Additional CAD Data Manipulation Examples
Street Model from "Conformed" Centerline

The **Conform Selected** utility (page 101) can be used to quickly convert imported 2D *Annotation Lines* to 3D *Data Lines*. This example demonstrates how to "jumpstart" a street model by conforming 2D CAD line work to 3D CAD contours and CAD spot grade text objects (it also includes some other useful CAD data manipulation and modeling techniques) . . .

Step 1: Start AGTEK and *open* the **conform10.dwg** CAD file for this exercise (see *Appendix C*).

Step 2: In **Import (CAD Transfer)** ▦ mode, select **Data Transfer > Transfer Min/Max** from the menu. In the *CAD Elevation Threshold* dialog, enter **5941** for the **Maximum** and **5886** for the **Minimum** then click **OK** (to eliminate "spiked" elevations in this CAD data).

This CAD file includes 26 layers of data, but we will use only the following nine layers for this exercise example (fewer steps will be required if the six *[indicated]* layers are *Joined* in Step 3):

> **E-GCONT1** - design contours *[Join]*
> **E-GCONT2** - design contours *[Join]*
> **E-GNOTES** - design grade leader lines
> **E-GNOTES Labels** - design grade text objects
> **E-GROAD** - existing street lines (***see note below***)
> **E-ROAD-CENTER** - design street centerline *[Join]*
> **E-SBC2** - design back of curb lines *[Join]*
> **E-SFC2** - design face of curb lines *[Join]*
> **E-SITE1PAV** - design edge of pavement lines *[Join]*

*Note: We're not modeling the site's Existing Surface in this example, but the existing street line work (on the **E-GROAD** CAD layer) will be a useful reference at the proposed street's intersection with the existing street (**we will transfer this one existing data layer to the Design Surface** as a convenience).*

Step 3: **(a)** Zoom and pan as needed; **(b) Left** click a CAD object representing one of the CAD layers listed above; **(c)** if indicated above, click the **Join** ⬚ toolbar button (**Ctrl-J**) to *Join* the selected objects; **(d) Right** click and select **Send to Design** from the pop-up menu.

[Repeat Step 3 until all nine required CAD layers are transferred to Design.]

Reminder: Since we know the specific CAD layers needed, we could also press **Alt-B** and use the *Layer Selection* dialog to filter the displayed layers (as per page 141). See pages 81-84 to review the settings and methods for selecting and transferring CAD layers.

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