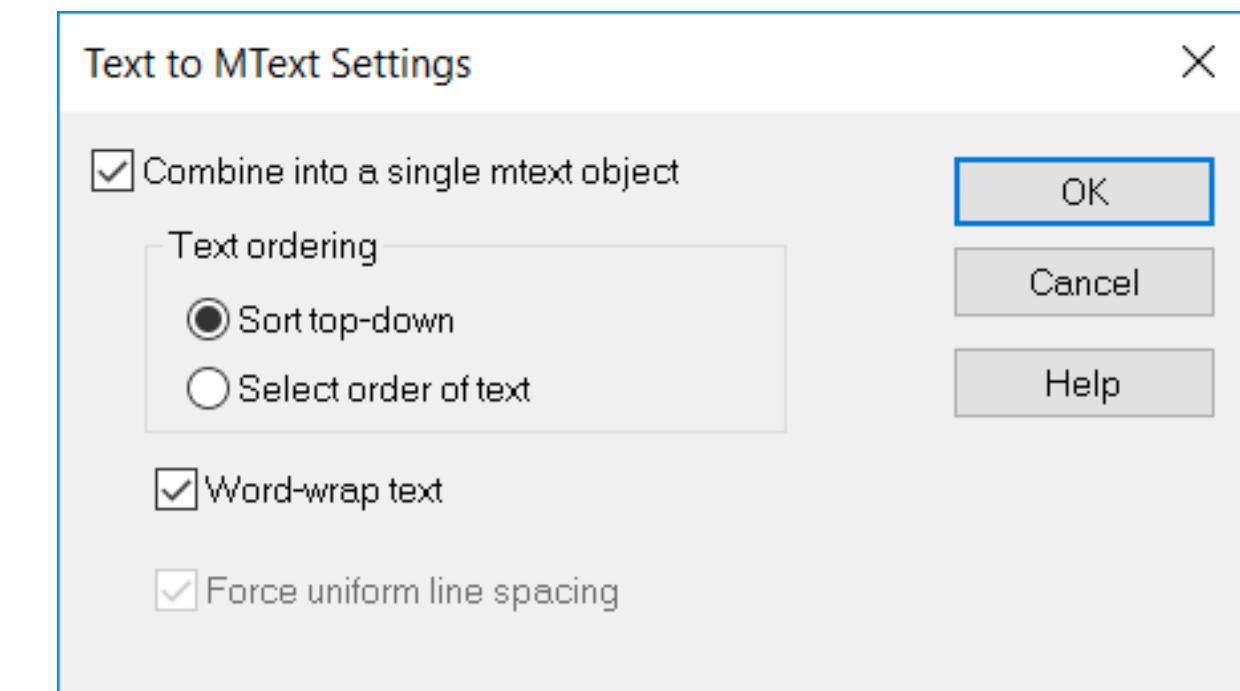
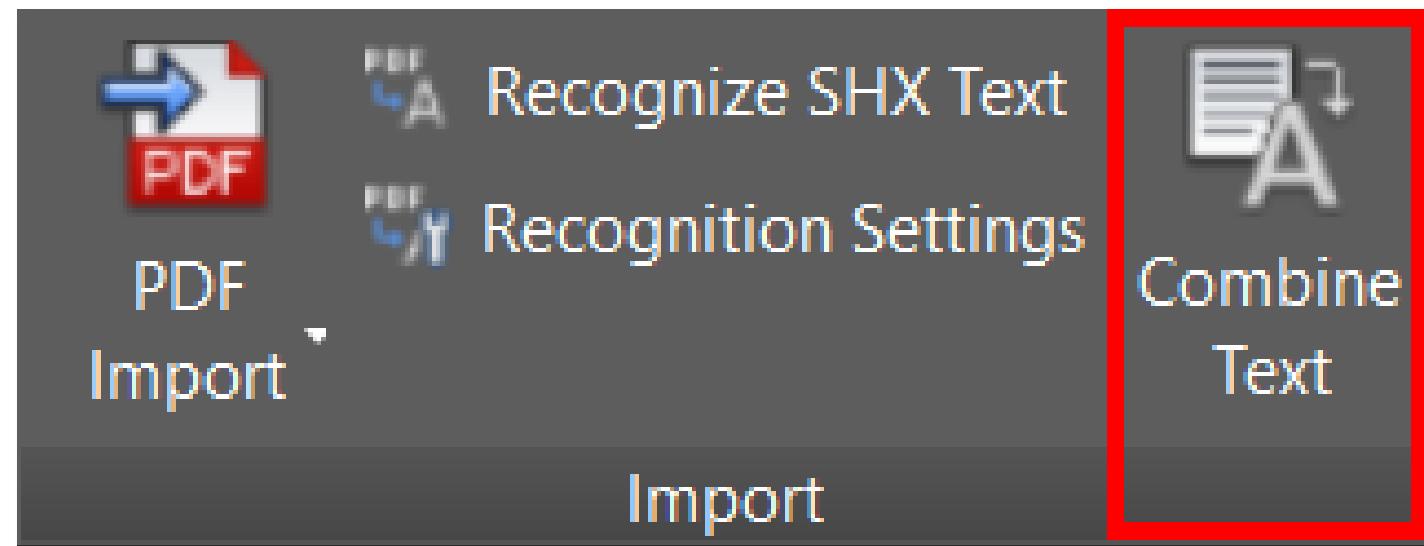
- 1. Infer Linetypes from Collinear Dashes** – AutoCAD will look at dashes and dots and replace with a polyline. If unchecked, EVERY dash and dot will be a polyline (ouch)!
- 2. Linetypes** – AutoCAD creates a linetype called PDF_Import
- 3. Text** – TrueType fonts come in as regular text objects, but SHX fonts are not recognised (but don't worry)!



Combining Text

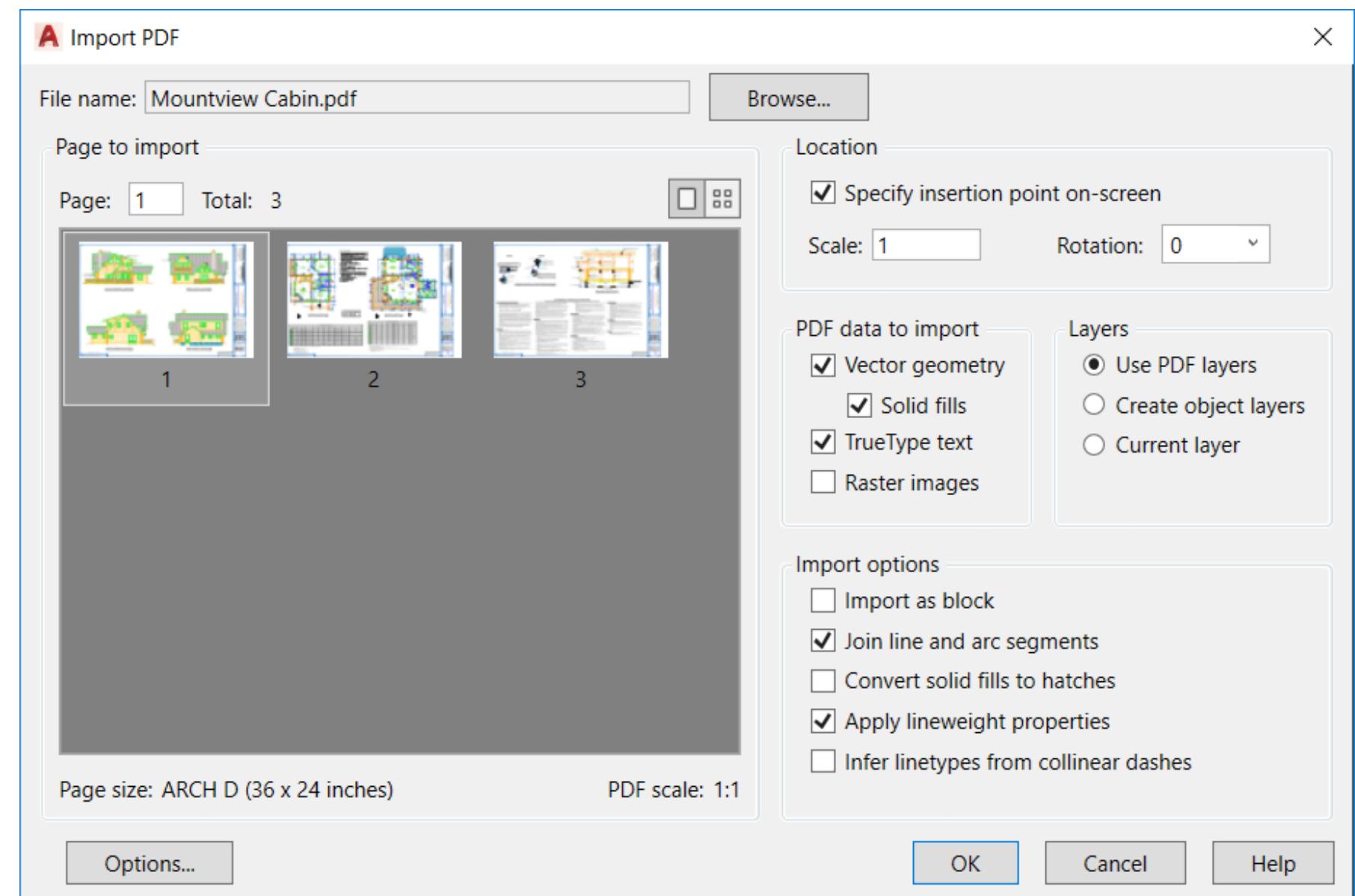
1. Combining Text With

TXT2MTXT – After converting the SHX text from the PDF to mtext, use the **TXT2MTXT** command to group individual mtext objects in to one group of mtext. Originally an Express Tools command, it is now on the Import panel. Check out the “Force uniform line spacing” option!



Other PDF Enhancements

- 1. Thumbnail Previews** – We now get thumbnail previews in the PDFIMPORT and PDFATTACH dialogs
- 2. Improved Scaling** – better scaling of PDF geometry from layouts
- 3. Better data** – Improved form data from importing PDFs

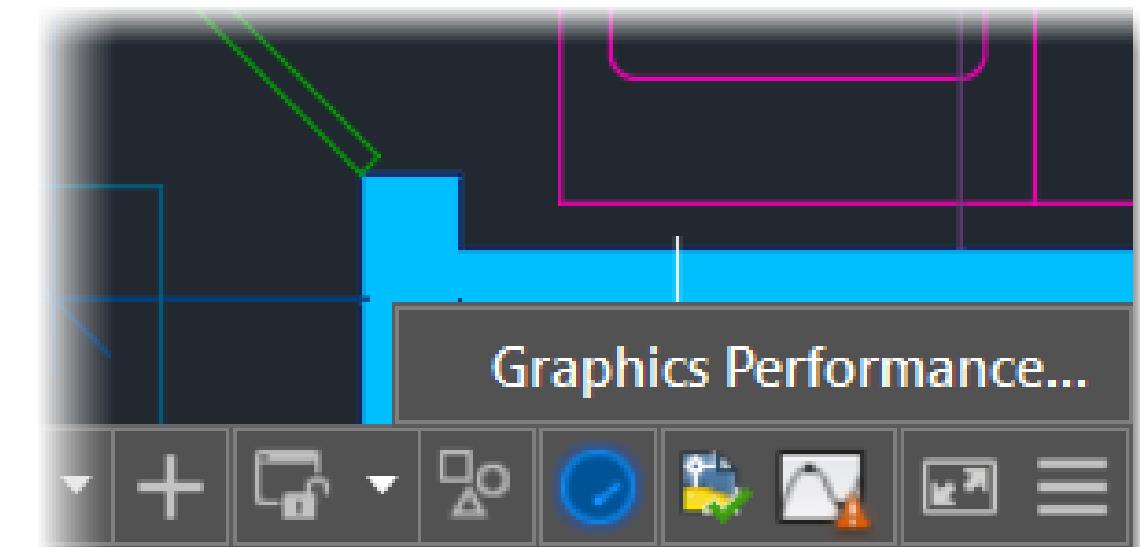
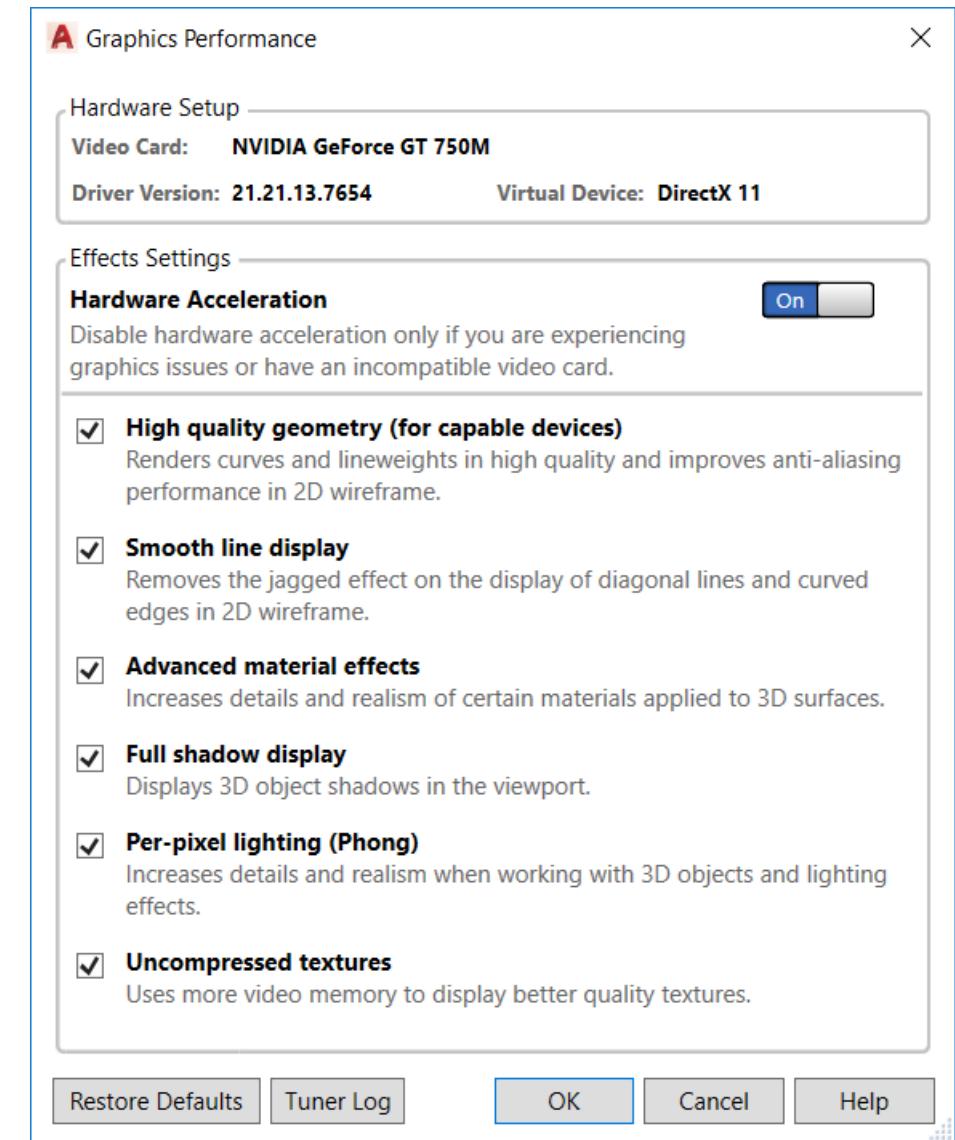


The background features a complex, organic geometric pattern composed of numerous thin, light gray lines forming a mesh of triangles and irregular polygons. This pattern is set against a solid white background. A solid blue horizontal band runs across the middle of the image. The text is positioned on this blue band.

Technology & Performance Updates

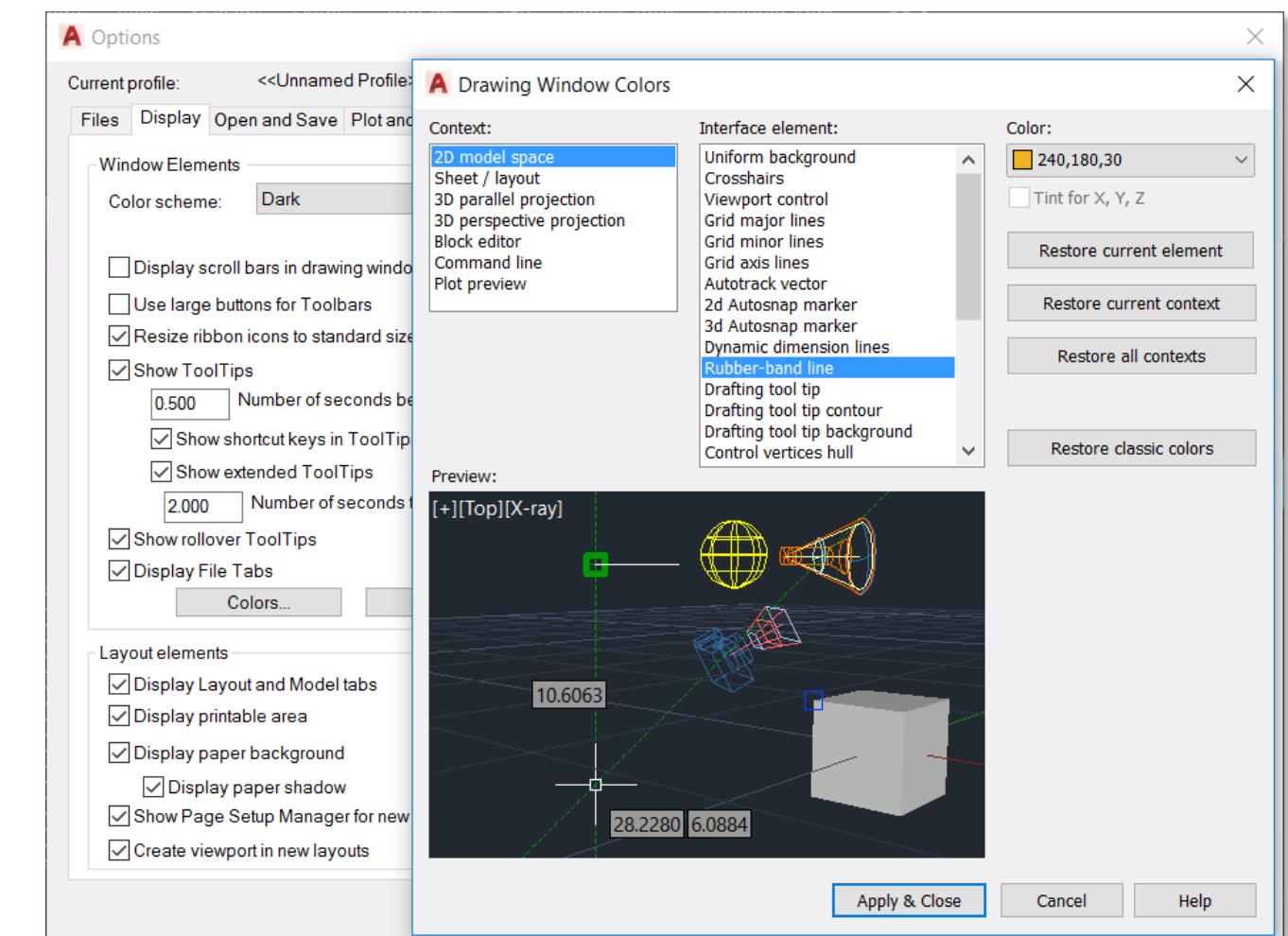
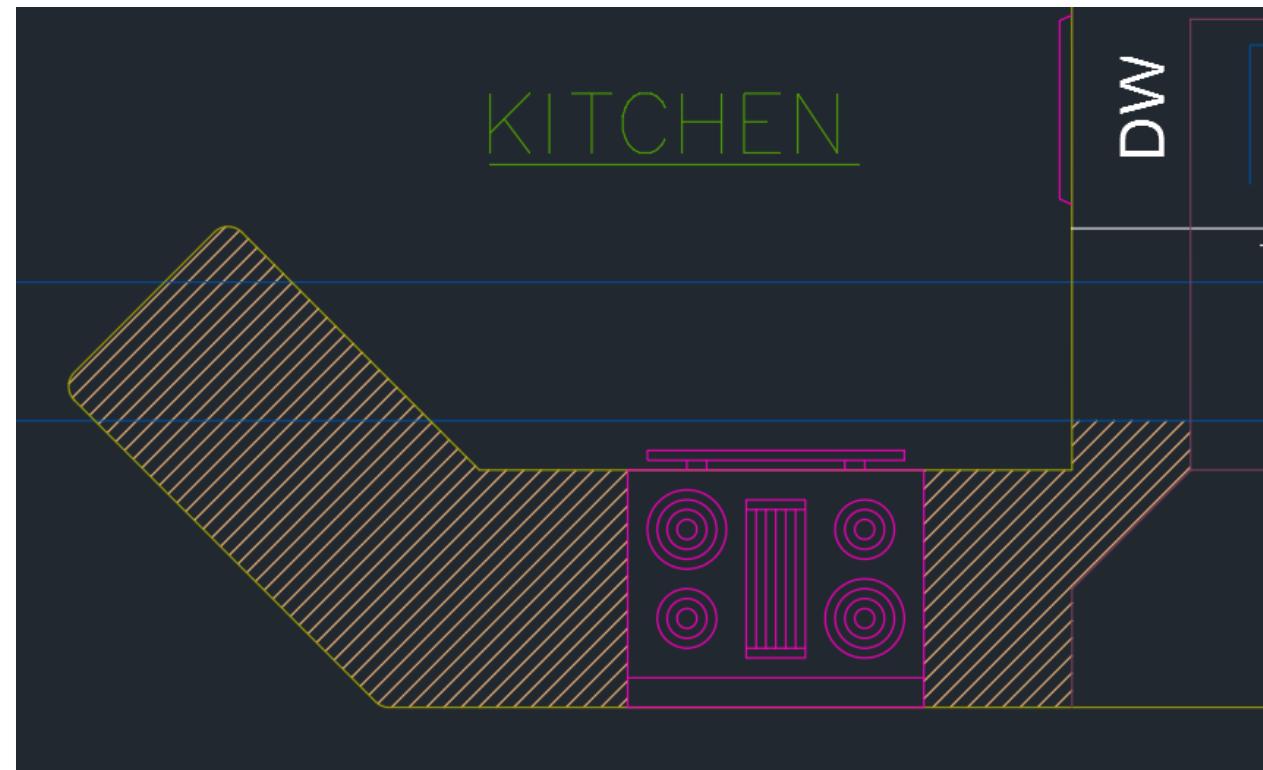
Graphics Performance

1. **Graphics Card** – you will need a DirectX 11 card with hardware acceleration ON!
2. **Graphics Performance** – it's on the status bar bottom right (GRAPHICS CONFIG)
3. **Line Fading** – can be controlled by LINEFADING set to 1
4. **Line Fading Level** – control amount of line fade with LINEFADINGLEVEL



Other Graphics Stuff

1. **Parallel Hatches** – you will find these have a more consistent line spacing, graphically
2. **Rubber Band Line Colour** – it's the line that appears when moving or copying objects. It's controlled in your **OPTIONS** dialog box in the **Display** tab
3. **Generally**, the 2D and 3D graphics performance have been improved in AutoCAD 2018

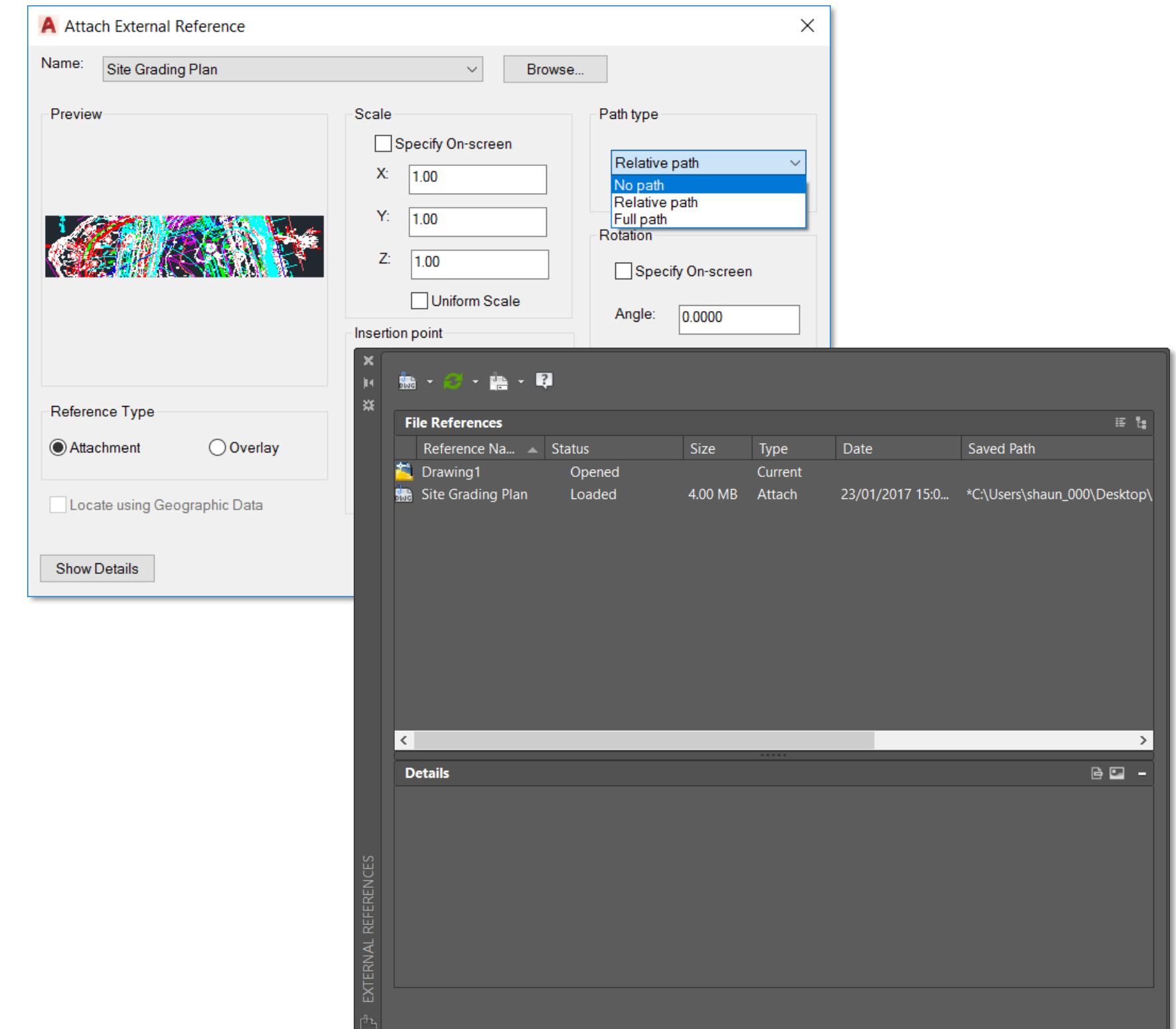


External References (XREFs)

Reference Paths

1. Default Path Type – Default

XREF path is now set to Relative. You can also set REFPATHTYPE = 0 for no path, 1 for Relative and 2 for Full Path

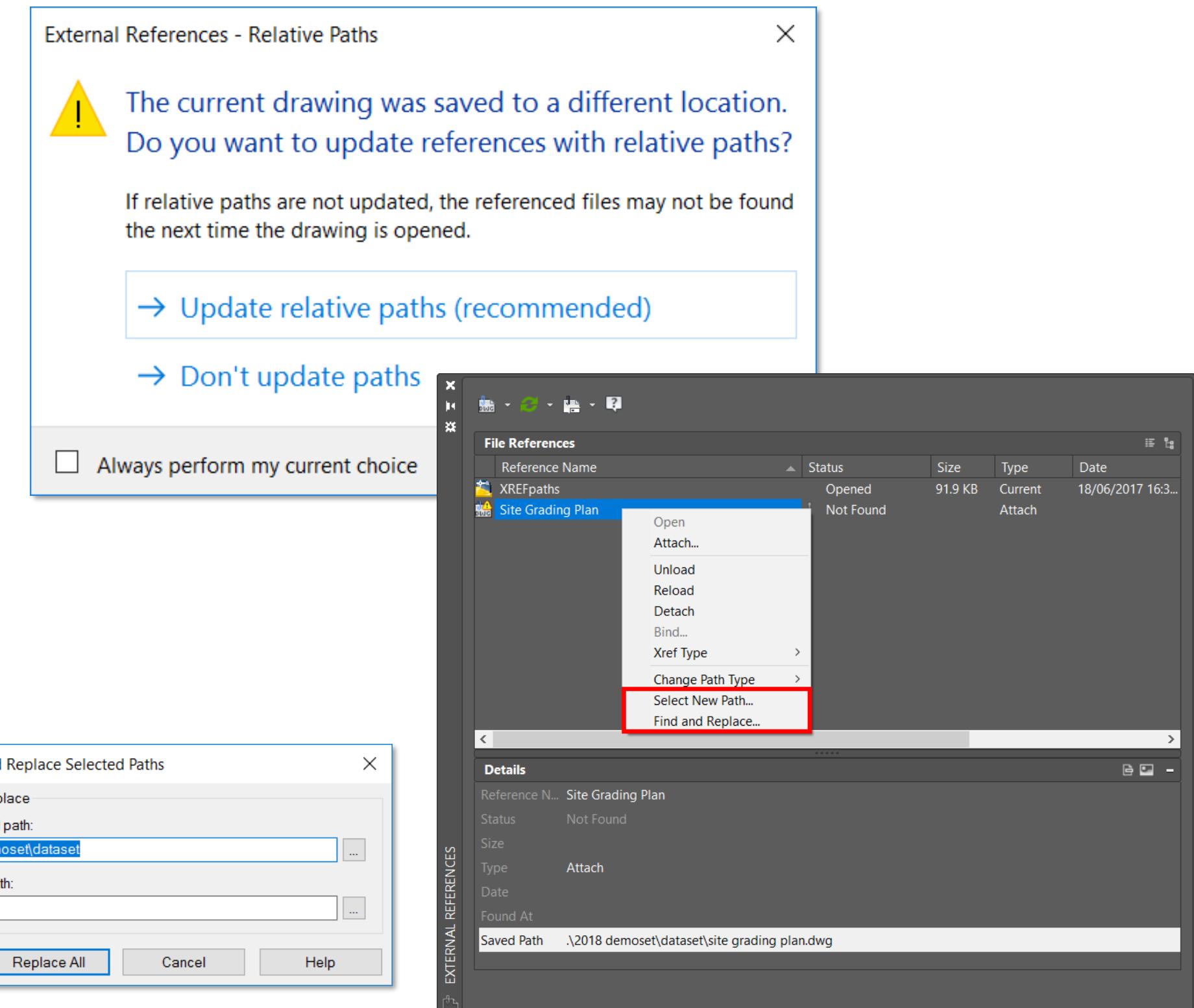


2. Unnamed Host Drawing – You can now add an XREF to an unnamed or unsaved host drawing

Broken Reference Paths 1

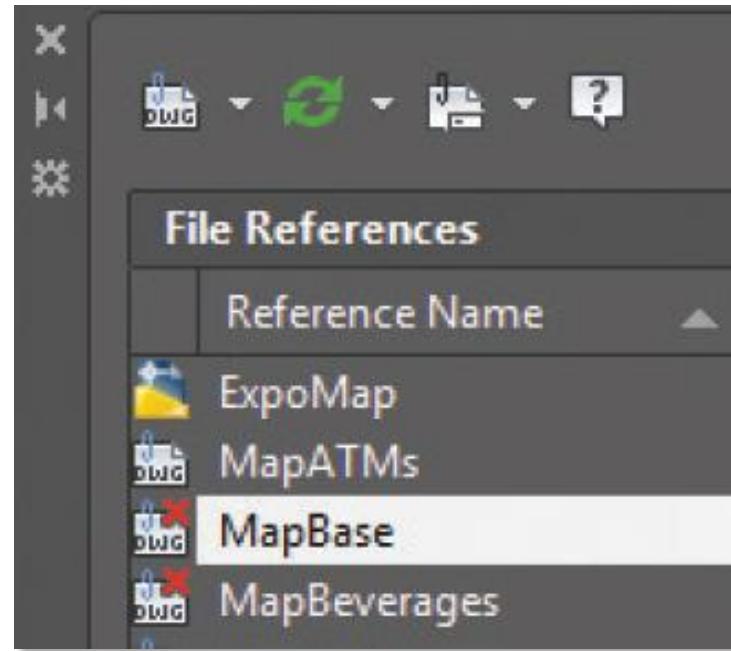
1. **Relative References** – if you have relative XREFs in the current drawing and you save the host drawing to a new location, you are prompted to update the relative XREF locations

2. **Changing Paths** – You can now select a new XREF path or Find and Replace the XREF. You can apply this to ALL missing XREFs!

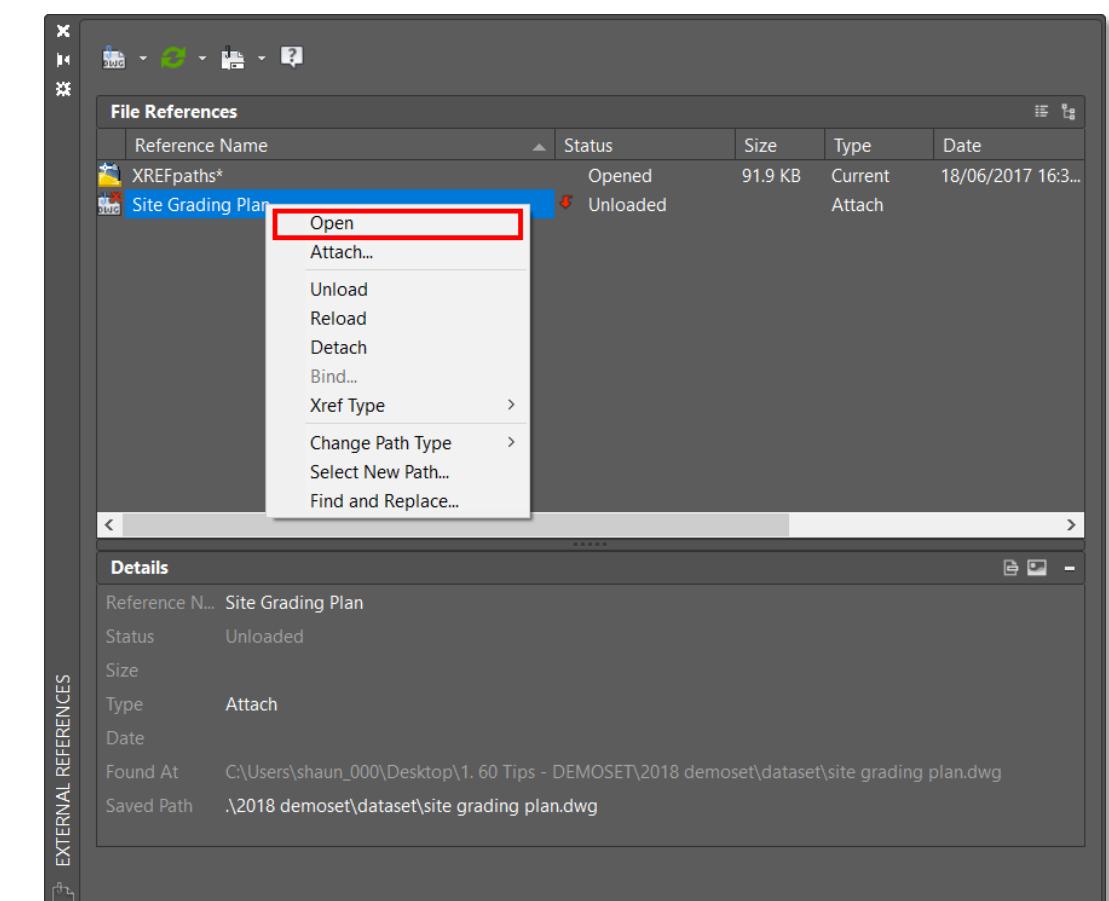


Broken Reference Paths 2

- 1. Child References – Nested**
(child) references now display as Orphaned (poor) references if the Parent reference is Unloaded or Not Found

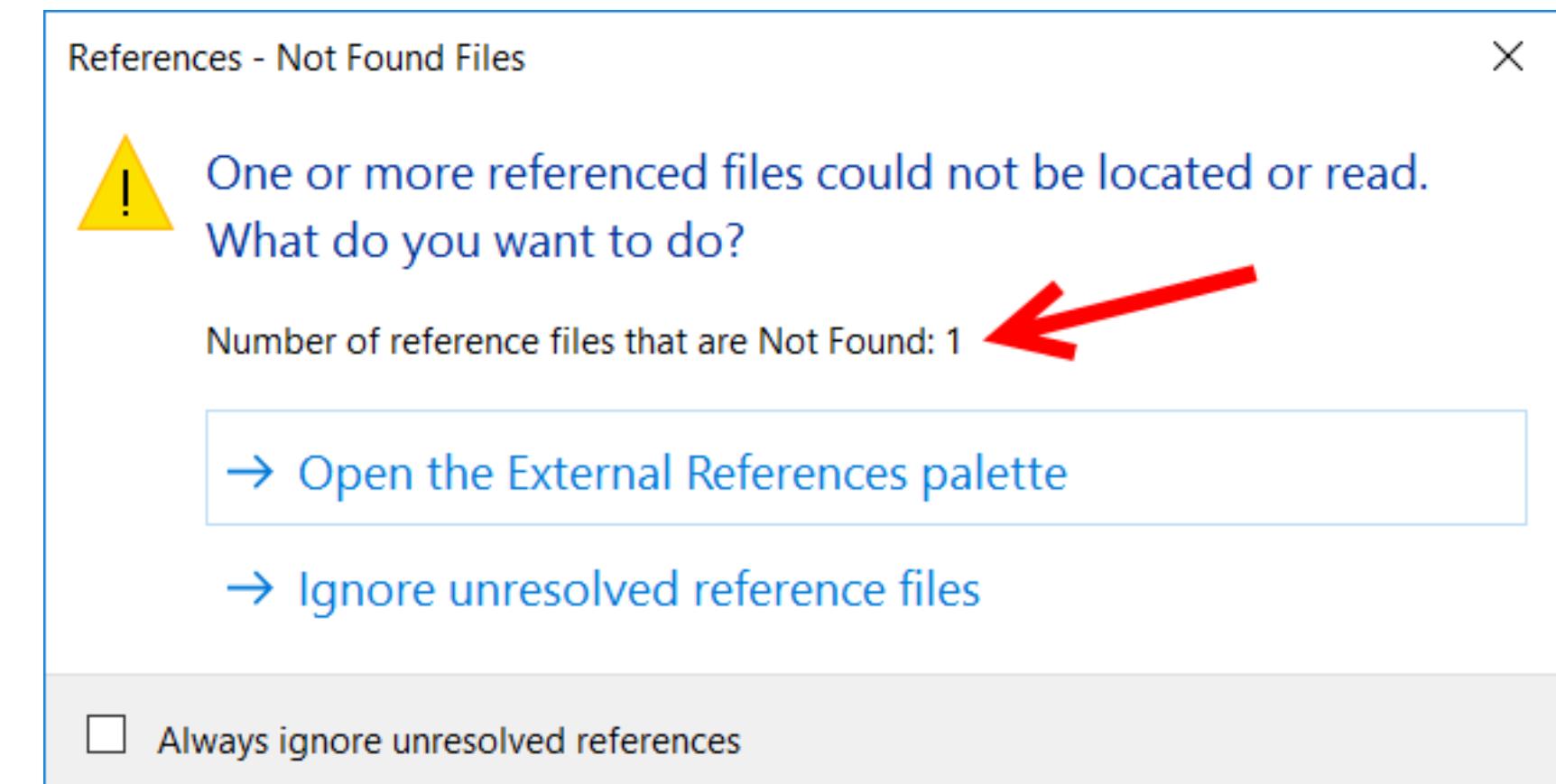


- 2. Opening Unloaded XREFs –**
You can now open an XREF that isn't loaded in the host drawing



Less Stress

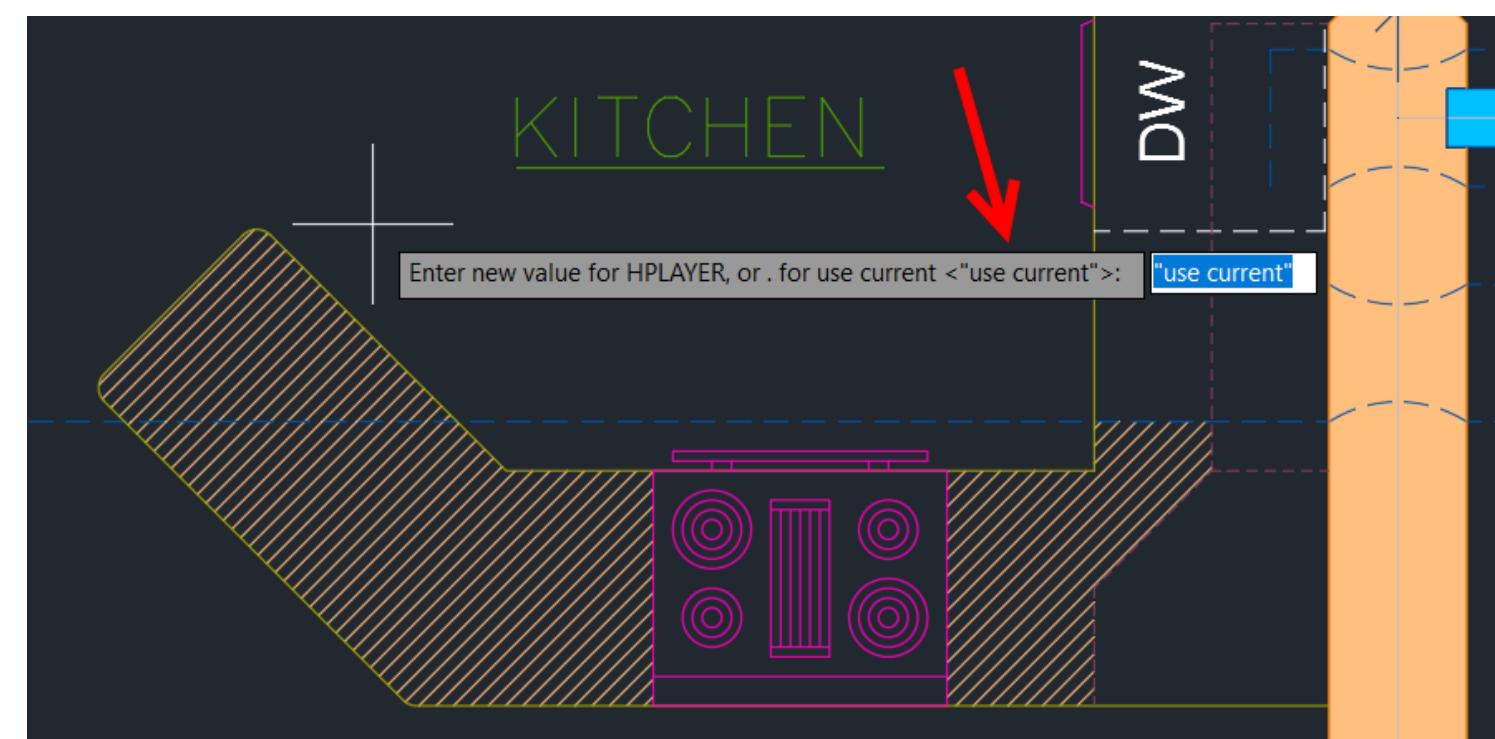
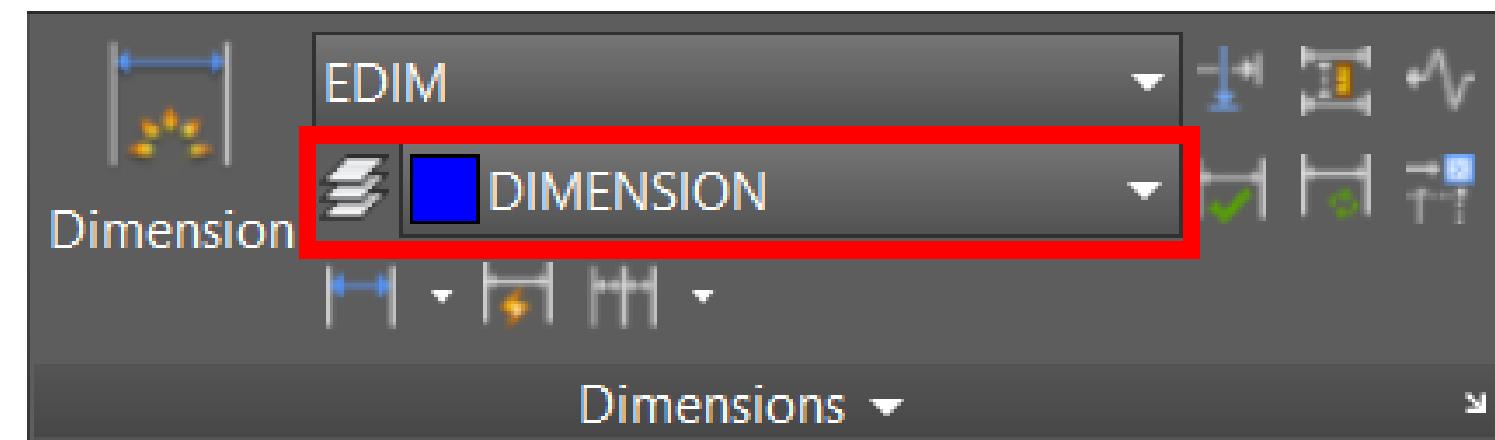
1. **Less Stressful Syntax** – We all know the dreaded “Missing number of reference files” warning, right? It makes them sound like they should be on a milk carton (American joke, lol). Well, now the statement is softer, saying “Number of reference files that are Not Found” (so there is a little bit of hope)!



Annotation

Dimensions and Hatching

- 1. Default Dimension Layer** – Set a default dimension layer with the DIMLAYER variable
- 2. Hatch Layer** – You can now set a default hatch layer using the HPLAYER system variable. You can specify a non-existing layer and HPLAYER will create it for you!



Associative Centerlines and Center Marks

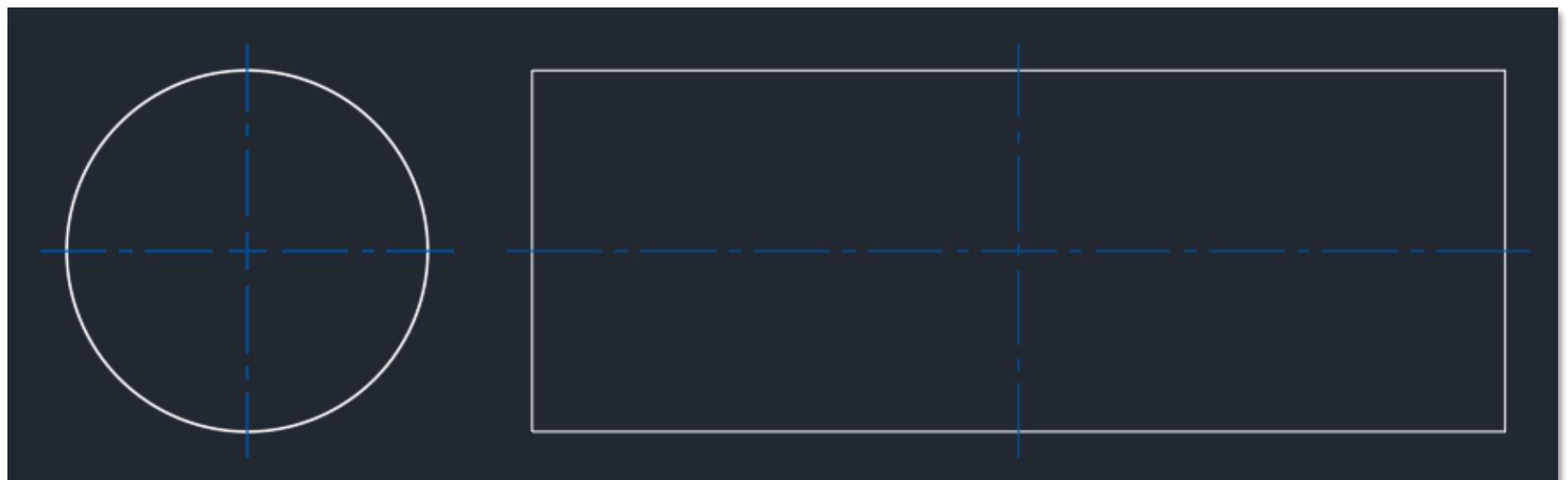
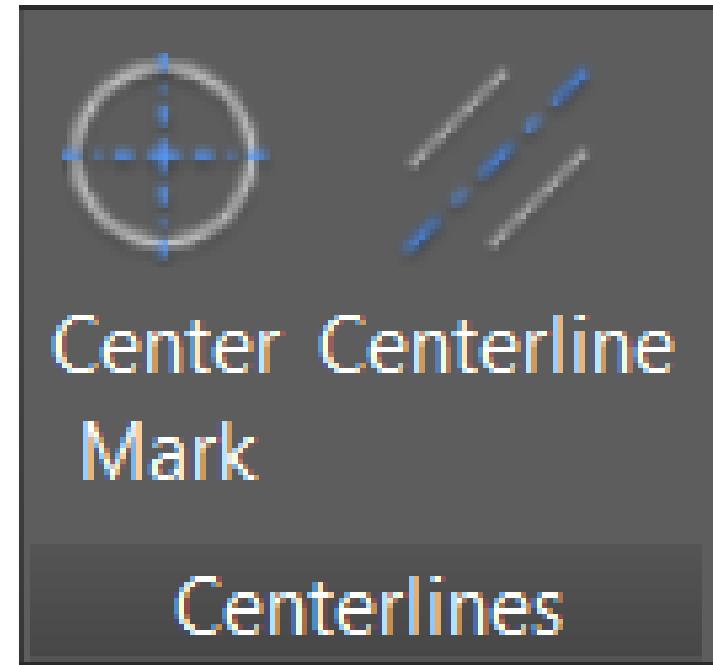
1. **Moving and Scaling** – If you move or scale an object with associative centerlines or center marks they update accordingly!

2. **CENTERDISASSOCIATE** –

Disassociates centerlines and center marks from their associated objects

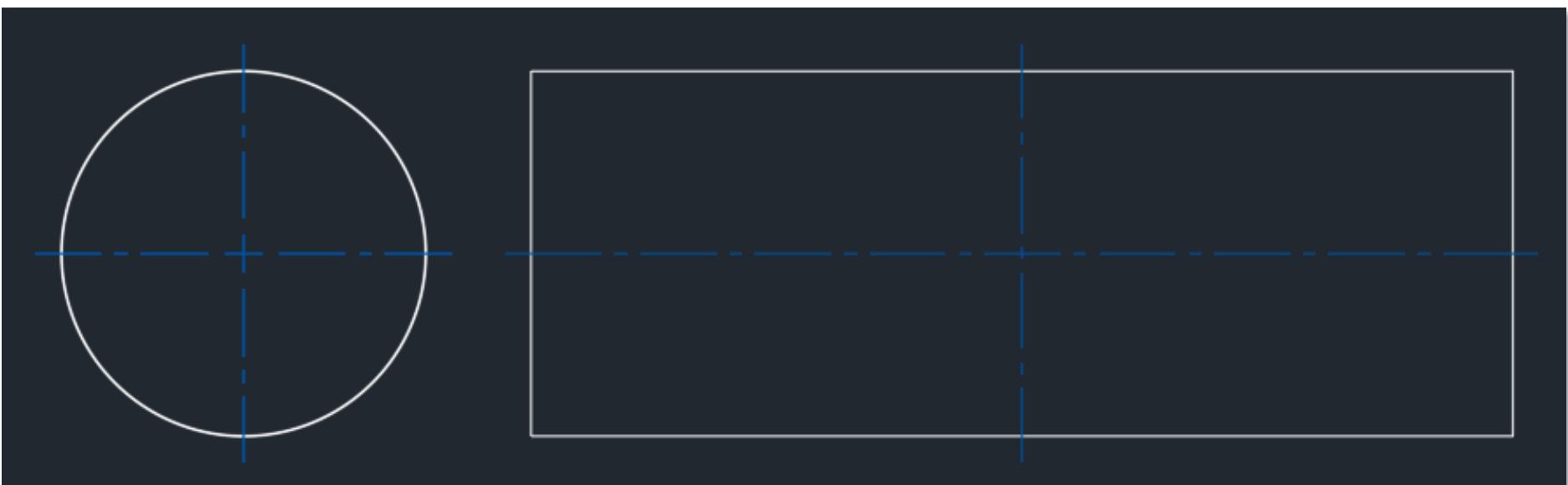
3. **CENTERREASSOCIATE** –

Reassociates centerlines and center marks with their associated objects



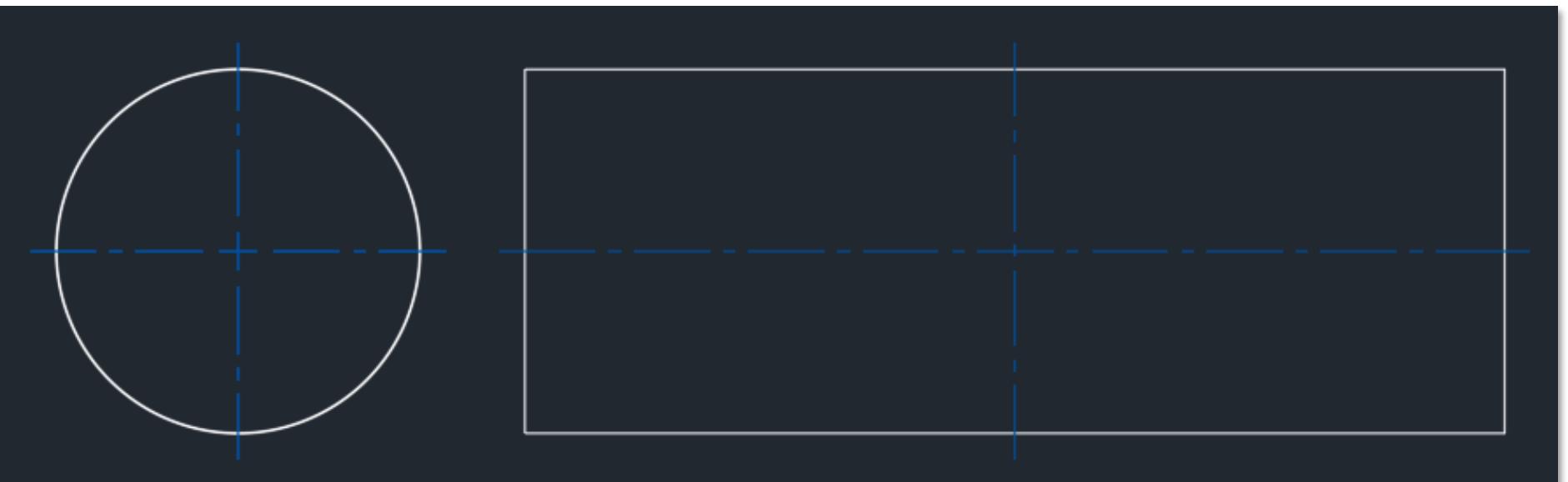
Centerlines and Center Marks – VARIABLES 1

1. **CENTEREXE** – Controls the length the extension line overshoots
2. **CENTERMARKEXE** – Determines if extension lines are created (center marks)
3. **CENTERRESET** – Resets extensions lines to value set in CENTEREXE
4. **CENTERLTSCALE** – Sets the LTSCALE for the centerlines and centermarks



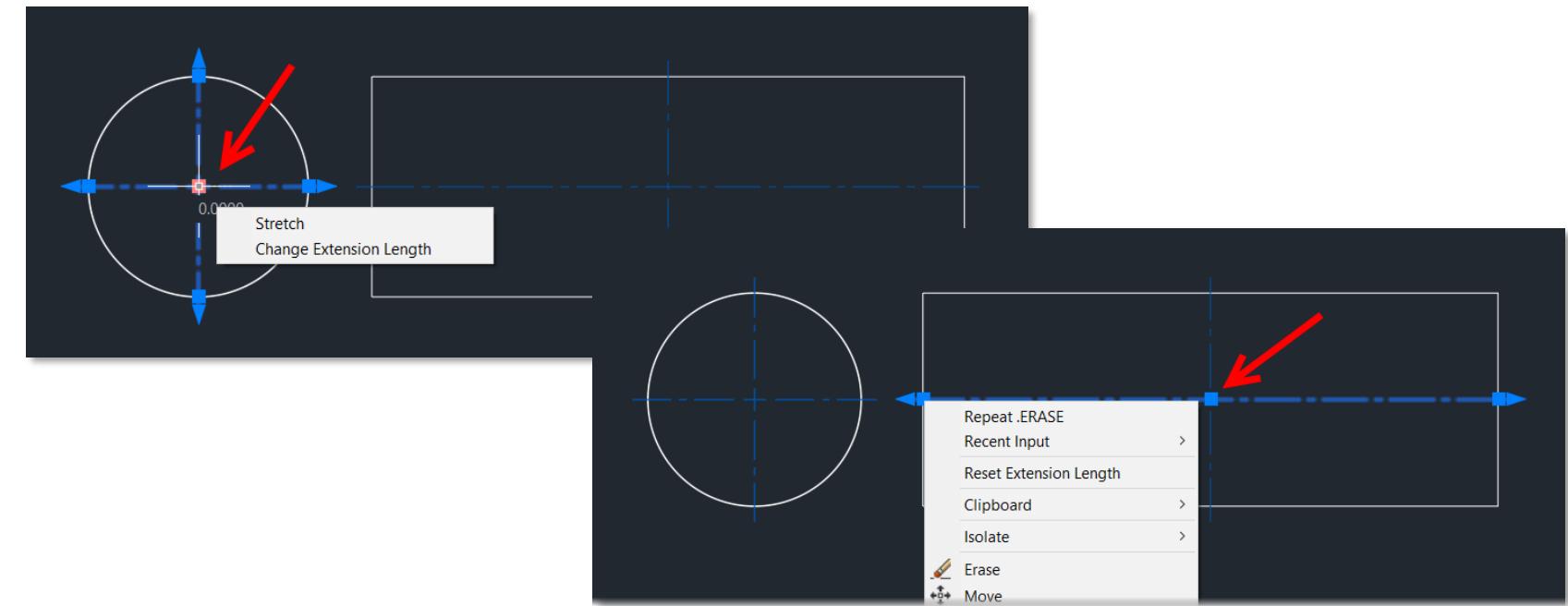
Centerlines and Center Marks – VARIABLES 2

1. **CENTERLTYPE** – Controls the linetype of the centerlines and center marks
2. **CENTERLAYER** – defines the layer of the centerlines and center marks
3. **CENTERCROSSSIZE** – Sets the size of the central cross (center marks)
4. **CENTERCROSSGAP** – Defines the gap between the central cross and the extension line (center marks)

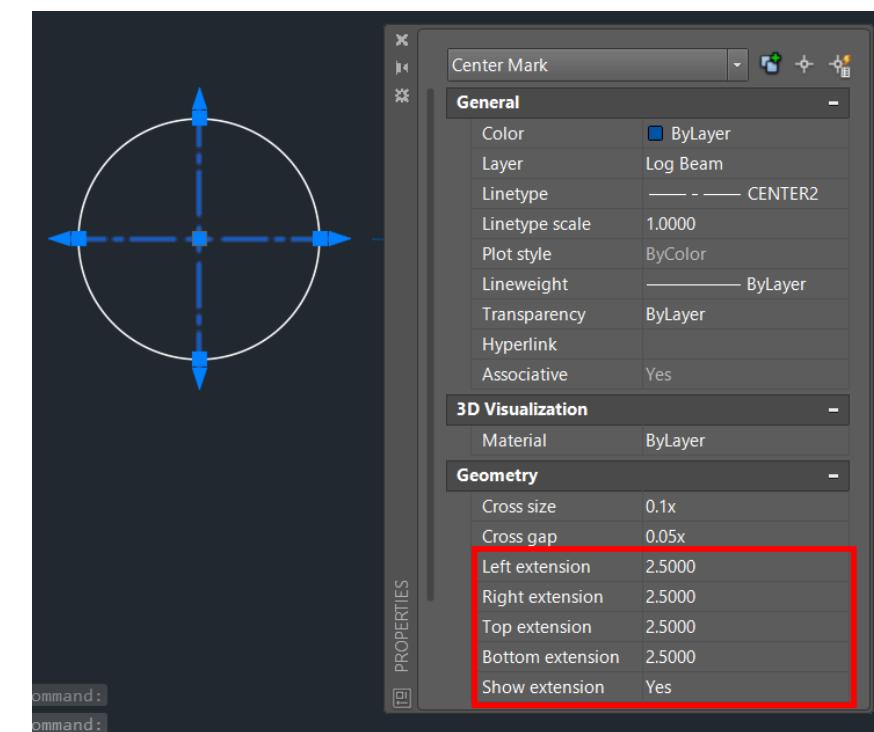


Centerlines and Center Marks – VARIABLES 2

1. **Grips** – Use the grip controls to resize and change the extension length on both centerlines and center marks



2. **Properties** – The extension line overshoots can also be controlled in the Properties Palette for both centerlines and center marks

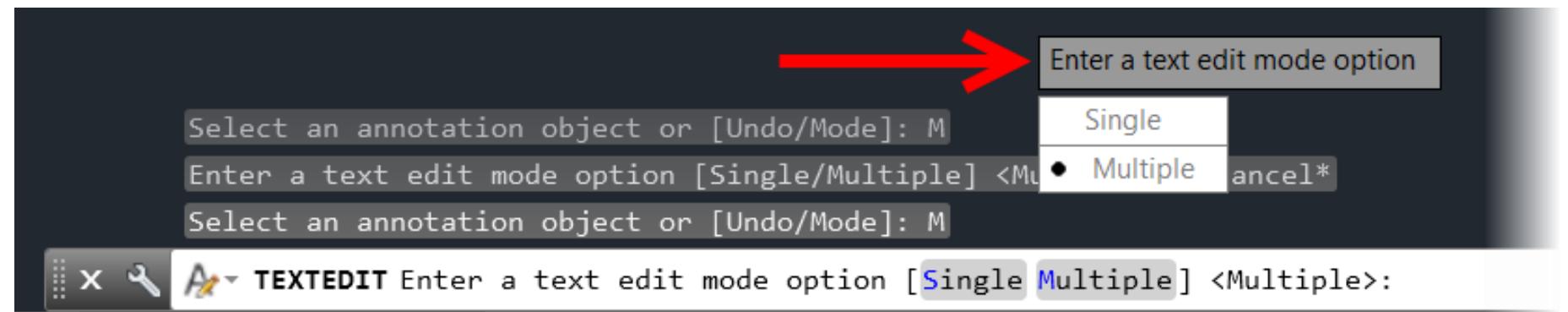


Text Editing (TEXTEDIT)

1. Mode – Use the TEXTEDIT mode control (Single/Multiple) to edit either single lines of text or multiple lines of text.

Saves on hitting Enter all the time!

2. Undo – Use the TEXTEDIT Undo option to undo text editing. If you use the regular Undo when in multiple mode, you'll lose it all!



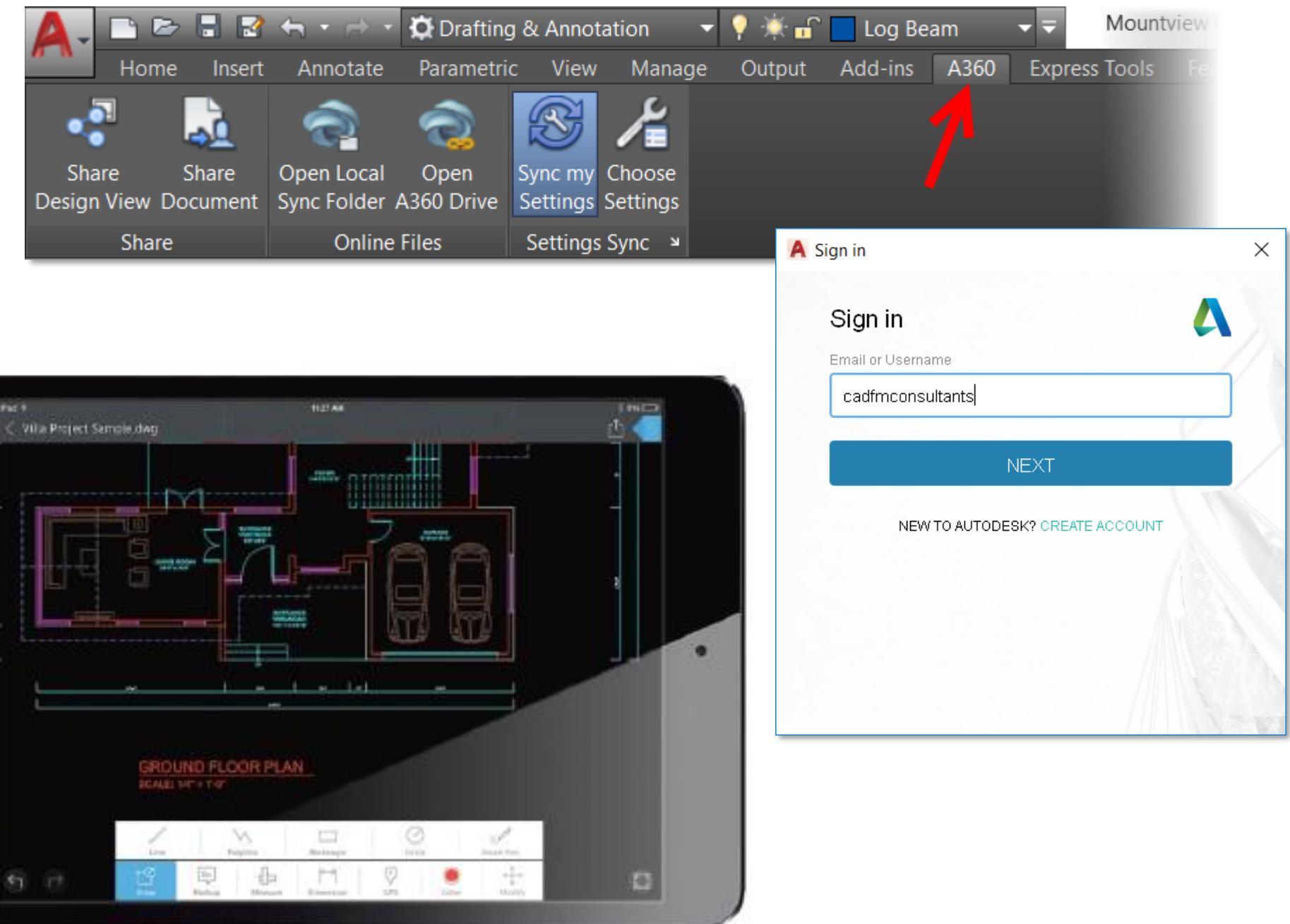
The background features a complex, organic geometric pattern composed of numerous thin, light-grey lines forming a mesh of triangles and irregular polygons. This pattern is set against a solid white background. A solid blue rectangular area is overlaid on the bottom half of the image, extending from approximately y=630 to y=1000. The text is positioned within this blue area.

A360 and the Cloud

A360 and the AutoCAD Mobile App

1. **A360 Tab** – Link AutoCAD to your cloud based A360 account using the A360 tab (an Autodesk ID is required)

2. **AutoCAD Mobile app** – Originally known as AutoCAD 360, this is a cloud and browser based version of AutoCAD to mobilise your desktop!



The background features a complex, organic geometric pattern composed of numerous thin, light gray lines forming a mesh of triangles and irregular polygons. This pattern is set against a solid white background. A solid blue rectangular area is overlaid on the bottom half of the image, extending from approximately y=630 to y=1000. The text is positioned within this blue area.

Thank you!

Lynn Allen's AutoCAD 2018 Tips & Tricks

- All of these tips and more are in Lynn Allen's Tips & Tricks booklet for AutoCAD 2018
- Stop by the AutoCAD booth (**LG-016**) for your FREE copy!



Stop by and say “Hello”!

- I will be at the AutoCAD booth when I’m not presenting classes – we’re at *Booth LG-016*
- Come and see the *AutoCAD Mobile app* in action on an iPad Pro at the booth too!
- Check out my AutoCAD classes on both *Lynda.com* (www.Lynda.com) and *LinkedIn Learning* (www.linkedin.com/learning).



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