18_01 Civil Cells for Ramps, Loops and Collector-Distributors

Effective immediately with the next CONNECT workspace update.

As was discussed during the 2017 Fall ASHE Technical Seminar, new civil cells have been added to the interchange library for alternative loop and ramp configurations.



Ramp in One Quadrant



Designed for two-way operation 250' Radius 200' Spiral

References Sequence (order of selection on-screen):

- Road Main Centerline (1/2)
- Road Minor Centerline (2/2)

4° 07' Exit Angle 32' offset from mainline road outside edge of travel 6000' & 8000' Reverse Curve Radius

References Sequence (order of selection on-screen):

- Road Main Outside Edge of Travel (1/3)
- CD Begin Limit (2/3)
- CD End Limit (3/3)

Note that the primary purpose of a collector-distributor road (aka CD, C-D, C/D, Local-Express Lanes, or Ramp Collector) is to separate the weaving (exiting and entering) movements at interchanges from the mainline through traffic. The typical section usually involves a "median ditch" like treatment or paved shoulders divided by a concrete median barrier when right of way is limited. A simplified collector-distributor road is just an additional lane, similar to the function of an auxiliary lane, added to the mainline for interchange traffic weaving and speed reduction without affecting or having little effect on the through traffic. This is usually used in urban areas where a full C-D is not feasible. Normally it does not require a horizontal and vertical alignment.

Loop with T-Intersection Skew < 90



Variable Curve Radius 200' Spiral 89° Terminal Intersection Angle

References Sequence (order of selection on-screen):

- Road Main Centerline (1/3)
- Road Main Outside Edge of Travel (2/3)
- Road Minor Centerline (3/3)



Variable Curve Radius 200' Spiral 89° Terminal Intersection Angle

References Sequence (order of selection on-screen):

- Road Main Centerline (1/3)
- Road Main Outside Edge of Travel (2/3)
- Road Minor Centerline (3/3)

Remember that these civil cells are intended to replace some of the functionality of GEOPAK COGO, as well as aiding the design and model of interchanges more effectively. They are a major component of the civil geometry delta training.

