QSection .TPL

The .TPL file is a template control file used in the creation of design cross sections. The format of this file is as follows:

1. Station Control

   The first variation is a station control file which will link multiple .TPL files over different ranges of chainages. The format is a comma delimited file as follows:

   Column 1: STA
   Column 2: Start station (do not include '+')
   Column 3: End station (do not include '+')
   Column 4: .TPL file for this station range.

   Example:

   STA,10087.078,10138.860,I:/Highway 97 Commotion Creek/RFL Control/BarrierRight.tpl

   The BarrierRight.tpl will be used from station 100+87.078 to station 101+38.860

   Note that I recommend to use '/' for folder delimitation – this is a general thing when dealing with LISP.

2. Section Control

   2.1 Default Superelevation

   When no superelevation is available for the given station the default will be utilized.

   Column 1: S
   Column 2: Left Super (%)
   Column 3: Right Super (%)

   Example:
   S,-2,-2

   This will set a normal crown of 2% down to the left and 2% down to the right.

   2.2 Alignment Control

   Column 1: AP

Column 2: Control number
Column 3: Layer for control

Example:

AP,1,C-ROAD-PVMT-EDGE
AP,2,C-ROAD-SHLD
AP,3,C-ROAD-BARR-CONC

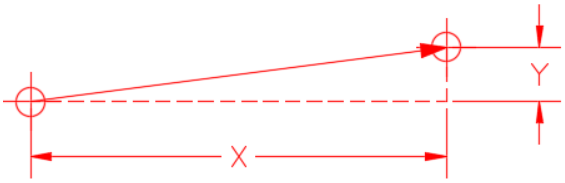
Alignment 1 will be all the POLYLINES and LWPOLYLINES found on layer “C-ROAD-PVMT-EDGE”, 2 will be all found on “C-ROAD-SHLD”, and 3 will be all found on “C-ROAD-BARR-CONC”

2.3 Left/Right Offsets

Column 1: L or R
Column 2: See below
Column 3: See below

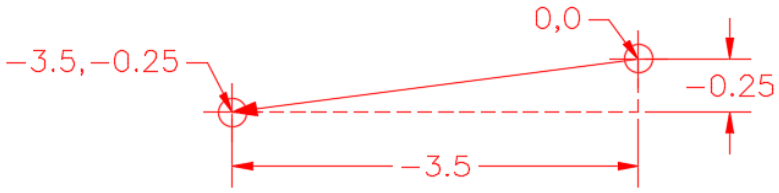
2.3.1 Column 2: X

2.3.1.1 Column 3: Y



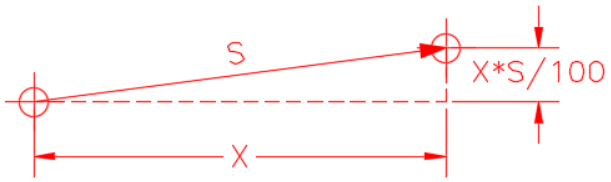
Example:

L,X0.0,Y0.0
L,X-3.5,Y-0.25



The first L defines the start left point and is at offset 0.0 from control line and at a depth of 0.0. The second lines moves the point the left section 3.5 units to the left of the previous point and 0.25 units down from the previous point.

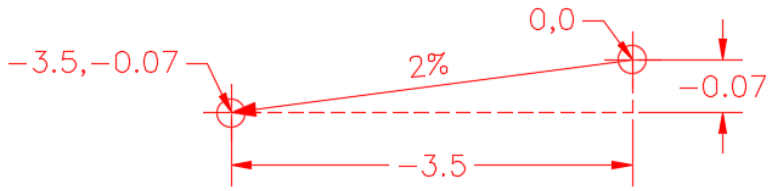
2.3.1.2 Column 3: SL / SR



Example:

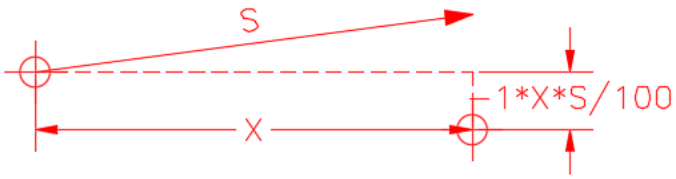
L,X-3.5,SL

Left Superelevation = -2.0



The left point will be moved 3.5 units left and down at 0.07.

2.3.1.3 Column 3: S-L / S-R

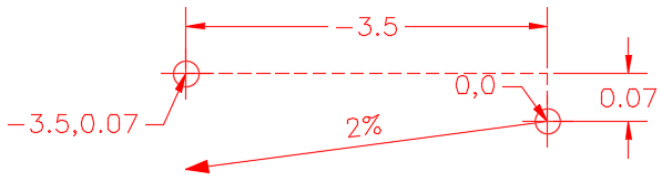


The use case for this is to move points on one side utilizing the superelevation on the other.

Example:

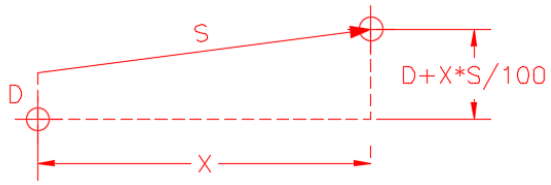
L,X-3.5,S-L

Left Superelevation = -2.0



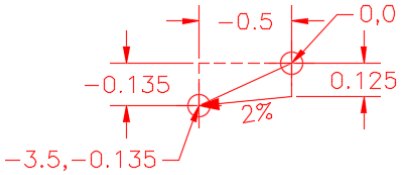
The left point will be moved 3.5 units left and up 0.07.

2.3.1.4 Column 3: DSL /DSR



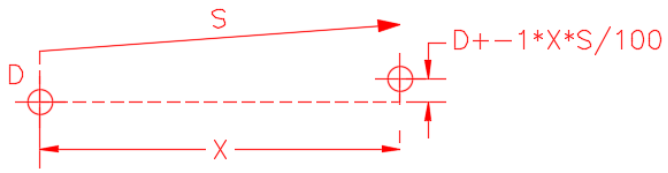
L,X-0.5,DSL-0.125

Left Superelevation = -2.0



The use case for this is moving a point to the base of a material, such as a shoulder edge would be the bottom of the asphalt.

2.3.1.5 Column 3: DS-L / DS-R



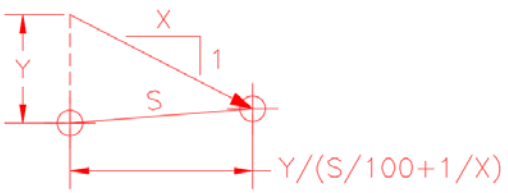
Column 3: OX

2.3.2 Column 2: Ax

Calculate offset to intersection with Alignment Polyline number ‘x’

2.3.3 Column 2: Y

2.3.3.1 Column 3: OX

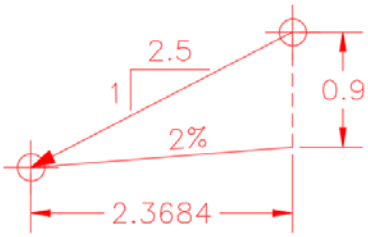


The use case for this is finding a point at the bottom of the subgrade travelling down a X:1 slope.

Example:

L,Y-0.9,OX2.5

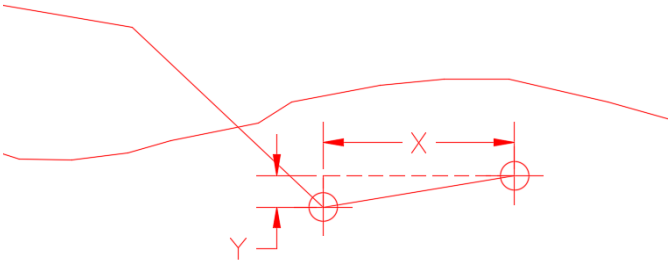
Left Superelevation = -2.0



2.4 Column 1: CL / CR and FL / FR

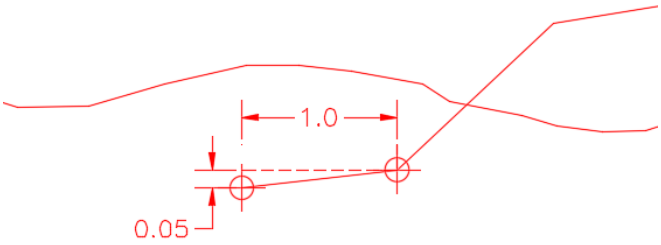
2.4.1 Column 2 / 3 : X / Y

Use case is for building ditching in cut and fill scenarios.



Example:

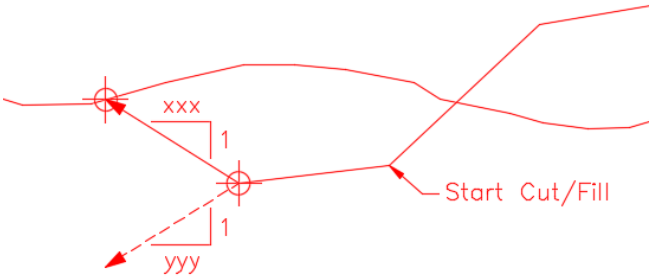
CL,X-1.0,Y-0.05



2.4.2 Column 2 / 3 : xxx / yyy

'xxx' is the primary try, 'yyy' is the on fail try.

Primary:



On Fail: