Creating Hydro Cross Sections for Redline Review

- 1. Create a New 2D file using NCDOT 2D seed file. See ORD Best Practices
- 2. Reference your complex terrain model. See Section 2 of the Drainage and Utilities Manual
- 3. Set the terrain to active. This will create a 3D model in the file.
- 4. Reference Roadway's CMD and ALG files. I recommend that you reference each one individually for more consistent results. Do not reference the combined CMD or ALG files.
 - a. Also when you reference these files, set the model to Default-3D

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- 5. Once all the files are attached, make sure you are in the OpenRoads Modeling workflowRi
- 6. Right click and chose View Control>2Views Plan/3D

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7. Go to the Drawing Production tab and Select the Named Boundary tool 2) Openfands Modeling → B + D H W (b + + + # # = + pwl/indot-pw.bentley.com/nodot-pw-20.Documents/Duision_2001+33348
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	Create Drawing	
	Show Dialog	

a.

- a. The 4th button on top of the tool is the Civil Cross Section. Select that option
- b. Drawing Seed: Typically, you will pick the 20 Scale
- c. Next steps are to select the alignment and set the beginning and end stations. I have more success picking the alignment in the Plan View.
- d. Once you pick the alignment, you can either select the Start and Stop locations by moving your cursor or entering the stations in the fields.
- e. Follow prompts to accept all your inputs.

- 10. At this point you should see blue lines in the plan view and "panes' in the 3D view where the cross sections will be created.
- 11. Now we need to create the Drawing Models and Sheets

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- a. Path down to your cross sections by choosing Cross Section Groups and selecting your cross sections
- b. Then select Create Cross Section Drawings (circled)
- 14. Depending on how many cross sections must be created it will take a while. I created 1300' of cross sections at 50 ft intervals (so 26 cross sections), and it took about 2 minutes.
- 15. You have a drawing model for each cross section. You can change models using the tool in the bottom left hand corner of your screen.

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16. In the drawing model you can use the coordinates for elevations and offsets.

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- 17. Multiple cross sections can be put on a sheet.
- 18. How to print cross sections will be added later

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