

AUTODESK® CIVIL 3D

Dynamic 3D Computer-aided Design with Autodesk Civil 3D

Training Course for:
Autodesk® Civil 3D™ 2007



Lecture 8 – Supplementary Notes Create Transition Corridor by Drawing

August 2006

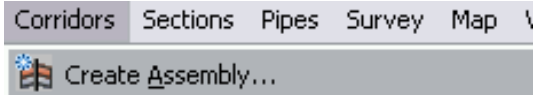
Autodesk®

Objective

This document describes the steps to Create Transition Corridors in Civil 3D.

Exercise

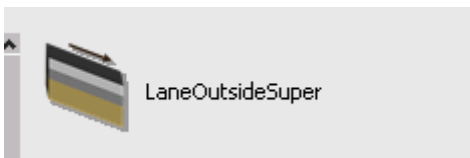
1. Open the 「Lecture 8- corridor 2.dwg」 drawing
2. In the menu Toolbar, select 「Corridors」 → 「Create Assembly」



3. In the dialog box, enter the name and press [OK]



4. Select to right bottom space
5. In the Toolpalettes, select 「LandOutsideSuper」



6. Set 「Right」 side and width 「13m」

ADVANCED	
Parameters	
Lane Slope	-2.000%
Version	R2007
Side	Right
Crown Point on Inside	No
Width	13.000m
Default Slope	-2.000%

7. Select to assembly right hand side



8. In the Toolpalettes, select 「BasicLaneTransition」



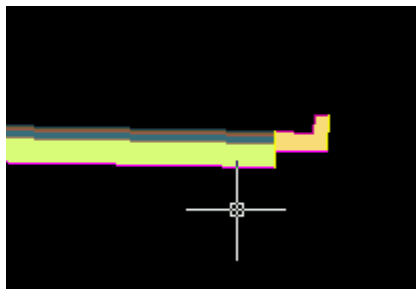
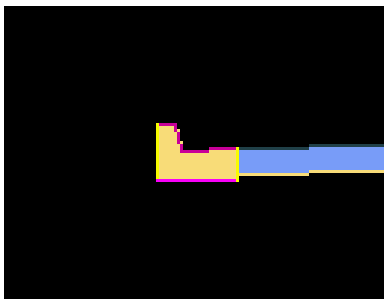
9. Set 「Left」 side, width 「30m」 and select transition 「Hold gradient, change offset」

ADVANCED	
Parameters	
Version	R2007
Side	Left
Default Width	30.000m
Depth	0.200m
Default Slope	-2.000%
Transition	Hold gradient, change offset

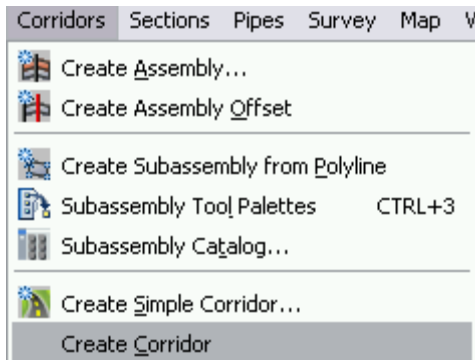
10. Select to assembly left hand side



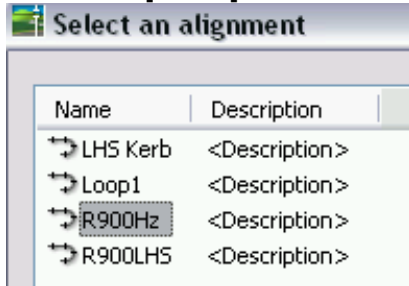
11. Repeat step 5 – 10, select 「BasicKerbAndChannel」 to left and right handside



12. In the menu Toolbar, select 「Corridors」 → 「Create Corridor」



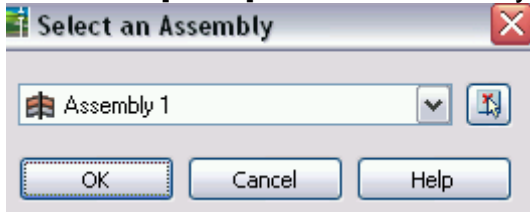
13. Press [Enter] to select Alignment (e.g.R900Hz)







14. Press [Enter] to select Profile (e.g.R900Hz)

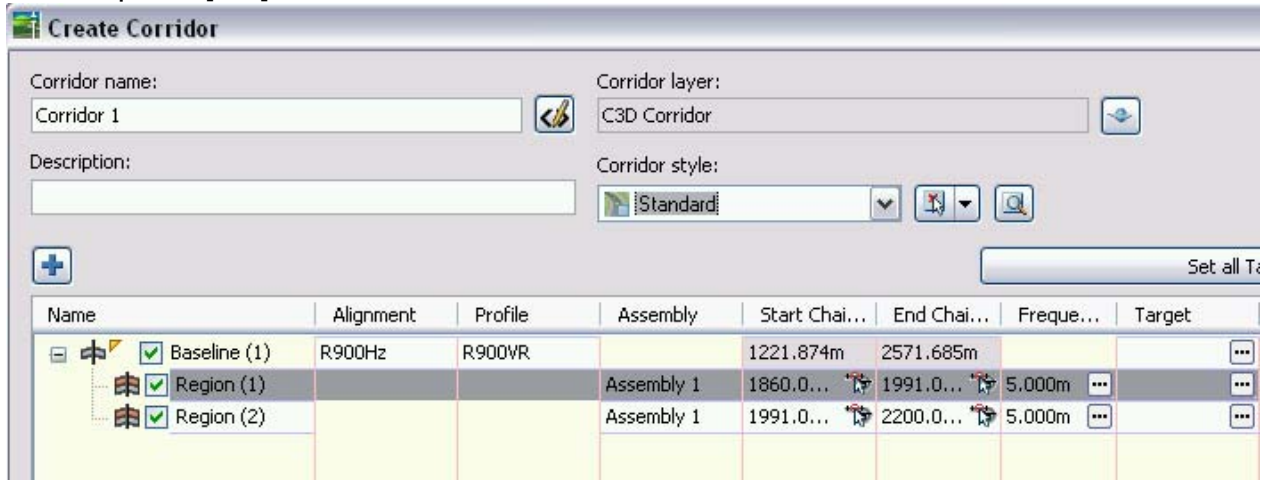


15. Press [Enter] to select Assembly (e.g. Assembly 1)



16. In dialog box :

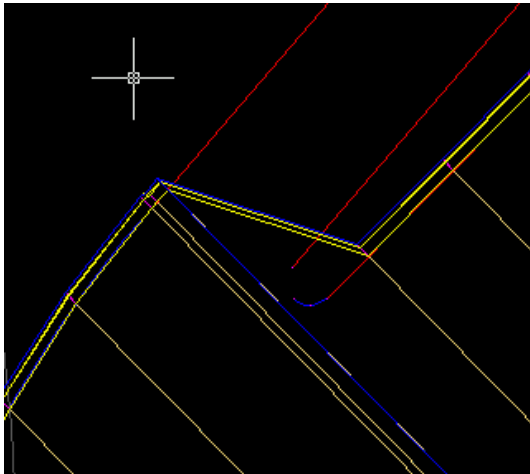
- enter the corridor name
- in bottom box, select the baseline, right click 「 Add Region 」 add region 2
- enter the region (1) start & end chainage (1860 – 1991)
- click frequency  icon set straight, curves, transition & profile curves (5m.)
- click target  icon set transition alignment [LHS Kerb]
- enter the region (2) start & end chainage (1991 – 2200)
- click frequency  icon set straight, curves, transition & profile curves (5m.)
- click target  icon set transition alignment [R900LHS]
- press [OK]



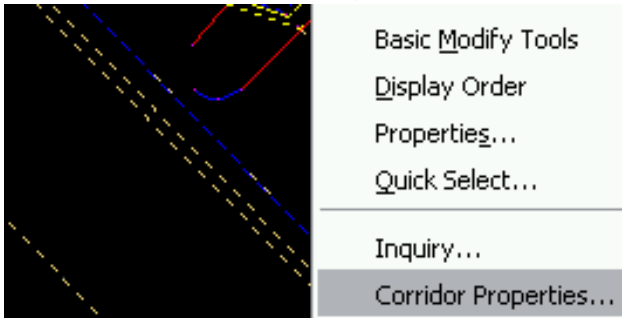
Apply Assembly	
Along straights	5.000m
Along curves	5.000m
Along transitions	5.000m
Along profile curves	5.000m
At horizontal geometr...	Yes
At superelevation criti...	Yes
At profile geometry po...	Yes
At Profile High/Low poi...	Yes

Target	Object Name
Surfaces	<Click here to set all>
Alignments	
Transition Alignment	R900LHS
Width Alignment	<None>
Profiles	
Transition Profile	<None>
Outside Level Profile	<None>

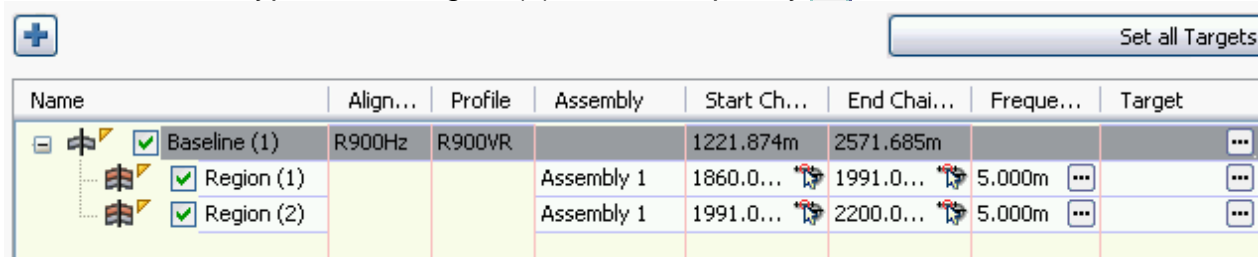
17. Zoom to transition



18. Select the corridor, right click 「Corridor properties」

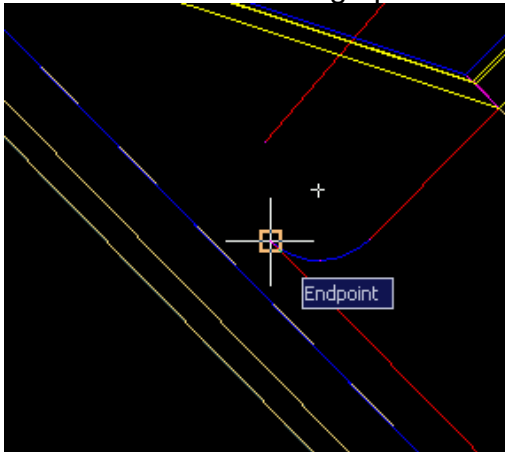


19. In Parameter type, select region (2) & click frequency ... icon

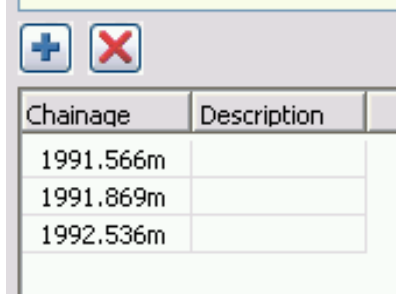


20. In dialog box, click + icon to add the chainage line

21. Select the arc through point

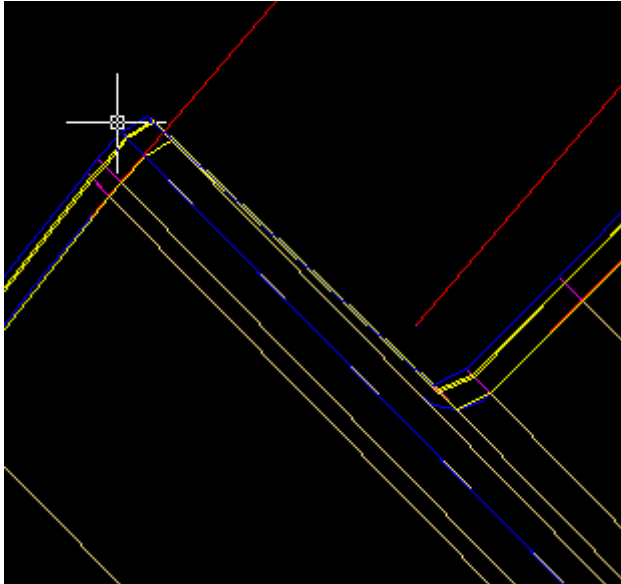


22. Repeat step 21 to select arc second & third point, press [OK]



Chainage	Description
1991.566m	
1991.869m	
1992.536m	

23. Re-build the corridor and zoom to transition



24. Close the drawing file. Do not save the change