

2015 PLS-CADD Advanced Training and User Group Meeting

Efficient Distribution Modeling

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Purpose

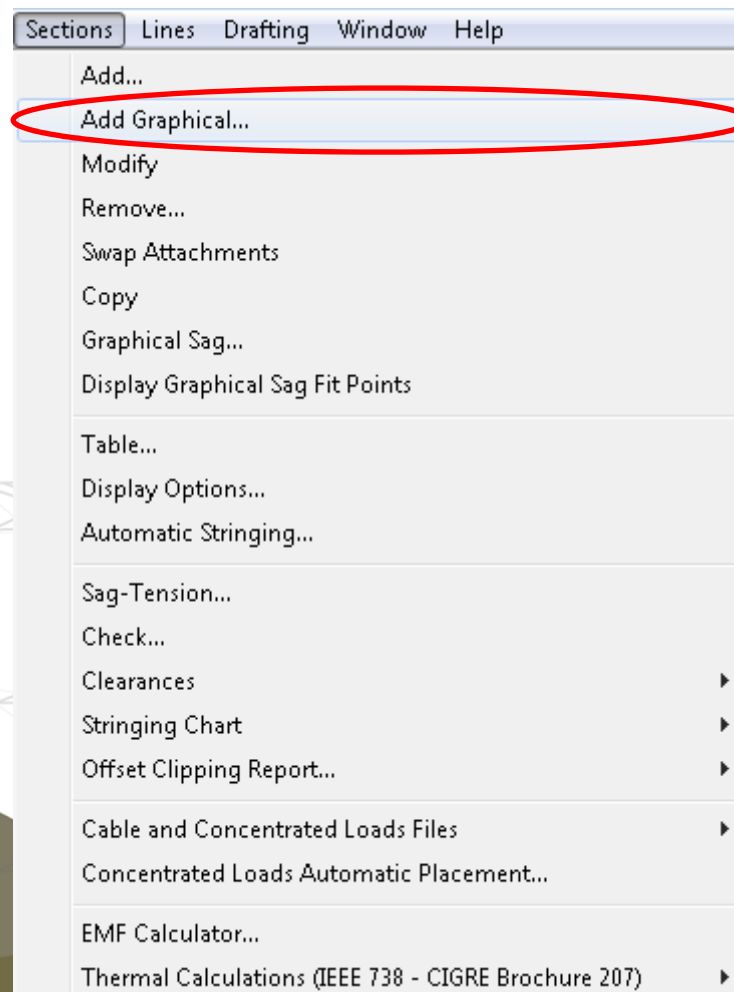
- Take advantage of time-saving new features
 - 3D Graphical Stringing
 - Add XY Structure Placement
- Useful shortcut for any type of design
 - Distribution, Transmission, Telecommunication
 - Various Substation Structures
 - Poles, Towers, Service “Sticks”, and my proposed “final exam” hybrid model if there was a PLS-CADD Certification Test to qualify new users...

Cambodia Tower/Pole Hybrid



Introduction - 3D Graphical Stringing

- Not brand-new (~1yr) but new since the last ATUG
 - Helpful stringing method in Profile, 3D, and Plan views

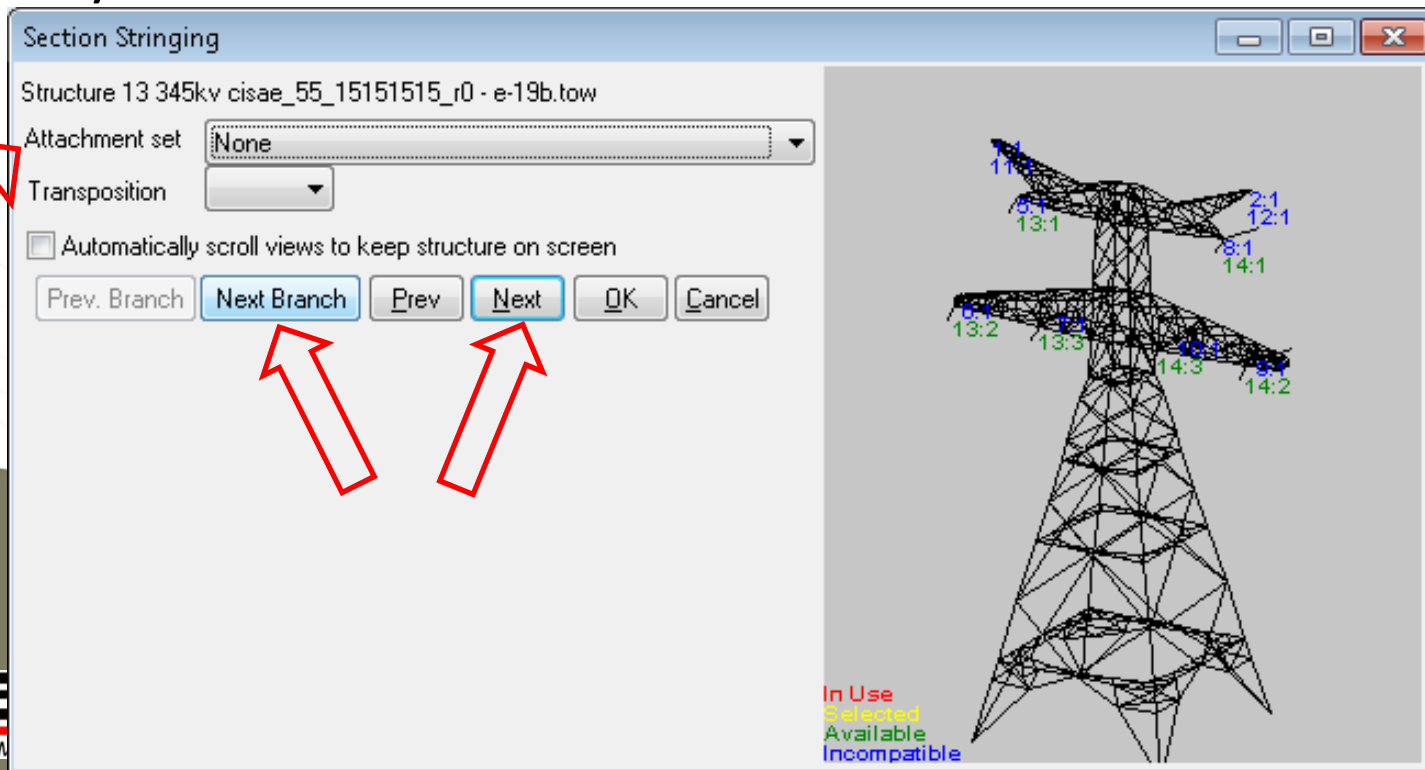


3D Graphical Stringing Benefits

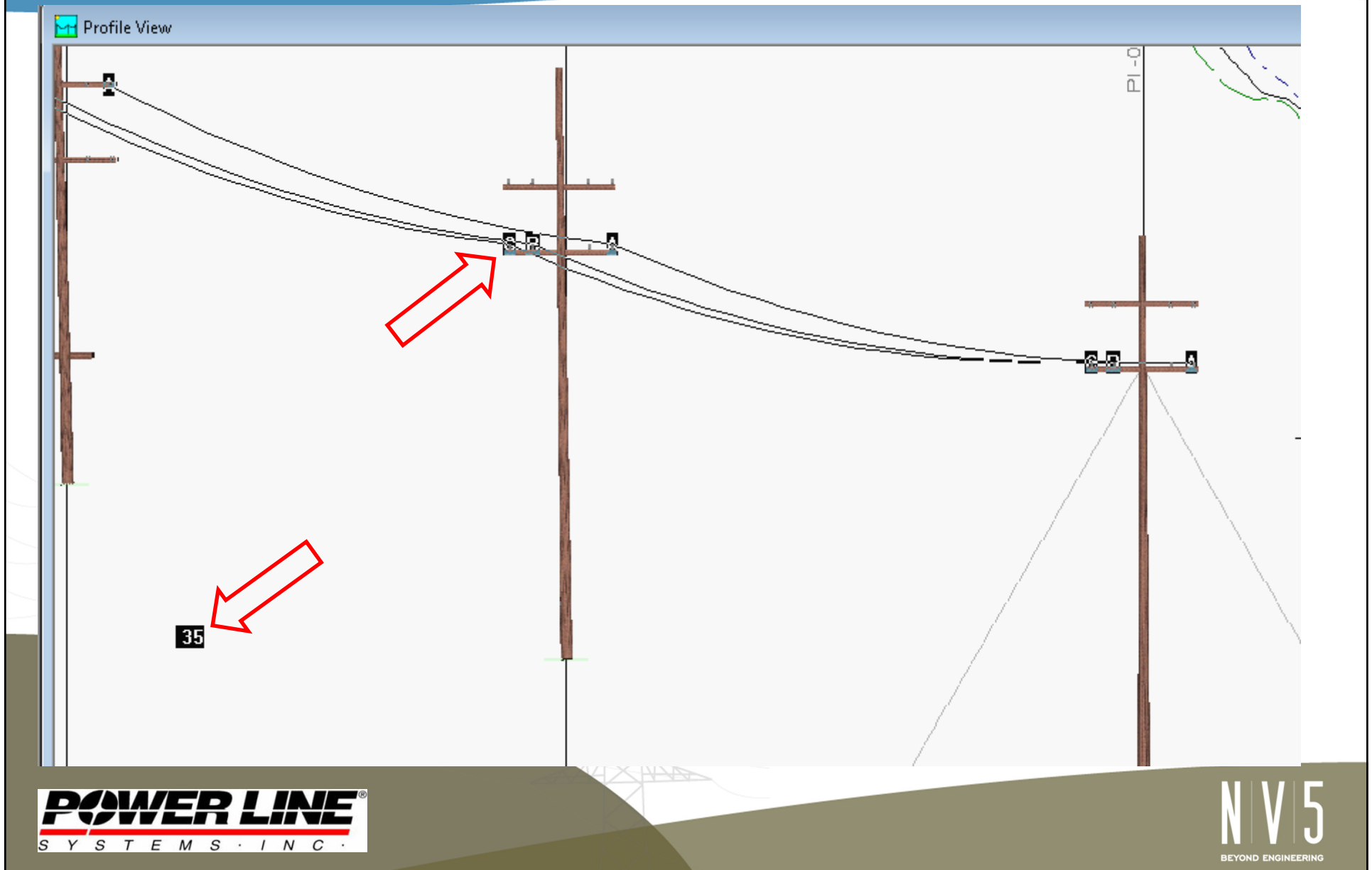
- Simplifies stringing to other alignments
- Easily skip structures in the same alignment
- Allows you to see the sets and phases to choose from, to avoid swapping attachments later on
- Can string single or multiple sections in one step
- Recommend graphical stringing either in 3D view or using 3D structures in Profile view
 - To confirm you have chosen the correct side
 - To verify if phasing must be altered or swapped

Previous Stringing Methods

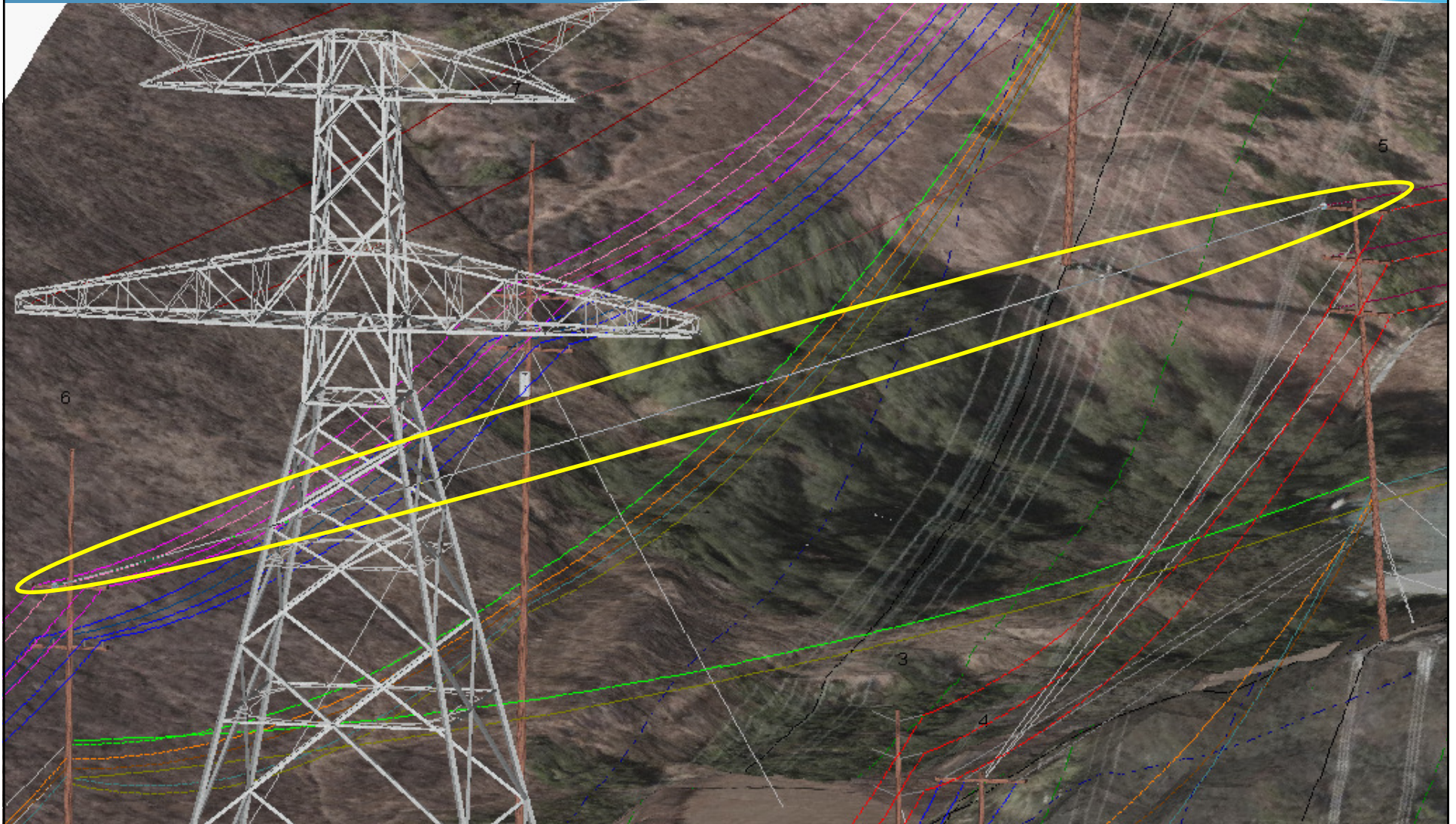
- Limited by Section Stringing dialog box
 - If you wanted to skip a structure, choose “None” attachment
 - If you wanted a new alignment, choose “None” attachment and alternate between choosing “Next Branch” and “Next” until/if you reach your desired structure



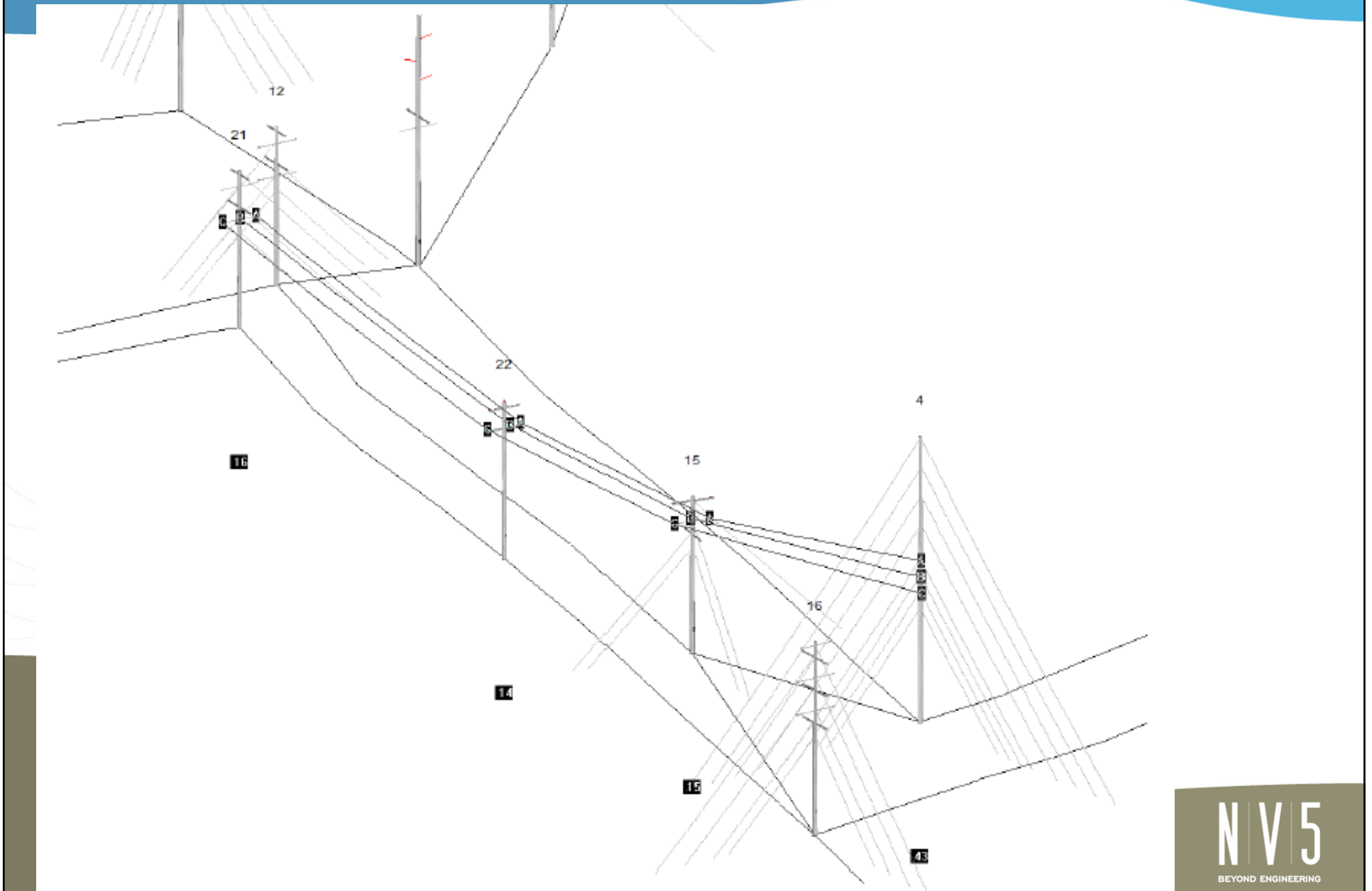
3D Graphical Stringing – Profile View



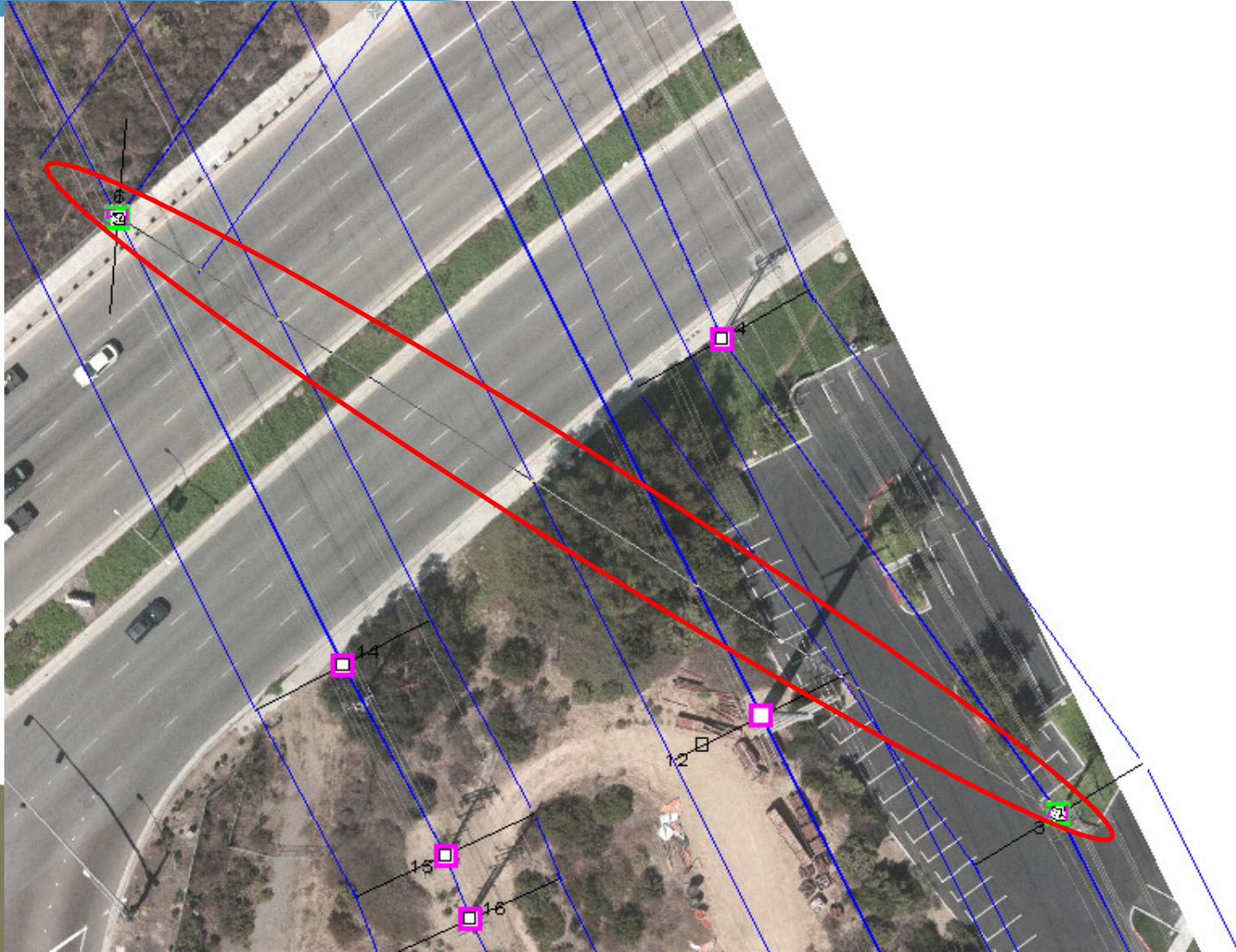
3D Graphical Stringing – 3D View



3D Graphical Stringing – 3D View

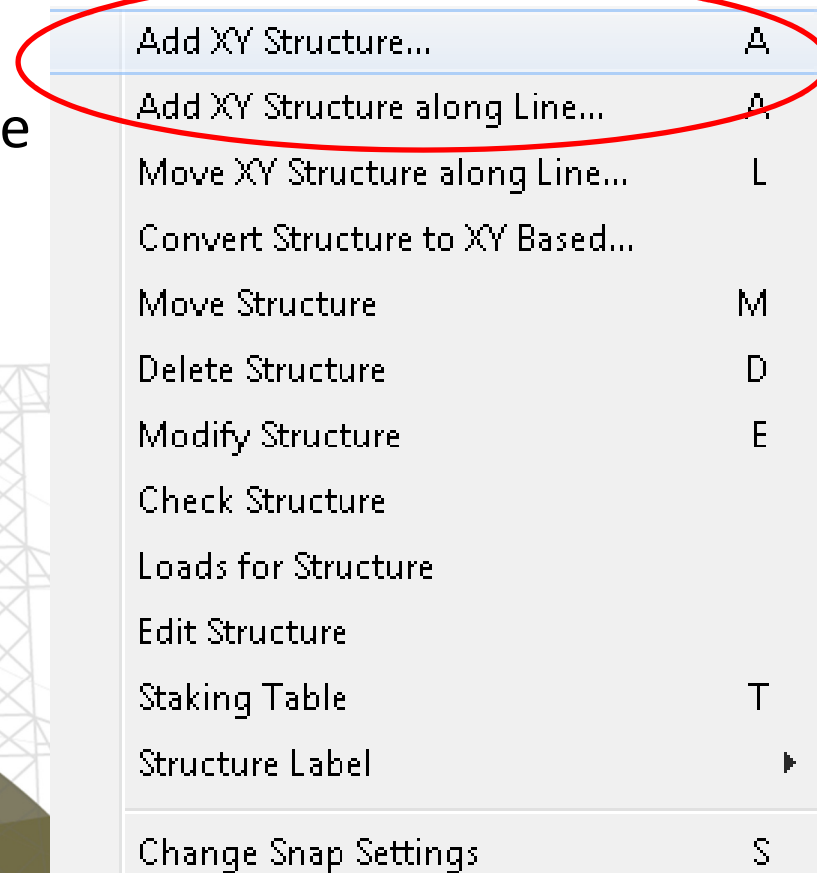


3D Graphical Stringing – Plan View



Introduction – Add XY Structure Placement

- A new or existing alignment is no longer necessary to add a new structure
- Two options to choose from with the “left-click” menu
 - Add XY Structure
 - Add XY Structure along Line

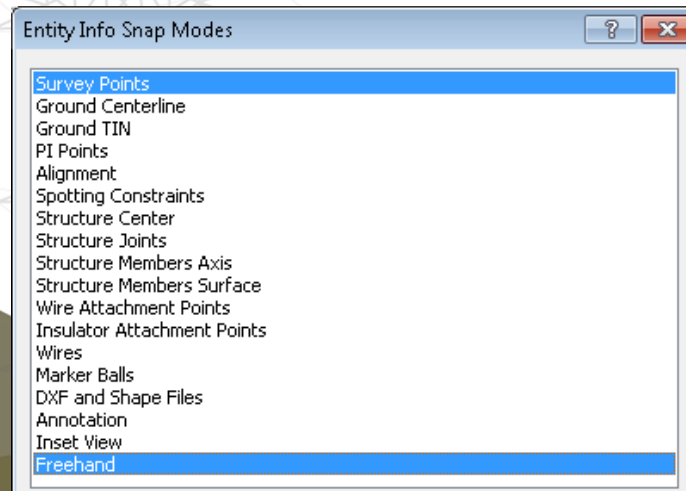


Add XY Option Differences

- Add XY Structure
 - Useful when you want to place a structure exactly in an existing spot, such as using survey data or images
- Add XY Structure along Line
 - Useful when you are attempting to add a structure along a specific path, such as along a sidewalk or directly in line between two structures

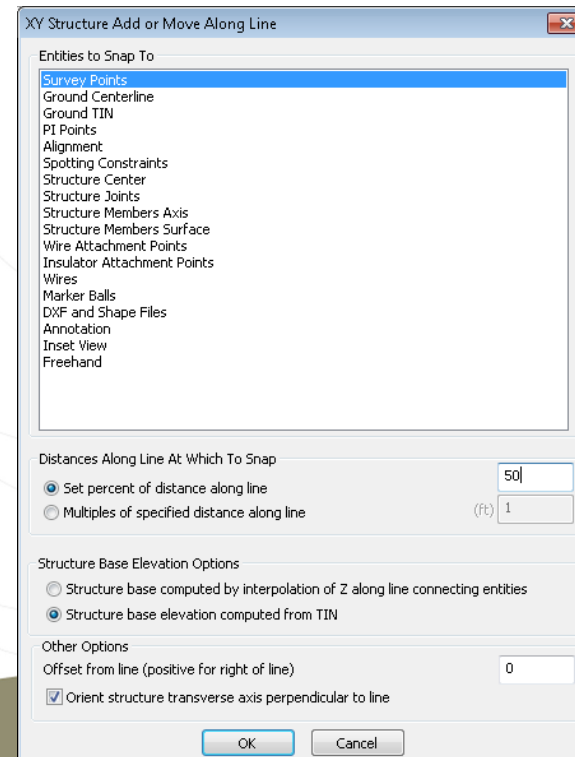
Add XY Option Recommendations

- Add XY Structure
 - Select “Freehand” in the Entity Info Snap Modes so that you can place your new structure anywhere
- Add XY Structure along Line
 - Select “Survey Points” in the Entity Info Snap Modes so that you can select “Add XY” line based on survey point entities such as pole base, edge of sidewalk, etc.

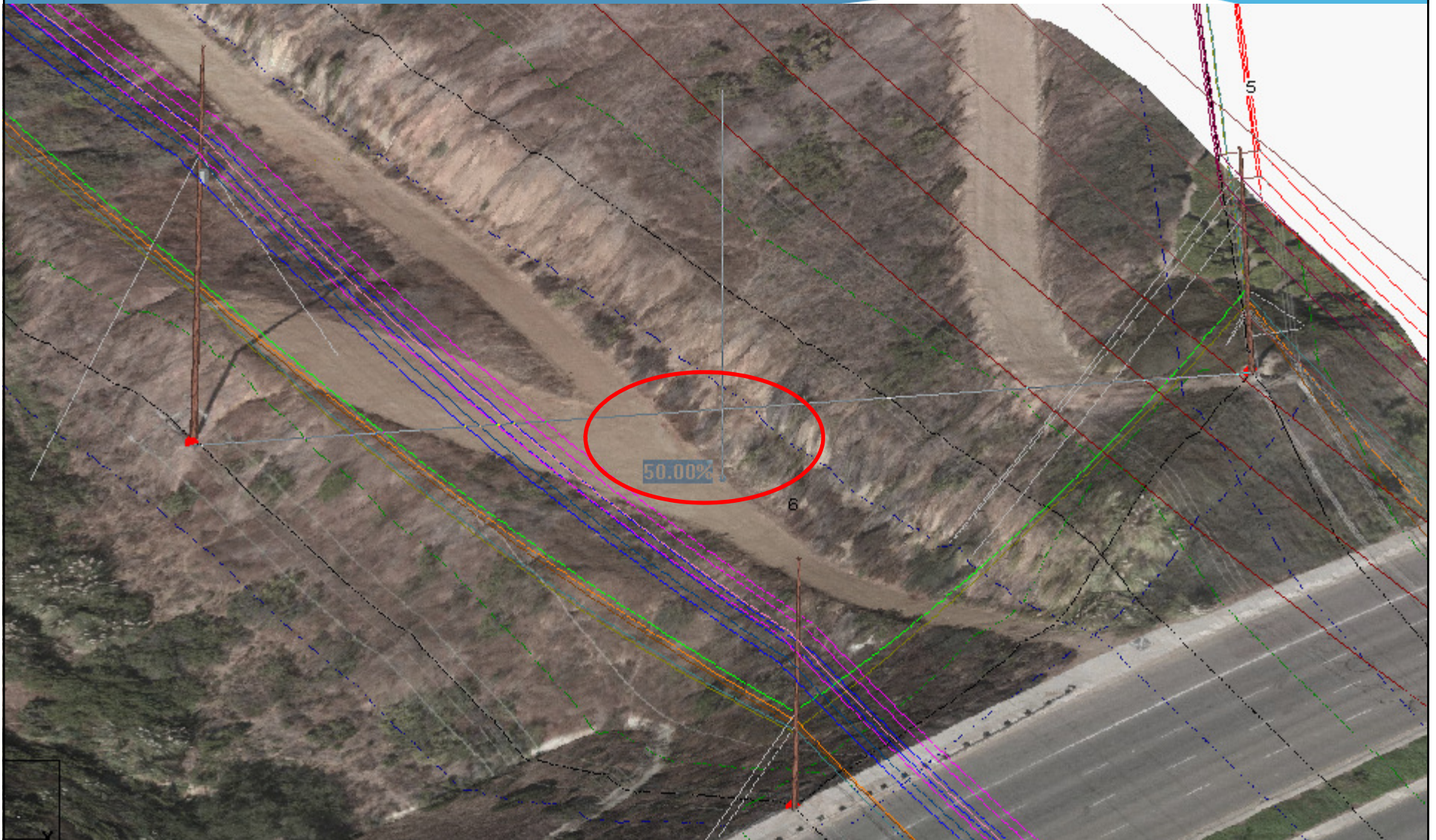


Additional Snap Mode Options

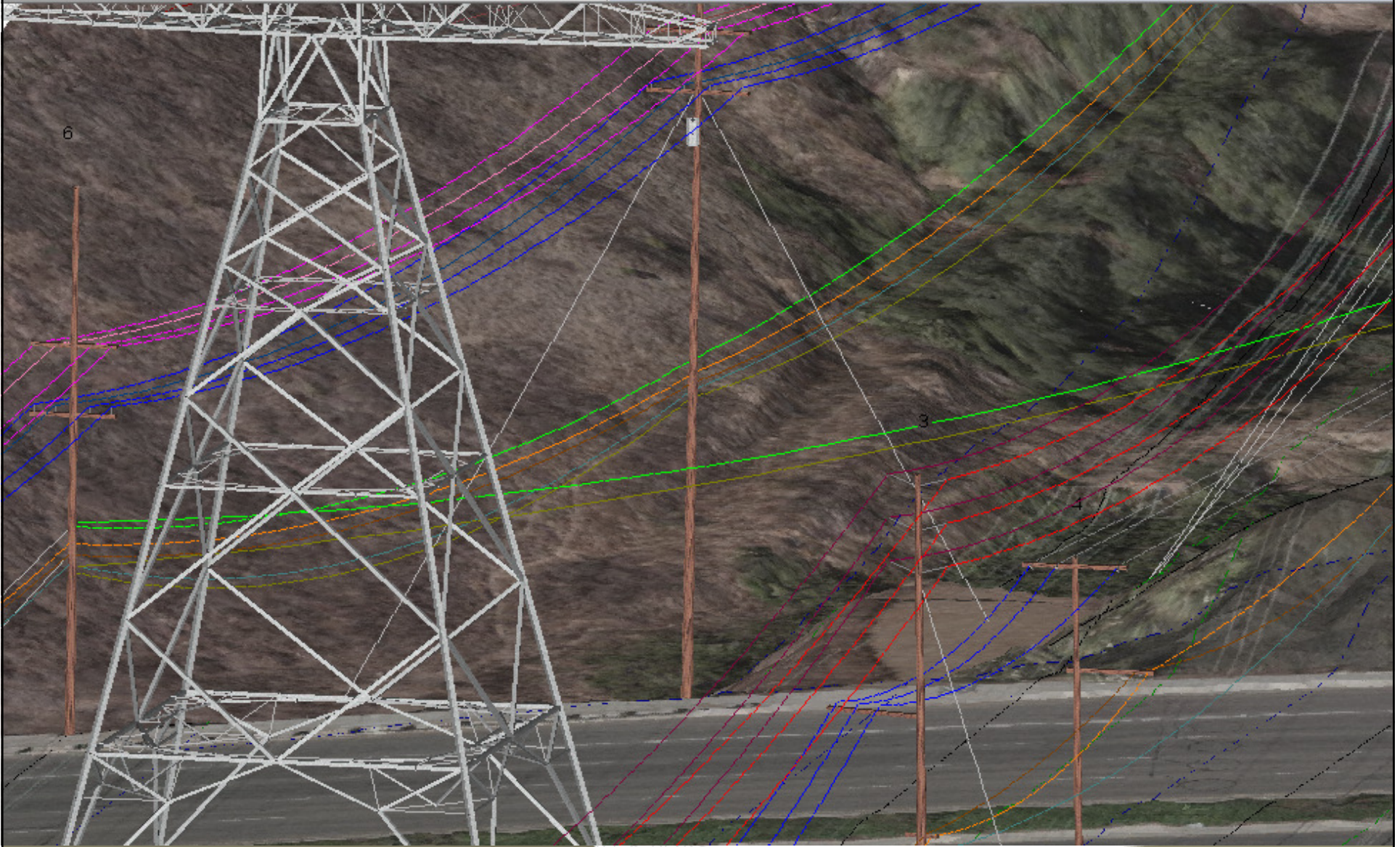
- Type “s” when using the “Add XY Along Line” feature to bring up an advanced Snap menu
- Additional snap options now include:
 - Choose distance along line (percentage or footage)
 - Set elevation with Z or TIN
 - Set offset from line
 - Set orientation of structure



Add XY Structure Along Line @ 50% Distance



Add XY and 3D Stringing Demonstration



Most Common Applications

- 3D Graphical Stringing
 - Quickly and accurately string to different alignments
 - Quickly skip structures in same alignment when stringing
 - Quickly and accurately switch set numbers when stringing
- XY Structure Placement
 - Minor distribution crossings and service feeds (especially those that won't require future design edits)
 - Quick hypothetical initial look at potential solutions, such as modeling the impact of a mid-span interset (*Add XY at 50%*)
 - Model above transmission crossings for quick clearance checks

Future Use Recommendations

- For new features like these, keep providing feedback and recommendations to support@powline.com
- There have been many updates in the past couple years, so perhaps your recommendation/request might already be implemented in another menu

Thank you for your time!

Any questions?

