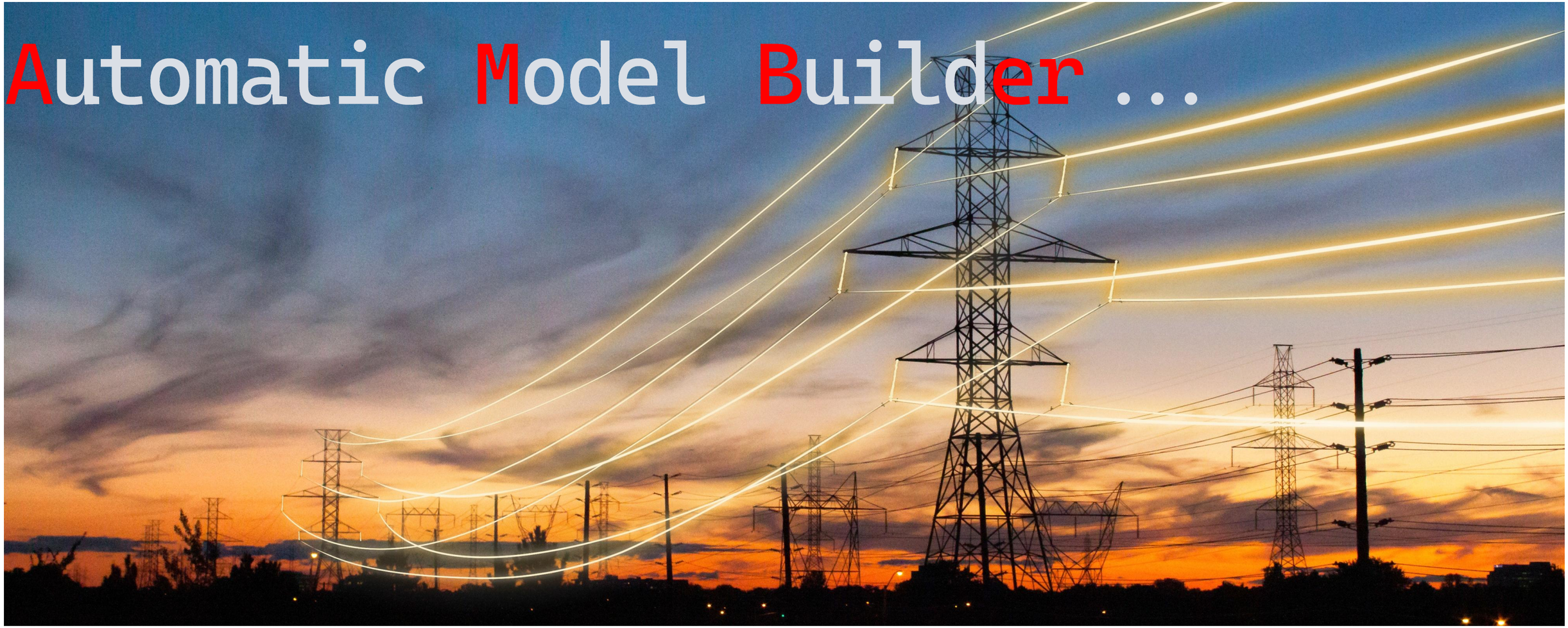
AMBER Updates



Graeme Louw P.E. & Dan McCormick P.E.
June, 2026

POWER LINE SYSTEMS
Part of Bentley Systems

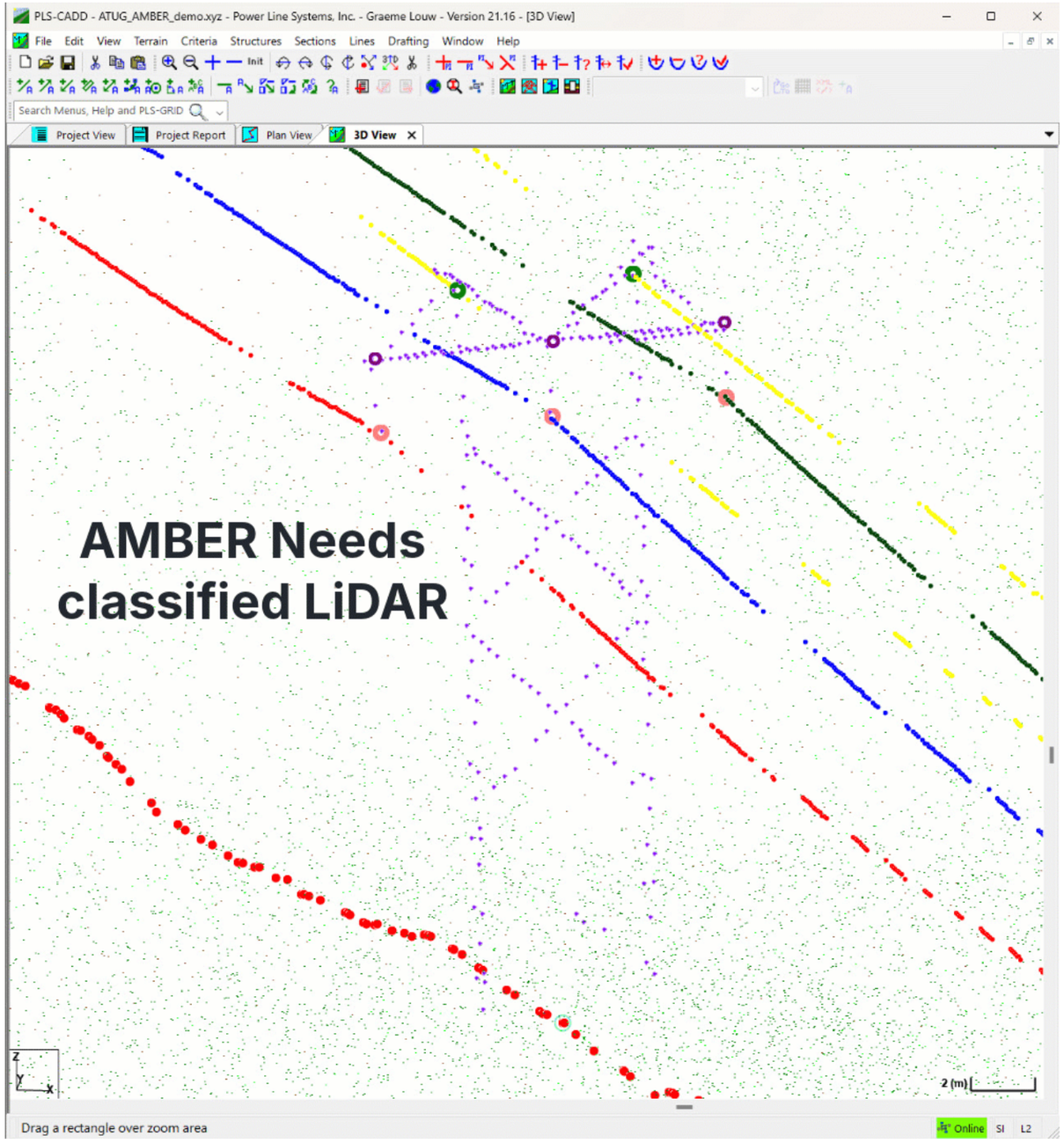
AMBER

- Automatically builds PLS-CADD models
- Classified LiDAR required
- Requires the Optimum Spotting license for PLS-CADD
- Automatically Creates:
  - Alignment(s)
  - Method 1 Structures
  - Strings + Sags Sections

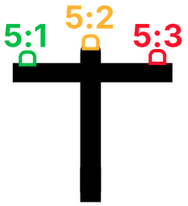
Classified LiDAR

- Required feature codes:
  - Structure point
  - Wire point
  - Wire attachment point

- Optional Points:
  - Structure top
  - Structure bottom
  - Insulator attachment point

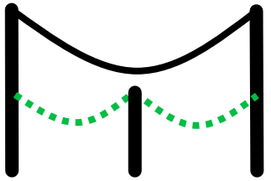


Progress since last ATUG



Multi-phase sets with unique wire file, set numbers, and attachment classifications

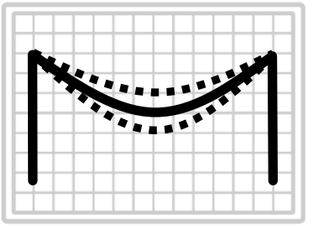
Multiple FEA Codes for the wire attachments within a given set



Enable/disable looking for skip-span connections

Works on projects with existing alignments, structures, or sections

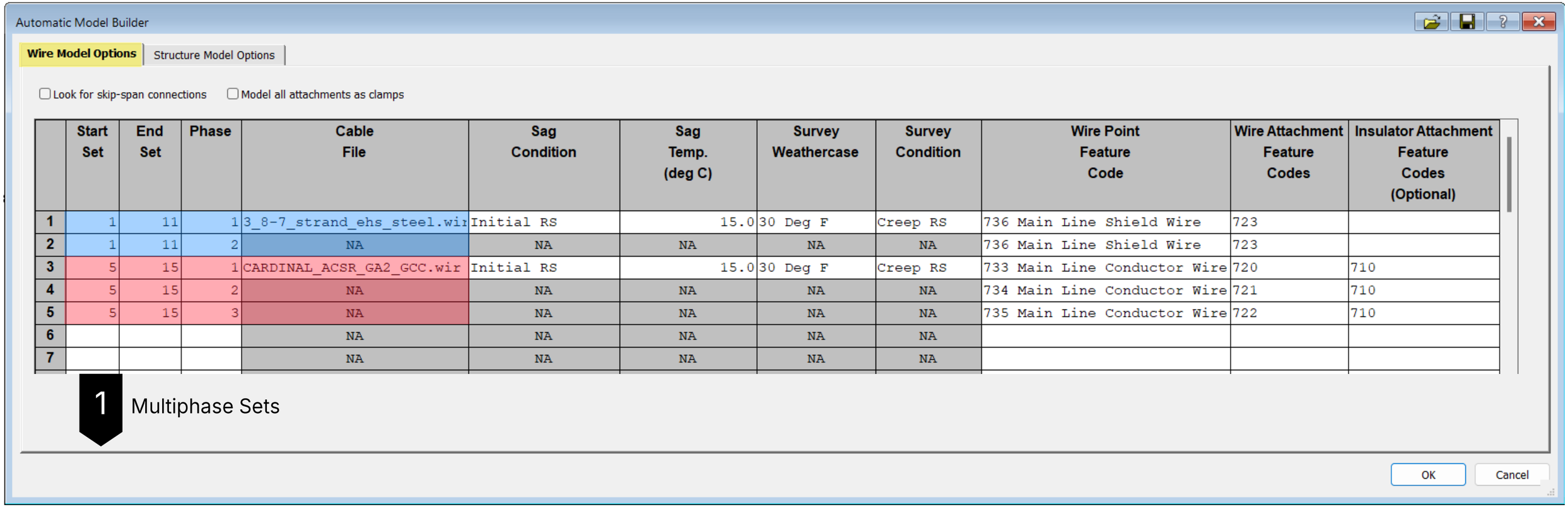
Now detects strain and suspension insulators



Can perform graphical sagging (RS)

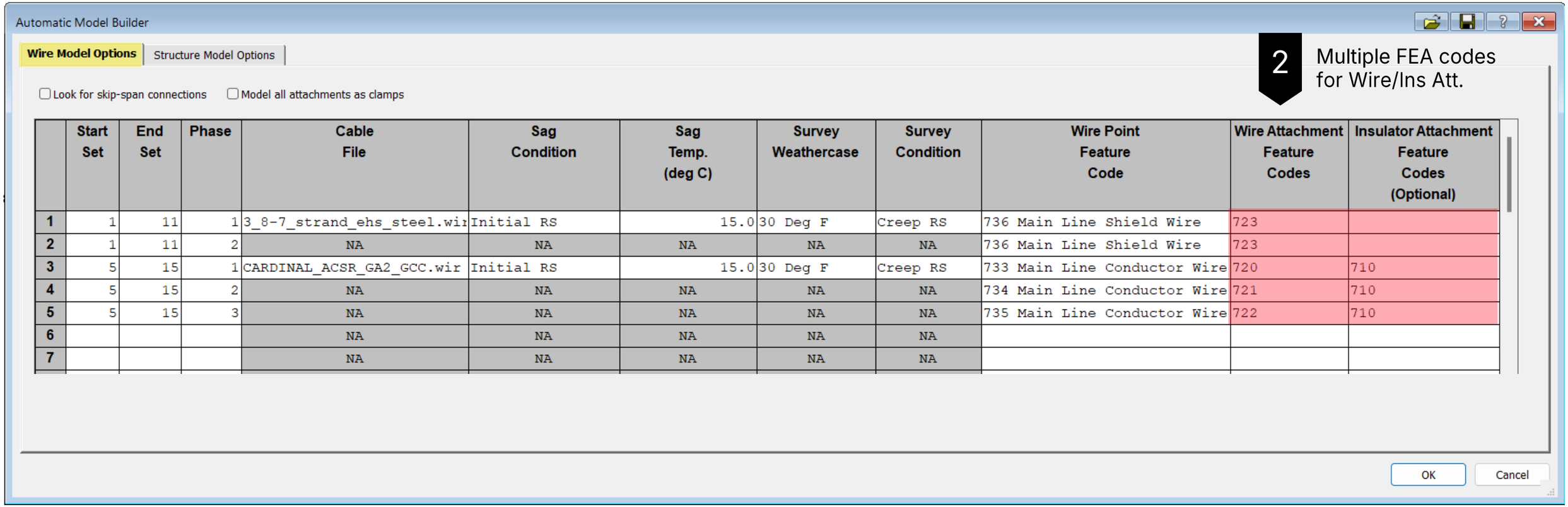
AMBER process

- ***Terrain/Automatic Model Builder (AMBER)…***
  - **“Wire Model Options” tab**
  - How to cluster wire survey points.
  - Detect and string wires into appropriate sets.



	Start Set	End Set	Phase	Cable File	Sag Condition	Sag Temp. (deg C)	Survey Weathercase	Survey Condition	Wire Point Feature Code	Wire Attachment Feature Codes	Insulator Attachment Feature Codes (Optional)
1	1	11	1	3_8-7_strand_ehs_steel.wir	Initial RS	15.0	30 Deg F	Creep RS	736 Main Line Shield Wire	723	
2	1	11	2	NA	NA	NA	NA	NA	736 Main Line Shield Wire	723	
3	5	15	1	CARDINAL_ACSR_GA2_GCC.wir	Initial RS	15.0	30 Deg F	Creep RS	733 Main Line Conductor Wire	720	710
4	5	15	2	NA	NA	NA	NA	NA	734 Main Line Conductor Wire	721	710
5	5	15	3	NA	NA	NA	NA	NA	735 Main Line Conductor Wire	722	710
6				NA	NA	NA	NA	NA			
7				NA	NA	NA	NA	NA			

AMBER process



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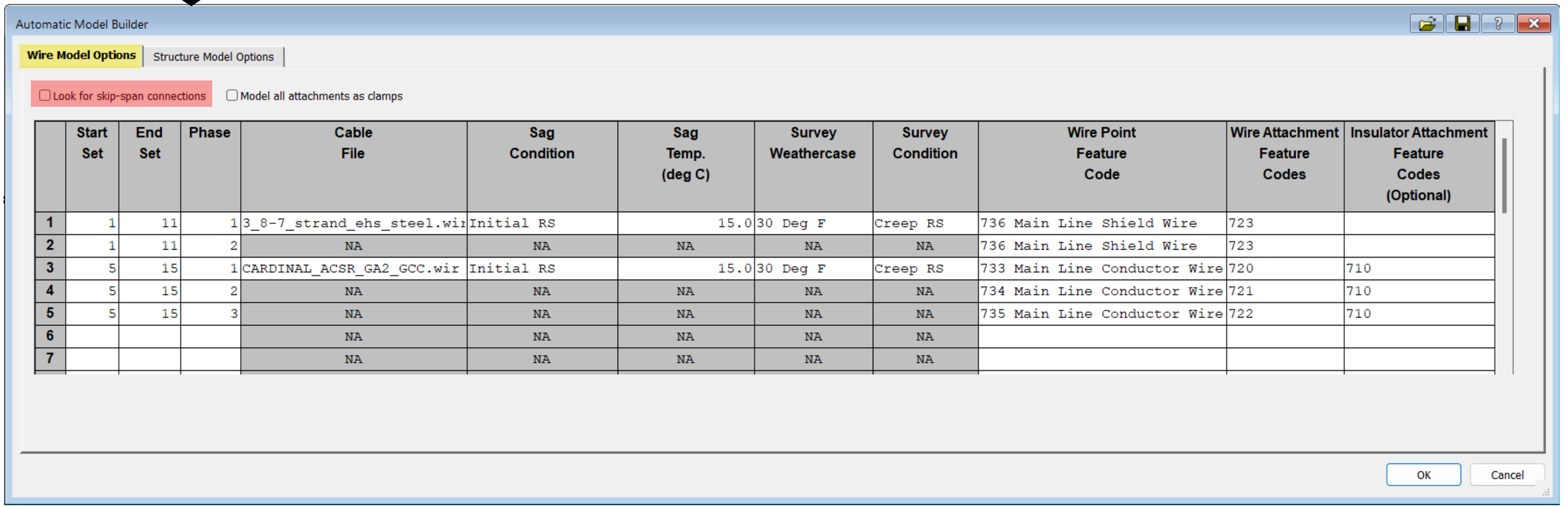
6				NA	NA	NA	NA	NA			
7				NA	NA	NA	NA	NA			

AMBER process

3 Skip-span connections



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6				NA	NA	NA	NA	NA			
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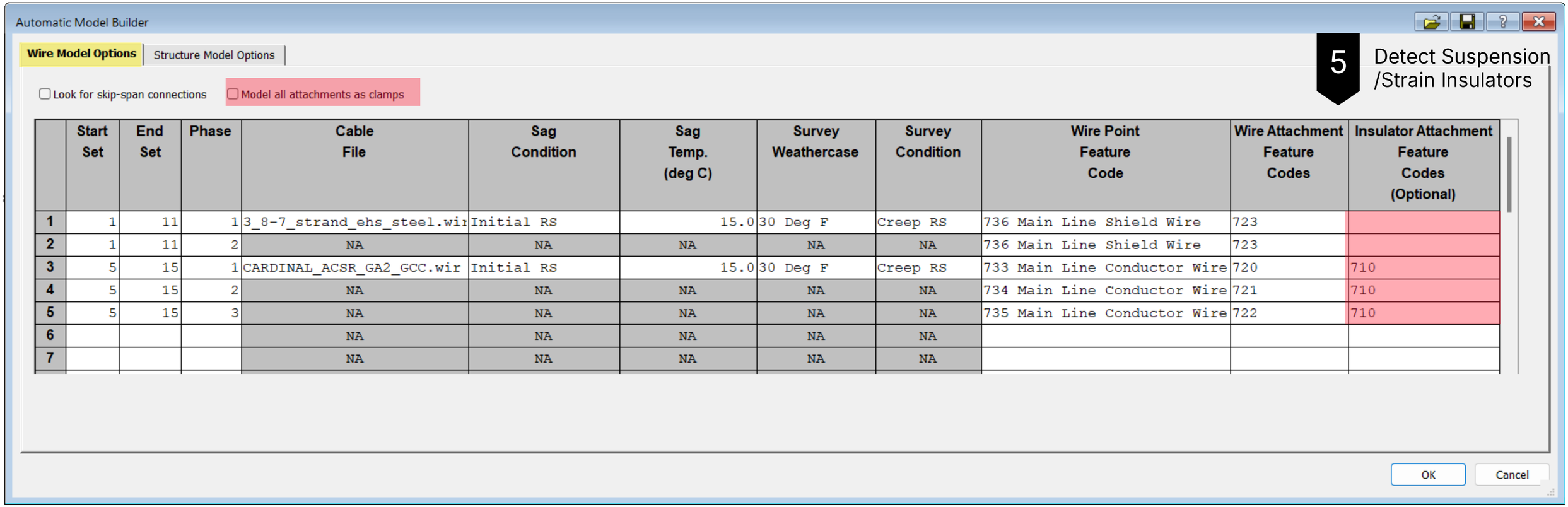
AMBER process



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6				NA	NA	NA	NA	NA			
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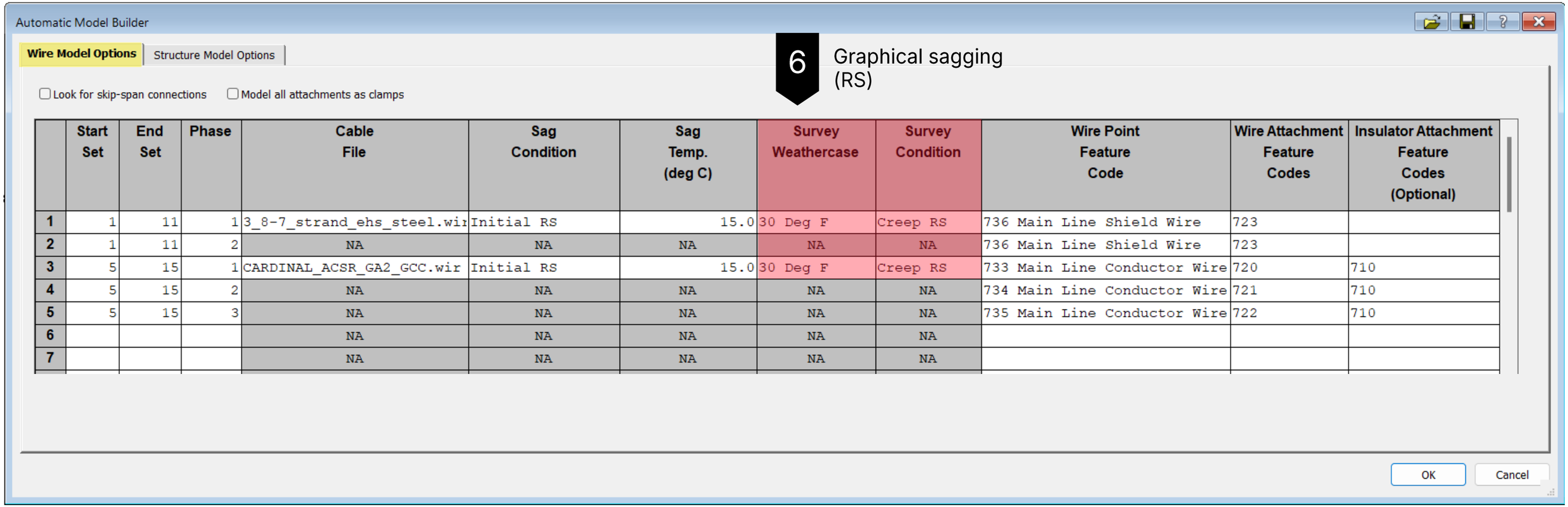
AMBER process



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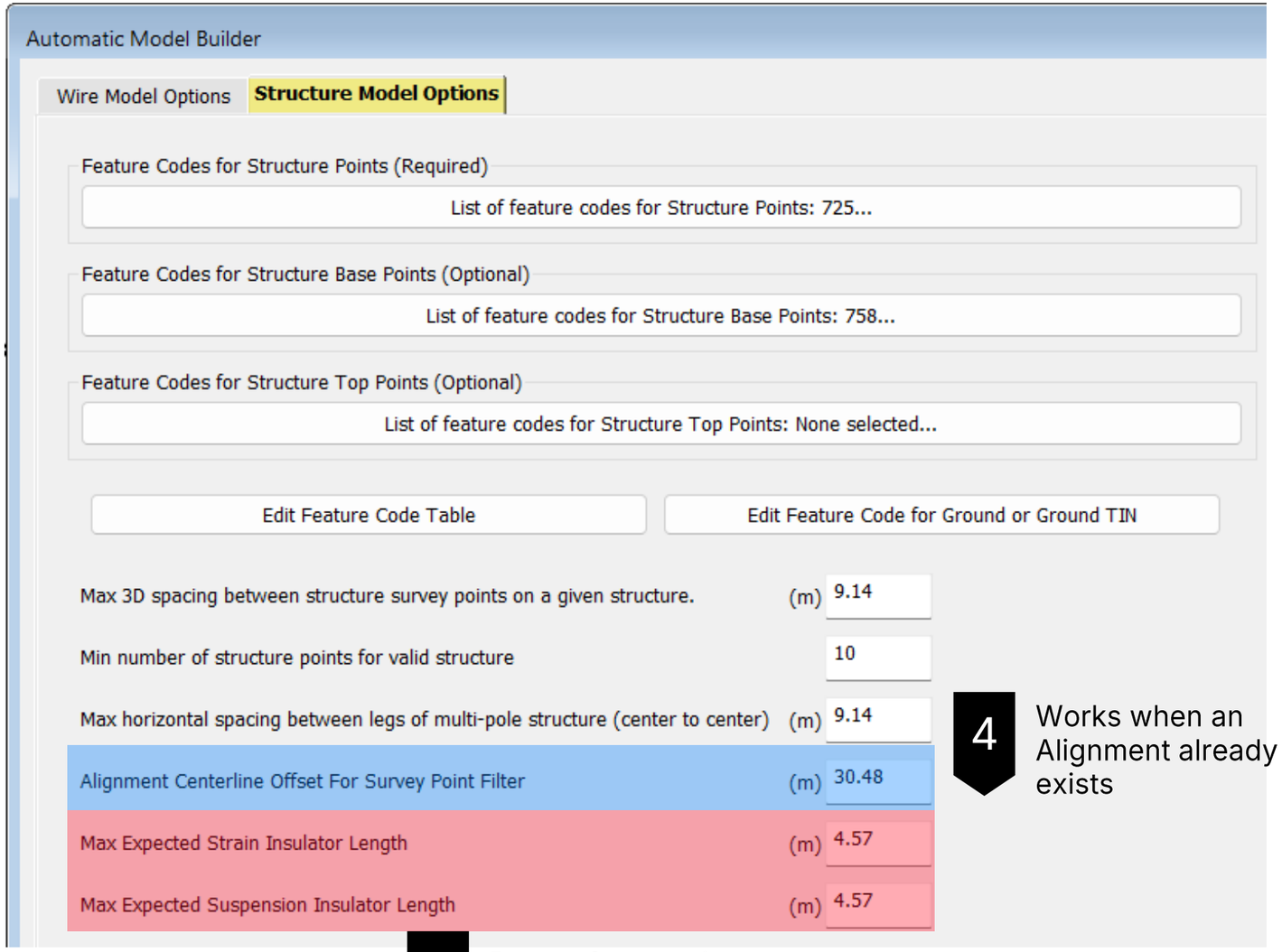
AMBER process

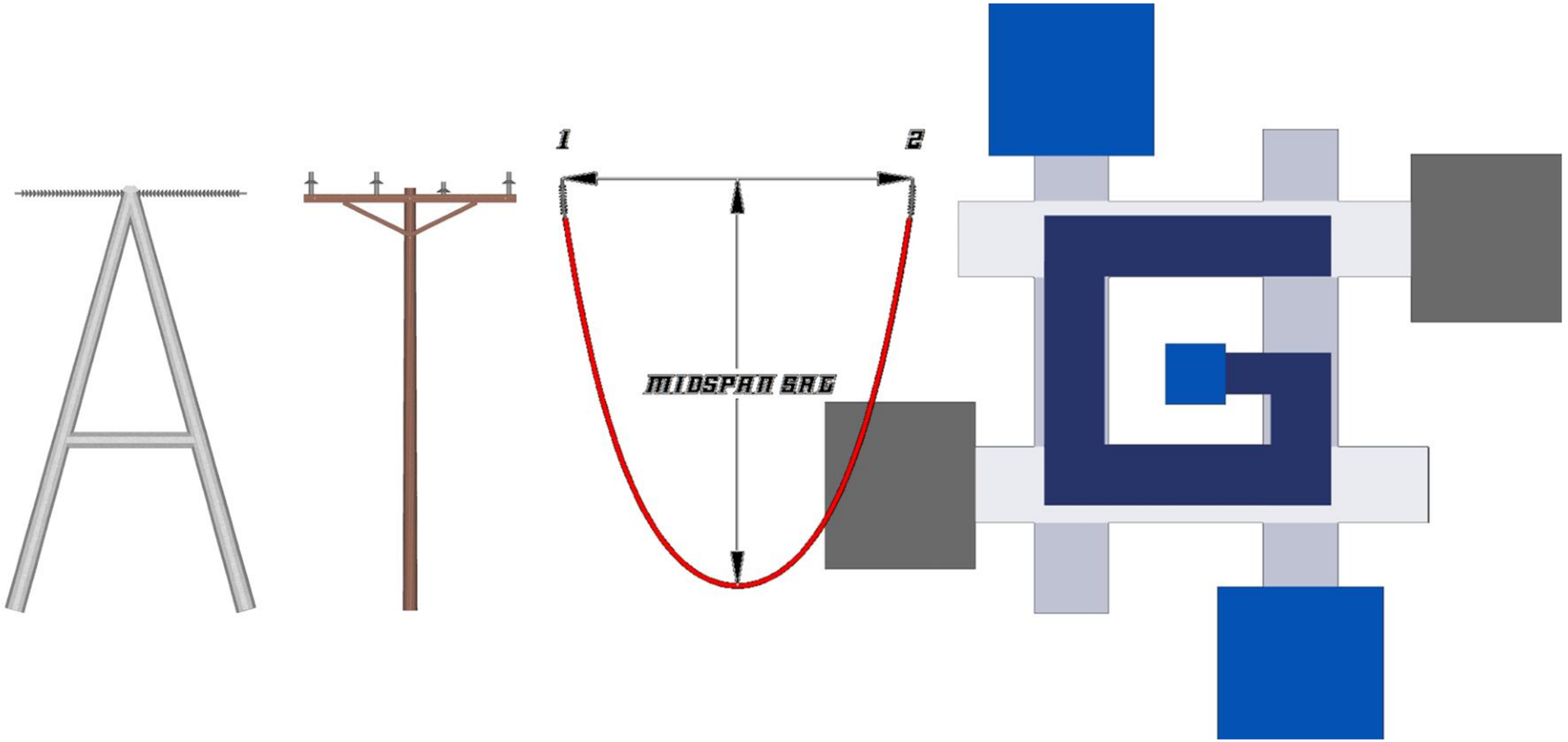
- ***Terrain/Automatic Model Builder (AMBER)…***
  - **“Structure Model Options” tab**
  - How to cluster structure points
  - Other filtering and speed-up options

  - Alignment Centerline offset – *useful when you have an existing alignment*

  - Insulator lengths (upper limits)



Live Demo



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