

2. **(4)** Matchline on the minor road:
  - Set Feature to Modeling-Seam\_Line

#### **Case 1: Tie to Connection Road Corridor**

- Draw matchline **(4)** at the station (perpendicular to connection baseline) where you want to begin to warp for the intersection (at least back of radial return).
- End your template drop on the connection at this station. The template drop may need to be slightly past this station to get a profile (next step). Zoom way in to see.
- Generate profile using "Quick Profile from Surface", selecting the connection corridor, and set as active profile (same as **(1)** & **(2)** above).

#### **Case 2: Tie to Existing**

- Draw matchline **(4)** at your pavement tie point (end of construction). This does not really have to be perpendicular to the connection baseline.
- Set existing ground (the Active Terrain Model) as the Active Profile.

3. **(6)** Connection Baseline:

- Unfortunately, line **(6)** cannot be the actual connection baseline, but needs to be trimmed to just the intersection area (see figure above).
- Use Single Offset Partial to copy the connection baseline. Set offset to zero, and snap to your matchlines **(1)** & **(4)** for your begin and end stations.
- Use Project Profile to Element to project the connection baseline profile to the partial baseline you just created and set as the Active Profile.

4. **(3)** & **(5)** Radial Returns (EPs in intersection):

- Radial returns (3) may be simple curves, compound curves, or tapered curves.
- It may include linear sections (5) along the mainline (for warping when not adjacent to thru lanes) or along the connection (to avoid using a corridor, or tie into a corridor further down).
- **Horizontal:**
  - Option 1:** Draw using traditional linework and featureize.
  - Option 2:** Use the Simple Arc, Taper Arc Taper, or 3 Center Arc tool to create the radial returns. This way, the returns will update automatically if the corridor changes.
  - Option 2B:** Use Arc to Element or Simple Arc to Element if the tie in is in the middle of the return.
- Use "Complex by Elements" to add (3)s and (5)s to a single chain for each return.
- Trim the mainline/connection EPs and roadside as necessary. Do not trim EPs for driveways.