

BVE Feature

Building Special Sharp Rail Objects for BVE Using Curverail Editor

By Luigi Cartello (<http://bve.altervista.org>)

Curverail_Editer Ver 4.6 is a handy utility designed by Advanceboy, a clever Japanese programmer. You can get it free at this address:

<http://tokyo.cool.ne.jp/advanceboy/BVEs/Read%20me%20For%20%204.5.html>

By tweaking your objects a little with this program, it's possible to build some interesting things. Here is an example about how to build a mountain tramline curve having a 25-meter radius (metric gauge). The object is composed of a road with tram rails placed at the left, a mountain at the left side and a slope at the right:



Textures

The object uses the following textures:

- Road-mezza.bmp (road's surface)
- Rail.bmp (light rail's surface)
- Railr.bmp (dark rail's surface)
- Grass2.bmp (Green at the sides)

The method consists of building four different objects using Curverail. The first is the main object and has to be further edited by hand using some parameters and pieces taken from the other three objects.

Object #1

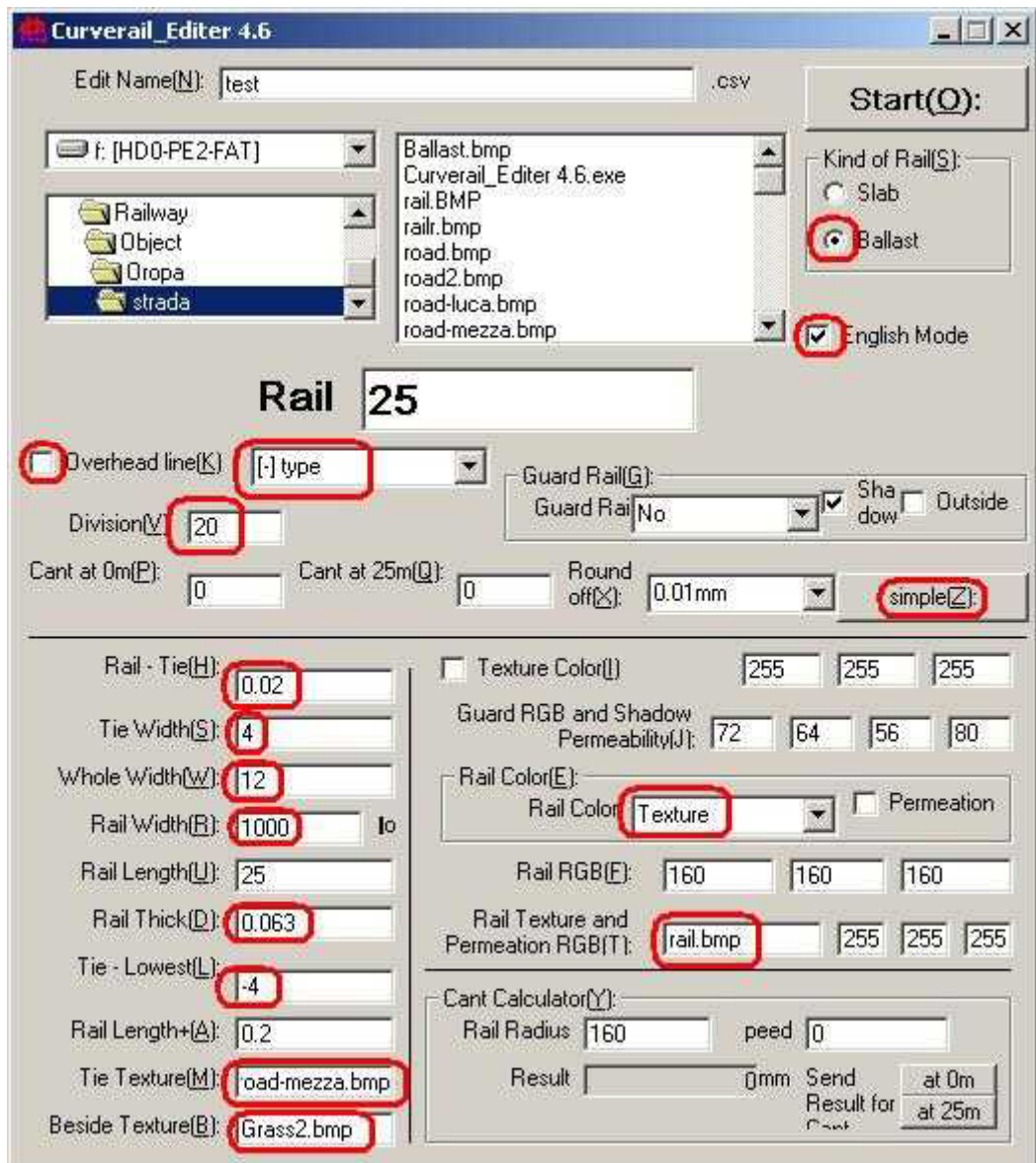
This is the first and main object to build.



These are the main dimensions:

- Total width of the object (Whole width): 12 meters
- Road's width (Tie width): 4 meters
- Height of the dike (Tie lowest): 4 meters (this parameter has to be negative to obtain an elevation of the height instead of a lowering)
- The Rail-Tie parameter, setting how much the road is lowered from the 0 height (rail's surface) is set at 0.02 (2 centimetres).

Curverail's settings for the main object are shown in the following property sheet. The selected parameters are circled in red.



Object #2

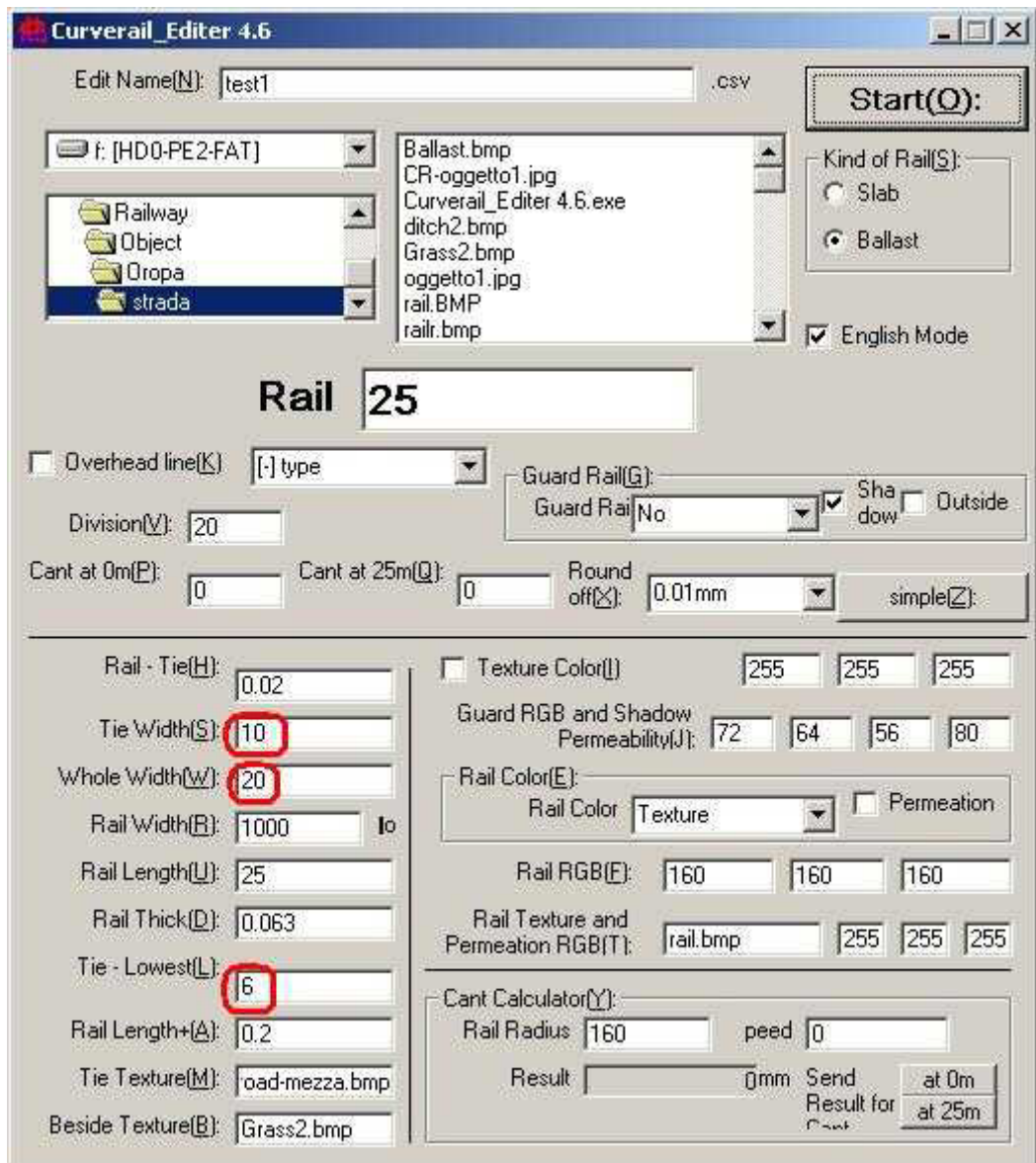
This is the second object to build.



These are the main dimensions:

- Total width of the object (Whole width): 20 meters
- Road's width (Tie width): 10 meters
- Lowering of the dike (Tie lowest): 6 meters

Curverail's settings for the second object are shown in the following property sheet. The selected parameters are circled in red.



Auxiliary Objects #3 and #4

These are useful only to extract from them the code generated for rail surfaces. This code will be used to build the interior side and the drill of the tram track.

After the creation of the Object #2, it's necessary to change these parameters:

Object #3 – for interior sides

Set:

- Gauge (Rail width): 900
- Rail's width (Rail thick): 0.035

Object #4 – for drill

Set:

- Gauge (Rail width): 950
- Rail's width (Rail thick): 0.06
- Railtexture: railr.bmp (it's darker then rail.bmp)

Hand Editing the Main Object

Red – modifications by hand

Blue – Comments

Black – Original code of the first main object

```
;~Curverail_Editer4.5 2004 advanceboy~  
;????  
;?????:25  
;????  
;????:20  
  
;?? First section – Road's surface  
; Red parameters (vertexes for the right side)  
; are taken from the first section of the second object  
CreateMeshBuilder  
AddVertex,-1.7552,-.02,-.9588  
AddVertex, 4.3879,-.02, 2.3971  
AddVertex,-2.3725,-.02,.2416  
AddVertex, 3.9306,-.02, 3.2863  
AddVertex,-2.9291,-.02,1.4713  
AddVertex, 3.5183,-.02, 4.1973  
AddVertex,-3.4235,-.02,2.7274  
AddVertex, 3.1521,-.02, 5.1277  
AddVertex,-3.8545,-.02,4.0066  
AddVertex, 2.8328,-.02, 6.0752  
AddVertex,-4.2211,-.02,5.3057  
AddVertex, 2.5613,-.02, 7.0376  
AddVertex,-4.5222,-.02,6.6216
```

```

AddVertex, 2.3382,-.02, 8.0123
AddVertex,-4.7573,-.02,7.9508
AddVertex, 2.1641,-.02, 8.9969
AddVertex,-4.9255,-.02,9.2901
AddVertex, 2.0395,-.02, 9.989
AddVertex,-5.0267,-.02,10.6362
AddVertex, 1.9646,-.02, 10.9861
AddVertex,-5.0604,-.02,11.9856
AddVertex, 1.9396,-.02,11.9856
AddVertex,-5.0267,-.02,13.3351
AddVertex, 1.9646,-.02, 12.9852
AddVertex,-4.9255,-.02,14.6811
AddVertex, 2.0395,-.02, 13.9823
AddVertex,-4.7573,-.02,16.0205
AddVertex, 2.1641,-.02, 14.9744
AddVertex,-4.5222,-.02,17.3497
AddVertex, 2.3382,-.02, 15.959
AddVertex,-4.2211,-.02,18.6655
AddVertex, 2.5613,-.02, 16.9337
AddVertex,-3.8545,-.02,19.9647
AddVertex, 2.8328,-.02, 17.896
AddVertex,-3.4235,-.02,21.2439
AddVertex, 3.1521,-.02, 18.8436
AddVertex,-2.9291,-.02,22.4999
AddVertex, 3.5183,-.02, 19.774
AddVertex,-2.3725,-.02,23.7297
AddVertex, 3.9306,-.02, 20.685
AddVertex,-1.7552,-.02,24.9301
AddVertex, 4.3879,-.02, 21.5742
AddVertex,-1.6509,-.02,25.1193
AddVertex, 4.4652,-.02, 21.7143
AddFace,1,0,2,3
AddFace,3,2,4,5
AddFace,5,4,6,7
AddFace,7,6,8,9
AddFace,9,8,10,11
AddFace,11,10,12,13
AddFace,13,12,14,15
AddFace,15,14,16,17
AddFace,17,16,18,19
AddFace,19,18,20,21
AddFace,21,20,22,23
AddFace,23,22,24,25
AddFace,25,24,26,27
AddFace,27,26,28,29
AddFace,29,28,30,31
AddFace,31,30,32,33
AddFace,33,32,34,35
AddFace,35,34,36,37
AddFace,37,36,38,39
AddFace,39,38,40,41
AddFace,41,40,42,43
GenerateNormals

LoadTexture,road-mezza.bmp
SetTextureCoordinates,0,1,9
SetTextureCoordinates,1,0,9

```

```

SetTextureCoordinates,2,1,8.55
SetTextureCoordinates,3,0,8.55
SetTextureCoordinates,4,1,8.1
SetTextureCoordinates,5,0,8.1
SetTextureCoordinates,6,1,7.65
SetTextureCoordinates,7,0,7.65
SetTextureCoordinates,8,1,7.2
SetTextureCoordinates,9,0,7.2
SetTextureCoordinates,10,1,6.75
SetTextureCoordinates,11,0,6.75
SetTextureCoordinates,12,1,6.3
SetTextureCoordinates,13,0,6.3
SetTextureCoordinates,14,1,5.85
SetTextureCoordinates,15,0,5.85
SetTextureCoordinates,16,1,5.4
SetTextureCoordinates,17,0,5.4
SetTextureCoordinates,18,1,4.95
SetTextureCoordinates,19,0,4.95
SetTextureCoordinates,20,1,4.5
SetTextureCoordinates,21,0,4.5
SetTextureCoordinates,22,1,4.05
SetTextureCoordinates,23,0,4.05
SetTextureCoordinates,24,1,3.6
SetTextureCoordinates,25,0,3.6
SetTextureCoordinates,26,1,3.15
SetTextureCoordinates,27,0,3.15
SetTextureCoordinates,28,1,2.7
SetTextureCoordinates,29,0,2.7
SetTextureCoordinates,30,1,2.25
SetTextureCoordinates,31,0,2.25
SetTextureCoordinates,32,1,1.8
SetTextureCoordinates,33,0,1.8
SetTextureCoordinates,34,1,1.35
SetTextureCoordinates,35,0,1.35
SetTextureCoordinates,36,1,.9
SetTextureCoordinates,37,0,.9
SetTextureCoordinates,38,1,.45
SetTextureCoordinates,39,0,.45
SetTextureCoordinates,40,1,0
SetTextureCoordinates,41,0,0
SetTextureCoordinates,42,1,-.072
SetTextureCoordinates,43,0,-.072

```

```

;???? Surface of the left rail

```

```

CreateMeshBuilder
AddVertex,-.5279,0,-.2884
AddVertex,-.4682,0,-.2558
AddVertex,-1.1132,0,.8499
AddVertex,-1.052,0,.8794
AddVertex,-1.641,0,2.0159
AddVertex,-1.5783,0,2.0424
AddVertex,-2.1098,0,3.2069
AddVertex,-2.0459,0,3.2303
AddVertex,-2.5185,0,4.4199
AddVertex,-2.4535,0,4.44
AddVertex,-2.866,0,5.6517

```



```

AddVertex,-2.8002,0,5.6686
AddVertex,-3.1516,0,6.8994
AddVertex,-3.085,0,6.9129
AddVertex,-3.3745,0,8.1598
AddVertex,-3.3072,0,8.17
AddVertex,-3.534,0,9.4298
AddVertex,-3.4664,0,9.4365
AddVertex,-3.6299,0,10.7061
AddVertex,-3.562,0,10.7095
AddVertex,-3.6619,0,11.9856
AddVertex,-3.5939,0,11.9856
AddVertex,-3.6299,0,13.2652
AddVertex,-3.562,0,13.2618
AddVertex,-3.534,0,14.5415
AddVertex,-3.4664,0,14.5347
AddVertex,-3.3745,0,15.8115
AddVertex,-3.3072,0,15.8013
AddVertex,-3.1516,0,17.0719
AddVertex,-3.085,0,17.0584
AddVertex,-2.866,0,18.3196
AddVertex,-2.8002,0,18.3027
AddVertex,-2.5185,0,19.5514
AddVertex,-2.4535,0,19.5313
AddVertex,-2.1098,0,20.7643
AddVertex,-2.0459,0,20.741
AddVertex,-1.641,0,21.9553
AddVertex,-1.5783,0,21.9289
AddVertex,-1.1132,0,23.1214
AddVertex,-1.052,0,23.0918
AddVertex,-.5279,0,24.2597
AddVertex,-.4682,0,24.2271
AddVertex,-.429,0,24.439
AddVertex,-.3695,0,24.4059
AddFace,1,0,2,3
AddFace,3,2,4,5
AddFace,5,4,6,7
AddFace,7,6,8,9
AddFace,9,8,10,11
AddFace,11,10,12,13
AddFace,13,12,14,15
AddFace,15,14,16,17
AddFace,17,16,18,19
AddFace,19,18,20,21
AddFace,21,20,22,23
AddFace,23,22,24,25
AddFace,25,24,26,27
AddFace,27,26,28,29
AddFace,29,28,30,31
AddFace,31,30,32,33
AddFace,33,32,34,35
AddFace,35,34,36,37
AddFace,37,36,38,39
AddFace,39,38,40,41
AddFace,41,40,42,43
GenerateNormals

```

```

LoadTexture,rail.bmp

```

```

SetTextureCoordinates,0,1,9
SetTextureCoordinates,1,0,9
SetTextureCoordinates,2,1,8.55
SetTextureCoordinates,3,0,8.55
SetTextureCoordinates,4,1,8.1
SetTextureCoordinates,5,0,8.1
SetTextureCoordinates,6,1,7.65
SetTextureCoordinates,7,0,7.65
SetTextureCoordinates,8,1,7.2
SetTextureCoordinates,9,0,7.2
SetTextureCoordinates,10,1,6.75
SetTextureCoordinates,11,0,6.75
SetTextureCoordinates,12,1,6.3
SetTextureCoordinates,13,0,6.3
SetTextureCoordinates,14,1,5.85
SetTextureCoordinates,15,0,5.85
SetTextureCoordinates,16,1,5.4
SetTextureCoordinates,17,0,5.4
SetTextureCoordinates,18,1,4.95
SetTextureCoordinates,19,0,4.95
SetTextureCoordinates,20,1,4.5
SetTextureCoordinates,21,0,4.5
SetTextureCoordinates,22,1,4.05
SetTextureCoordinates,23,0,4.05
SetTextureCoordinates,24,1,3.6
SetTextureCoordinates,25,0,3.6
SetTextureCoordinates,26,1,3.15
SetTextureCoordinates,27,0,3.15
SetTextureCoordinates,28,1,2.7
SetTextureCoordinates,29,0,2.7
SetTextureCoordinates,30,1,2.25
SetTextureCoordinates,31,0,2.25
SetTextureCoordinates,32,1,1.8
SetTextureCoordinates,33,0,1.8
SetTextureCoordinates,34,1,1.35
SetTextureCoordinates,35,0,1.35
SetTextureCoordinates,36,1,.9
SetTextureCoordinates,37,0,.9
SetTextureCoordinates,38,1,.45
SetTextureCoordinates,39,0,.45
SetTextureCoordinates,40,1,0
SetTextureCoordinates,41,0,0
SetTextureCoordinates,42,1,-.072
SetTextureCoordinates,43,0,-.072

```

```

;???? Surface of the right rail
CreateMeshBuilder
AddVertex,.4682,0,.2558
AddVertex,.5279,0,.2884
AddVertex,-.0912,0,1.3436
AddVertex,-.03,0,1.3731
AddVertex,-.5956,0,2.4579
AddVertex,-.5329,0,2.4844
AddVertex,-1.0436,0,3.5961
AddVertex,-.9797,0,3.6194
AddVertex,-1.4342,0,4.7553

```

```

AddVertex,-1.3692,0,4.7754
AddVertex,-1.7663,0,5.9325
AddVertex,-1.7004,0,5.9494
AddVertex,-2.0392,0,7.1249
AddVertex,-1.9726,0,7.1384
AddVertex,-2.2522,0,8.3294
AddVertex,-2.185,0,8.3396
AddVertex,-2.4047,0,9.5431
AddVertex,-2.337,0,9.5499
AddVertex,-2.4964,0,10.7628
AddVertex,-2.4284,0,10.7662
AddVertex,-2.5269,0,11.9856
AddVertex,-2.4589,0,11.9856
AddVertex,-2.4964,0,13.2085
AddVertex,-2.4284,0,13.2051
AddVertex,-2.4047,0,14.4282
AddVertex,-2.337,0,14.4214
AddVertex,-2.2522,0,15.6419
AddVertex,-2.185,0,15.6317
AddVertex,-2.0392,0,16.8464
AddVertex,-1.9726,0,16.8329
AddVertex,-1.7663,0,18.0387
AddVertex,-1.7004,0,18.0219
AddVertex,-1.4342,0,19.216
AddVertex,-1.3692,0,19.1959
AddVertex,-1.0436,0,20.3751
AddVertex,-.9797,0,20.3518
AddVertex,-.5956,0,21.5133
AddVertex,-.5329,0,21.4869
AddVertex,-.0912,0,22.6277
AddVertex,-.03,0,22.5981
AddVertex,.4682,0,23.7155
AddVertex,.5279,0,23.6829
AddVertex,.5627,0,23.8869
AddVertex,.6221,0,23.8538
AddFace,1,0,2,3
AddFace,3,2,4,5
AddFace,5,4,6,7
AddFace,7,6,8,9
AddFace,9,8,10,11
AddFace,11,10,12,13
AddFace,13,12,14,15
AddFace,15,14,16,17
AddFace,17,16,18,19
AddFace,19,18,20,21
AddFace,21,20,22,23
AddFace,23,22,24,25
AddFace,25,24,26,27
AddFace,27,26,28,29
AddFace,29,28,30,31
AddFace,31,30,32,33
AddFace,33,32,34,35
AddFace,35,34,36,37
AddFace,37,36,38,39
AddFace,39,38,40,41
AddFace,41,40,42,43
GenerateNormals

```

```

LoadTexture,rail.bmp
SetTextureCoordinates,0,1,9
SetTextureCoordinates,1,0,9
SetTextureCoordinates,2,1,8.55
SetTextureCoordinates,3,0,8.55
SetTextureCoordinates,4,1,8.1
SetTextureCoordinates,5,0,8.1
SetTextureCoordinates,6,1,7.65
SetTextureCoordinates,7,0,7.65
SetTextureCoordinates,8,1,7.2
SetTextureCoordinates,9,0,7.2
SetTextureCoordinates,10,1,6.75
SetTextureCoordinates,11,0,6.75
SetTextureCoordinates,12,1,6.3
SetTextureCoordinates,13,0,6.3
SetTextureCoordinates,14,1,5.85
SetTextureCoordinates,15,0,5.85
SetTextureCoordinates,16,1,5.4
SetTextureCoordinates,17,0,5.4
SetTextureCoordinates,18,1,4.95
SetTextureCoordinates,19,0,4.95
SetTextureCoordinates,20,1,4.5
SetTextureCoordinates,21,0,4.5
SetTextureCoordinates,22,1,4.05
SetTextureCoordinates,23,0,4.05
SetTextureCoordinates,24,1,3.6
SetTextureCoordinates,25,0,3.6
SetTextureCoordinates,26,1,3.15
SetTextureCoordinates,27,0,3.15
SetTextureCoordinates,28,1,2.7
SetTextureCoordinates,29,0,2.7
SetTextureCoordinates,30,1,2.25
SetTextureCoordinates,31,0,2.25
SetTextureCoordinates,32,1,1.8
SetTextureCoordinates,33,0,1.8
SetTextureCoordinates,34,1,1.35
SetTextureCoordinates,35,0,1.35
SetTextureCoordinates,36,1,.9
SetTextureCoordinates,37,0,.9
SetTextureCoordinates,38,1,.45
SetTextureCoordinates,39,0,.45
SetTextureCoordinates,40,1,0
SetTextureCoordinates,41,0,0
SetTextureCoordinates,42,1,-.072
SetTextureCoordinates,43,0,-.072

```

```

;????? Dike at the left (upstream)
CreateMeshBuilder
AddVertex,-5.2655,3.98,-2.8766
AddVertex,-1.7552,-.02,-.9588
AddVertex,-5.9743,3.98,-1.4983
AddVertex,-2.3725,-.02,.2416
AddVertex,-6.6133,3.98,-.0863
AddVertex,-2.9291,-.02,1.4713
AddVertex,-7.181,3.98,1.3558

```

```

AddVertex,-3.4235,-.02,2.7274
AddVertex,-7.6759,3.98,2.8245
AddVertex,-3.8545,-.02,4.0066
AddVertex,-8.0967,3.98,4.3161
AddVertex,-4.2211,-.02,5.3057
AddVertex,-8.4425,3.98,5.8269
AddVertex,-4.5222,-.02,6.6216
AddVertex,-8.7123,3.98,7.3531
AddVertex,-4.7573,-.02,7.9508
AddVertex,-8.9056,3.98,8.8908
AddVertex,-4.9255,-.02,9.2901
AddVertex,-9.0217,3.98,10.4363
AddVertex,-5.0267,-.02,10.6362
AddVertex,-9.0604,3.98,11.9856
AddVertex,-5.0604,-.02,11.9856
AddVertex,-9.0217,3.98,13.535
AddVertex,-5.0267,-.02,13.3351
AddVertex,-8.9056,3.98,15.0805
AddVertex,-4.9255,-.02,14.6811
AddVertex,-8.7123,3.98,16.6182
AddVertex,-4.7573,-.02,16.0205
AddVertex,-8.4425,3.98,18.1444
AddVertex,-4.5222,-.02,17.3497
AddVertex,-8.0967,3.98,19.6552
AddVertex,-4.2211,-.02,18.6655
AddVertex,-7.6759,3.98,21.1468
AddVertex,-3.8545,-.02,19.9647
AddVertex,-7.181,3.98,22.6155
AddVertex,-3.4235,-.02,21.2439
AddVertex,-6.6133,3.98,24.0576
AddVertex,-2.9291,-.02,22.4999
AddVertex,-5.9743,3.98,25.4696
AddVertex,-2.3725,-.02,23.7297
AddVertex,-5.2655,3.98,26.8478
AddVertex,-1.7552,-.02,24.9301
AddVertex,-5.1457,3.98,27.065
AddVertex,-1.6509,-.02,25.1193
AddFace,1,0,2,3
AddFace,3,2,4,5
AddFace,5,4,6,7
AddFace,7,6,8,9
AddFace,9,8,10,11
AddFace,11,10,12,13
AddFace,13,12,14,15
AddFace,15,14,16,17
AddFace,17,16,18,19
AddFace,19,18,20,21
AddFace,21,20,22,23
AddFace,23,22,24,25
AddFace,25,24,26,27
AddFace,27,26,28,29
AddFace,29,28,30,31
AddFace,31,30,32,33
AddFace,33,32,34,35
AddFace,35,34,36,37
AddFace,37,36,38,39
AddFace,39,38,40,41

```

AddFace, 41, 40, 42, 43
GenerateNormals

LoadTexture, Grass2.bmp
SetTextureCoordinates, 0, 1, 1
SetTextureCoordinates, 1, 0, 1
SetTextureCoordinates, 2, 1, .95
SetTextureCoordinates, 3, 0, .95
SetTextureCoordinates, 4, 1, .9
SetTextureCoordinates, 5, 0, .9
SetTextureCoordinates, 6, 1, .85
SetTextureCoordinates, 7, 0, .85
SetTextureCoordinates, 8, 1, .8
SetTextureCoordinates, 9, 0, .8
SetTextureCoordinates, 10, 1, .75
SetTextureCoordinates, 11, 0, .75
SetTextureCoordinates, 12, 1, .7
SetTextureCoordinates, 13, 0, .7
SetTextureCoordinates, 14, 1, .65
SetTextureCoordinates, 15, 0, .65
SetTextureCoordinates, 16, 1, .6
SetTextureCoordinates, 17, 0, .6
SetTextureCoordinates, 18, 1, .55
SetTextureCoordinates, 19, 0, .55
SetTextureCoordinates, 20, 1, .5
SetTextureCoordinates, 21, 0, .5
SetTextureCoordinates, 22, 1, .45
SetTextureCoordinates, 23, 0, .45
SetTextureCoordinates, 24, 1, .4
SetTextureCoordinates, 25, 0, .4
SetTextureCoordinates, 26, 1, .35
SetTextureCoordinates, 27, 0, .35
SetTextureCoordinates, 28, 1, .3
SetTextureCoordinates, 29, 0, .3
SetTextureCoordinates, 30, 1, .25
SetTextureCoordinates, 31, 0, .25
SetTextureCoordinates, 32, 1, .2
SetTextureCoordinates, 33, 0, .2
SetTextureCoordinates, 34, 1, .15
SetTextureCoordinates, 35, 0, .15
SetTextureCoordinates, 36, 1, .1
SetTextureCoordinates, 37, 0, .1
SetTextureCoordinates, 38, 1, .05
SetTextureCoordinates, 39, 0, .05
SetTextureCoordinates, 40, 1, 0
SetTextureCoordinates, 41, 0, 0
SetTextureCoordinates, 42, 1, -.008
SetTextureCoordinates, 43, 0, -.008

;????? Dike at the right (downstream)
; Replace the whole section with the corresponding
; one taken from the second object built
CreateMeshBuilder
AddVertex, 4.3879, -.02, 2.3971
AddVertex, 8.7758, -6.02, 4.7943
AddVertex, 3.9306, -.02, 3.2863

AddVertex, 8.4329, -6.02, 5.4612
AddVertex, 3.5183, -.02, 4.1973
AddVertex, 8.1236, -6.02, 6.1444
AddVertex, 3.1521, -.02, 5.1277
AddVertex, 7.849, -6.02, 6.8422
AddVertex, 2.8328, -.02, 6.0752
AddVertex, 7.6095, -6.02, 7.5528
AddVertex, 2.5613, -.02, 7.0376
AddVertex, 7.4059, -6.02, 8.2746
AddVertex, 2.3382, -.02, 8.0123
AddVertex, 7.2386, -6.02, 9.0056
AddVertex, 2.1641, -.02, 8.9969
AddVertex, 7.108, -6.02, 9.7441
AddVertex, 2.0395, -.02, 9.989
AddVertex, 7.0145, -6.02, 10.4881
AddVertex, 1.9646, -.02, 10.9861
AddVertex, 6.9583, -6.02, 11.236
AddVertex, 1.9396, -.02, 11.9856
AddVertex, 6.9396, -6.02, 11.9856
AddVertex, 1.9646, -.02, 12.9852
AddVertex, 6.9583, -6.02, 12.7353
AddVertex, 2.0395, -.02, 13.9823
AddVertex, 7.0145, -6.02, 13.4831
AddVertex, 2.1641, -.02, 14.9744
AddVertex, 7.108, -6.02, 14.2272
AddVertex, 2.3382, -.02, 15.959
AddVertex, 7.2386, -6.02, 14.9657
AddVertex, 2.5613, -.02, 16.9337
AddVertex, 7.4059, -6.02, 15.6967
AddVertex, 2.8328, -.02, 17.896
AddVertex, 7.6095, -6.02, 16.4184
AddVertex, 3.1521, -.02, 18.8436
AddVertex, 7.849, -6.02, 17.1291
AddVertex, 3.5183, -.02, 19.774
AddVertex, 8.1236, -6.02, 17.8269
AddVertex, 3.9306, -.02, 20.685
AddVertex, 8.4329, -6.02, 18.5101
AddVertex, 4.3879, -.02, 21.5742
AddVertex, 8.7758, -6.02, 19.177
AddVertex, 4.4652, -.02, 21.7143
AddVertex, 8.8338, -6.02, 19.2821
AddFace, 1, 0, 2, 3
AddFace, 3, 2, 4, 5
AddFace, 5, 4, 6, 7
AddFace, 7, 6, 8, 9
AddFace, 9, 8, 10, 11
AddFace, 11, 10, 12, 13
AddFace, 13, 12, 14, 15
AddFace, 15, 14, 16, 17
AddFace, 17, 16, 18, 19
AddFace, 19, 18, 20, 21
AddFace, 21, 20, 22, 23
AddFace, 23, 22, 24, 25
AddFace, 25, 24, 26, 27
AddFace, 27, 26, 28, 29
AddFace, 29, 28, 30, 31
AddFace, 31, 30, 32, 33

```
AddFace, 33, 32, 34, 35
AddFace, 35, 34, 36, 37
AddFace, 37, 36, 38, 39
AddFace, 39, 38, 40, 41
AddFace, 41, 40, 42, 43
GenerateNormals
```

```
LoadTexture, Grass2.bmp
SetTextureCoordinates, 0, 1, 1
SetTextureCoordinates, 1, 0, 1
SetTextureCoordinates, 2, 1, .95
SetTextureCoordinates, 3, 0, .95
SetTextureCoordinates, 4, 1, .9
SetTextureCoordinates, 5, 0, .9
SetTextureCoordinates, 6, 1, .85
SetTextureCoordinates, 7, 0, .85
SetTextureCoordinates, 8, 1, .8
SetTextureCoordinates, 9, 0, .8
SetTextureCoordinates, 10, 1, .75
SetTextureCoordinates, 11, 0, .75
SetTextureCoordinates, 12, 1, .7
SetTextureCoordinates, 13, 0, .7
SetTextureCoordinates, 14, 1, .65
SetTextureCoordinates, 15, 0, .65
SetTextureCoordinates, 16, 1, .6
SetTextureCoordinates, 17, 0, .6
SetTextureCoordinates, 18, 1, .55
SetTextureCoordinates, 19, 0, .55
SetTextureCoordinates, 20, 1, .5
SetTextureCoordinates, 21, 0, .5
SetTextureCoordinates, 22, 1, .45
SetTextureCoordinates, 23, 0, .45
SetTextureCoordinates, 24, 1, .4
SetTextureCoordinates, 25, 0, .4
SetTextureCoordinates, 26, 1, .35
SetTextureCoordinates, 27, 0, .35
SetTextureCoordinates, 28, 1, .3
SetTextureCoordinates, 29, 0, .3
SetTextureCoordinates, 30, 1, .25
SetTextureCoordinates, 31, 0, .25
SetTextureCoordinates, 32, 1, .2
SetTextureCoordinates, 33, 0, .2
SetTextureCoordinates, 34, 1, .15
SetTextureCoordinates, 35, 0, .15
SetTextureCoordinates, 36, 1, .1
SetTextureCoordinates, 37, 0, .1
SetTextureCoordinates, 38, 1, .05
SetTextureCoordinates, 39, 0, .05
SetTextureCoordinates, 40, 1, 0
SetTextureCoordinates, 41, 0, 0
SetTextureCoordinates, 42, 1, -.008
SetTextureCoordinates, 43, 0, -.008
```

```
; Interior side for the left rail
; Add the second section taken from the third object
;????
CreateMeshBuilder
```



```
AddVertex,-.4256,0,-.2325
AddVertex,-.3949,0,-.2157
AddVertex,-1.0083,0,.9005
AddVertex,-.9768,0,.9158
AddVertex,-1.5337,0,2.0613
AddVertex,-1.5014,0,2.0749
AddVertex,-2.0004,0,3.2469
AddVertex,-1.9675,0,3.2589
AddVertex,-2.4072,0,4.4543
AddVertex,-2.3738,0,4.4647
AddVertex,-2.7532,0,5.6806
AddVertex,-2.7193,0,5.6892
AddVertex,-3.0374,0,6.9226
AddVertex,-3.0031,0,6.9295
AddVertex,-3.2593,0,8.1772
AddVertex,-3.2247,0,8.1824
AddVertex,-3.4181,0,9.4414
AddVertex,-3.3833,0,9.4449
AddVertex,-3.5136,0,10.7119
AddVertex,-3.4786,0,10.7137
AddVertex,-3.5454,0,11.9856
AddVertex,-3.5104,0,11.9856
AddVertex,-3.5136,0,13.2594
AddVertex,-3.4786,0,13.2576
AddVertex,-3.4181,0,14.5299
AddVertex,-3.3833,0,14.5264
AddVertex,-3.2593,0,15.7941
AddVertex,-3.2247,0,15.7888
AddVertex,-3.0374,0,17.0487
AddVertex,-3.0031,0,17.0418
AddVertex,-2.7532,0,18.2907
AddVertex,-2.7193,0,18.2821
AddVertex,-2.4072,0,19.517
AddVertex,-2.3738,0,19.5066
AddVertex,-2.0004,0,20.7244
AddVertex,-1.9675,0,20.7124
AddVertex,-1.5337,0,21.91
AddVertex,-1.5014,0,21.8963
AddVertex,-1.0083,0,23.0707
AddVertex,-.9768,0,23.0555
AddVertex,-.4256,0,24.2038
AddVertex,-.3949,0,24.187
AddVertex,-.3272,0,24.3823
AddVertex,-.2966,0,24.3653
AddFace,1,0,2,3
AddFace,3,2,4,5
AddFace,5,4,6,7
AddFace,7,6,8,9
AddFace,9,8,10,11
AddFace,11,10,12,13
AddFace,13,12,14,15
AddFace,15,14,16,17
AddFace,17,16,18,19
AddFace,19,18,20,21
AddFace,21,20,22,23
AddFace,23,22,24,25
AddFace,25,24,26,27
```

AddFace, 27, 26, 28, 29
AddFace, 29, 28, 30, 31
AddFace, 31, 30, 32, 33
AddFace, 33, 32, 34, 35
AddFace, 35, 34, 36, 37
AddFace, 37, 36, 38, 39
AddFace, 39, 38, 40, 41
AddFace, 41, 40, 42, 43
GenerateNormals

LoadTexture, rail.bmp
SetTextureCoordinates, 0, 1, 9
SetTextureCoordinates, 1, 0, 9
SetTextureCoordinates, 2, 1, 8.55
SetTextureCoordinates, 3, 0, 8.55
SetTextureCoordinates, 4, 1, 8.1
SetTextureCoordinates, 5, 0, 8.1
SetTextureCoordinates, 6, 1, 7.65
SetTextureCoordinates, 7, 0, 7.65
SetTextureCoordinates, 8, 1, 7.2
SetTextureCoordinates, 9, 0, 7.2
SetTextureCoordinates, 10, 1, 6.75
SetTextureCoordinates, 11, 0, 6.75
SetTextureCoordinates, 12, 1, 6.3
SetTextureCoordinates, 13, 0, 6.3
SetTextureCoordinates, 14, 1, 5.85
SetTextureCoordinates, 15, 0, 5.85
SetTextureCoordinates, 16, 1, 5.4
SetTextureCoordinates, 17, 0, 5.4
SetTextureCoordinates, 18, 1, 4.95
SetTextureCoordinates, 19, 0, 4.95
SetTextureCoordinates, 20, 1, 4.5
SetTextureCoordinates, 21, 0, 4.5
SetTextureCoordinates, 22, 1, 4.05
SetTextureCoordinates, 23, 0, 4.05
SetTextureCoordinates, 24, 1, 3.6
SetTextureCoordinates, 25, 0, 3.6
SetTextureCoordinates, 26, 1, 3.15
SetTextureCoordinates, 27, 0, 3.15
SetTextureCoordinates, 28, 1, 2.7
SetTextureCoordinates, 29, 0, 2.7
SetTextureCoordinates, 30, 1, 2.25
SetTextureCoordinates, 31, 0, 2.25
SetTextureCoordinates, 32, 1, 1.8
SetTextureCoordinates, 33, 0, 1.8
SetTextureCoordinates, 34, 1, 1.35
SetTextureCoordinates, 35, 0, 1.35
SetTextureCoordinates, 36, 1, .9
SetTextureCoordinates, 37, 0, .9
SetTextureCoordinates, 38, 1, .45
SetTextureCoordinates, 39, 0, .45
SetTextureCoordinates, 40, 1, 0
SetTextureCoordinates, 41, 0, 0
SetTextureCoordinates, 42, 1, -.072
SetTextureCoordinates, 43, 0, -.072

```

; Interior side for the right rail
; Add the third section take from the third object
;????
CreateMeshBuilder
AddVertex,.3949,0,.2157
AddVertex,.4256,0,.2325
AddVertex,-.1664,0,1.3072
AddVertex,-.1349,0,1.3225
AddVertex,-.6725,0,2.4254
AddVertex,-.6402,0,2.439
AddVertex,-1.122,0,3.5675
AddVertex,-1.0892,0,3.5795
AddVertex,-1.5139,0,4.7306
AddVertex,-1.4805,0,4.741
AddVertex,-1.8472,0,5.9119
AddVertex,-1.8133,0,5.9205
AddVertex,-2.1211,0,7.1083
AddVertex,-2.0868,0,7.1153
AddVertex,-2.3348,0,8.3169
AddVertex,-2.3002,0,8.3222
AddVertex,-2.4878,0,9.5347
AddVertex,-2.453,0,9.5382
AddVertex,-2.5798,0,10.7587
AddVertex,-2.5448,0,10.7604
AddVertex,-2.6104,0,11.9856
AddVertex,-2.5754,0,11.9856
AddVertex,-2.5798,0,13.2126
AddVertex,-2.5448,0,13.2109
AddVertex,-2.4878,0,14.4366
AddVertex,-2.453,0,14.4331
AddVertex,-2.3348,0,15.6543
AddVertex,-2.3002,0,15.6491
AddVertex,-2.1211,0,16.863
AddVertex,-2.0868,0,16.856
AddVertex,-1.8472,0,18.0594
AddVertex,-1.8133,0,18.0507
AddVertex,-1.5139,0,19.2407
AddVertex,-1.4805,0,19.2303
AddVertex,-1.122,0,20.4038
AddVertex,-1.0892,0,20.3918
AddVertex,-.6725,0,21.5459
AddVertex,-.6402,0,21.5322
AddVertex,-.1664,0,22.664
AddVertex,-.1349,0,22.6488
AddVertex,.3949,0,23.7555
AddVertex,.4256,0,23.7388
AddVertex,.4898,0,23.9275
AddVertex,.5203,0,23.9105
AddFace,1,0,2,3
AddFace,3,2,4,5
AddFace,5,4,6,7
AddFace,7,6,8,9
AddFace,9,8,10,11
AddFace,11,10,12,13
AddFace,13,12,14,15
AddFace,15,14,16,17
AddFace,17,16,18,19

```

AddFace, 19, 18, 20, 21
AddFace, 21, 20, 22, 23
AddFace, 23, 22, 24, 25
AddFace, 25, 24, 26, 27
AddFace, 27, 26, 28, 29
AddFace, 29, 28, 30, 31
AddFace, 31, 30, 32, 33
AddFace, 33, 32, 34, 35
AddFace, 35, 34, 36, 37
AddFace, 37, 36, 38, 39
AddFace, 39, 38, 40, 41
AddFace, 41, 40, 42, 43
GenerateNormals

LoadTexture, rail.bmp
SetTextureCoordinates, 0, 1, 9
SetTextureCoordinates, 1, 0, 9
SetTextureCoordinates, 2, 1, 8.55
SetTextureCoordinates, 3, 0, 8.55
SetTextureCoordinates, 4, 1, 8.1
SetTextureCoordinates, 5, 0, 8.1
SetTextureCoordinates, 6, 1, 7.65
SetTextureCoordinates, 7, 0, 7.65
SetTextureCoordinates, 8, 1, 7.2
SetTextureCoordinates, 9, 0, 7.2
SetTextureCoordinates, 10, 1, 6.75
SetTextureCoordinates, 11, 0, 6.75
SetTextureCoordinates, 12, 1, 6.3
SetTextureCoordinates, 13, 0, 6.3
SetTextureCoordinates, 14, 1, 5.85
SetTextureCoordinates, 15, 0, 5.85
SetTextureCoordinates, 16, 1, 5.4
SetTextureCoordinates, 17, 0, 5.4
SetTextureCoordinates, 18, 1, 4.95
SetTextureCoordinates, 19, 0, 4.95
SetTextureCoordinates, 20, 1, 4.5
SetTextureCoordinates, 21, 0, 4.5
SetTextureCoordinates, 22, 1, 4.05
SetTextureCoordinates, 23, 0, 4.05
SetTextureCoordinates, 24, 1, 3.6
SetTextureCoordinates, 25, 0, 3.6
SetTextureCoordinates, 26, 1, 3.15
SetTextureCoordinates, 27, 0, 3.15
SetTextureCoordinates, 28, 1, 2.7
SetTextureCoordinates, 29, 0, 2.7
SetTextureCoordinates, 30, 1, 2.25
SetTextureCoordinates, 31, 0, 2.25
SetTextureCoordinates, 32, 1, 1.8
SetTextureCoordinates, 33, 0, 1.8
SetTextureCoordinates, 34, 1, 1.35
SetTextureCoordinates, 35, 0, 1.35
SetTextureCoordinates, 36, 1, .9
SetTextureCoordinates, 37, 0, .9
SetTextureCoordinates, 38, 1, .45
SetTextureCoordinates, 39, 0, .45
SetTextureCoordinates, 40, 1, 0
SetTextureCoordinates, 41, 0, 0

```

SetTextureCoordinates,42,1,-.072
SetTextureCoordinates,43,0,-.072

; Drill for the right rail
; Add the second section taken from the 4° object
; 0.015 meters lowered
;????
CreateMeshBuilder
AddVertex,-.4695, -0.015,-.2565
AddVertex,-.4169, -0.015,-.2277
AddVertex,-1.0534, -0.015,.8788
AddVertex,-.9993, -0.015,.9049
AddVertex,-1.5797, -0.015,2.0418
AddVertex,-1.5245, -0.015,2.0652
AddVertex,-2.0473, -0.015,3.2297
AddVertex,-1.991, -0.015,3.2503
AddVertex,-2.455, -0.015,4.4395
AddVertex,-2.3976, -0.015,4.4573
AddVertex,-2.8016, -0.015,5.6682
AddVertex,-2.7435, -0.015,5.683
AddVertex,-3.0864, -0.015,6.9126
AddVertex,-3.0276, -0.015,6.9245
AddVertex,-3.3087, -0.015,8.1697
AddVertex,-3.2494, -0.015,8.1787
AddVertex,-3.4679, -0.015,9.4364
AddVertex,-3.4082, -0.015,9.4424
AddVertex,-3.5635, -0.015,10.7094
AddVertex,-3.5036, -0.015,10.7124
AddVertex,-3.5954, -0.015,11.9856
AddVertex,-3.5354, -0.015,11.9856
AddVertex,-3.5635, -0.015,13.2619
AddVertex,-3.5036, -0.015,13.2589
AddVertex,-3.4679, -0.015,14.5349
AddVertex,-3.4082, -0.015,14.5289
AddVertex,-3.3087, -0.015,15.8015
AddVertex,-3.2494, -0.015,15.7926
AddVertex,-3.0864, -0.015,17.0587
AddVertex,-3.0276, -0.015,17.0467
AddVertex,-2.8016, -0.015,18.3031
AddVertex,-2.7435, -0.015,18.2883
AddVertex,-2.455, -0.015,19.5317
AddVertex,-2.3976, -0.015,19.514
AddVertex,-2.0473, -0.015,20.7415
AddVertex,-1.991, -0.015,20.721
AddVertex,-1.5797, -0.015,21.9294
AddVertex,-1.5245, -0.015,21.9061
AddVertex,-1.0534, -0.015,23.0925
AddVertex,-.9993, -0.015,23.0664
AddVertex,-.4695, -0.015,24.2278
AddVertex,-.4169, -0.015,24.199
AddVertex,-.3709, -0.015,24.4067
AddVertex,-.3184, -0.015,24.3775
AddFace,1,0,2,3
AddFace,3,2,4,5
AddFace,5,4,6,7
AddFace,7,6,8,9

```

AddFace, 9, 8, 10, 11
AddFace, 11, 10, 12, 13
AddFace, 13, 12, 14, 15
AddFace, 15, 14, 16, 17
AddFace, 17, 16, 18, 19
AddFace, 19, 18, 20, 21
AddFace, 21, 20, 22, 23
AddFace, 23, 22, 24, 25
AddFace, 25, 24, 26, 27
AddFace, 27, 26, 28, 29
AddFace, 29, 28, 30, 31
AddFace, 31, 30, 32, 33
AddFace, 33, 32, 34, 35
AddFace, 35, 34, 36, 37
AddFace, 37, 36, 38, 39
AddFace, 39, 38, 40, 41
AddFace, 41, 40, 42, 43
GenerateNormals

LoadTexture, railr.bmp
SetTextureCoordinates, 0, 1, 9
SetTextureCoordinates, 1, 0, 9
SetTextureCoordinates, 2, 1, 8.55
SetTextureCoordinates, 3, 0, 8.55
SetTextureCoordinates, 4, 1, 8.1
SetTextureCoordinates, 5, 0, 8.1
SetTextureCoordinates, 6, 1, 7.65
SetTextureCoordinates, 7, 0, 7.65
SetTextureCoordinates, 8, 1, 7.2
SetTextureCoordinates, 9, 0, 7.2
SetTextureCoordinates, 10, 1, 6.75
SetTextureCoordinates, 11, 0, 6.75
SetTextureCoordinates, 12, 1, 6.3
SetTextureCoordinates, 13, 0, 6.3
SetTextureCoordinates, 14, 1, 5.85
SetTextureCoordinates, 15, 0, 5.85
SetTextureCoordinates, 16, 1, 5.4
SetTextureCoordinates, 17, 0, 5.4
SetTextureCoordinates, 18, 1, 4.95
SetTextureCoordinates, 19, 0, 4.95
SetTextureCoordinates, 20, 1, 4.5
SetTextureCoordinates, 21, 0, 4.5
SetTextureCoordinates, 22, 1, 4.05
SetTextureCoordinates, 23, 0, 4.05
SetTextureCoordinates, 24, 1, 3.6
SetTextureCoordinates, 25, 0, 3.6
SetTextureCoordinates, 26, 1, 3.15
SetTextureCoordinates, 27, 0, 3.15
SetTextureCoordinates, 28, 1, 2.7
SetTextureCoordinates, 29, 0, 2.7
SetTextureCoordinates, 30, 1, 2.25
SetTextureCoordinates, 31, 0, 2.25
SetTextureCoordinates, 32, 1, 1.8
SetTextureCoordinates, 33, 0, 1.8
SetTextureCoordinates, 34, 1, 1.35
SetTextureCoordinates, 35, 0, 1.35
SetTextureCoordinates, 36, 1, .9

```

SetTextureCoordinates,37,0,.9
SetTextureCoordinates,38,1,.45
SetTextureCoordinates,39,0,.45
SetTextureCoordinates,40,1,0
SetTextureCoordinates,41,0,0
SetTextureCoordinates,42,1,-.072
SetTextureCoordinates,43,0,-.072

; Drill for the left rail
; Add the third section taken from the 4° object
; 0.015 meters lowered
;????
CreateMeshBuilder
AddVertex,.4169, -0.015,.2277
AddVertex,.4695, -0.015,.2565
AddVertex,-.1439, -0.015,1.3181
AddVertex,-.0899, -0.015,1.3442
AddVertex,-.6495, -0.015,2.4352
AddVertex,-.5942, -0.015,2.4585
AddVertex,-1.0986, -0.015,3.5761
AddVertex,-1.0422, -0.015,3.5966
AddVertex,-1.4901, -0.015,4.738
AddVertex,-1.4327, -0.015,4.7557
AddVertex,-1.823, -0.015,5.9181
AddVertex,-1.7649, -0.015,5.9329
AddVertex,-2.0966, -0.015,7.1133
AddVertex,-2.0378, -0.015,7.1252
AddVertex,-2.31, -0.015,8.3207
AddVertex,-2.2507, -0.015,8.3296
AddVertex,-2.4629, -0.015,9.5372
AddVertex,-2.4032, -0.015,9.5432
AddVertex,-2.5548, -0.015,10.7599
AddVertex,-2.4949, -0.015,10.7629
AddVertex,-2.5854, -0.015,11.9856
AddVertex,-2.5254, -0.015,11.9856
AddVertex,-2.5548, -0.015,13.2114
AddVertex,-2.4949, -0.015,13.2084
AddVertex,-2.4629, -0.015,14.4341
AddVertex,-2.4032, -0.015,14.4281
AddVertex,-2.31, -0.015,15.6506
AddVertex,-2.2507, -0.015,15.6416
AddVertex,-2.0966, -0.015,16.858
AddVertex,-2.0378, -0.015,16.8461
AddVertex,-1.823, -0.015,18.0532
AddVertex,-1.7649, -0.015,18.0384
AddVertex,-1.4901, -0.015,19.2333
AddVertex,-1.4327, -0.015,19.2155
AddVertex,-1.0986, -0.015,20.3952
AddVertex,-1.0422, -0.015,20.3746
AddVertex,-.6495, -0.015,21.5361
AddVertex,-.5942, -0.015,21.5128
AddVertex,-.1439, -0.015,22.6532
AddVertex,-.0899, -0.015,22.6271
AddVertex,.4169, -0.015,23.7436
AddVertex,.4695, -0.015,23.7148
AddVertex,.5116, -0.015,23.9154
AddVertex,.564, -0.015,23.8862

```

AddFace, 1, 0, 2, 3
AddFace, 3, 2, 4, 5
AddFace, 5, 4, 6, 7
AddFace, 7, 6, 8, 9
AddFace, 9, 8, 10, 11
AddFace, 11, 10, 12, 13
AddFace, 13, 12, 14, 15
AddFace, 15, 14, 16, 17
AddFace, 17, 16, 18, 19
AddFace, 19, 18, 20, 21
AddFace, 21, 20, 22, 23
AddFace, 23, 22, 24, 25
AddFace, 25, 24, 26, 27
AddFace, 27, 26, 28, 29
AddFace, 29, 28, 30, 31
AddFace, 31, 30, 32, 33
AddFace, 33, 32, 34, 35
AddFace, 35, 34, 36, 37
AddFace, 37, 36, 38, 39
AddFace, 39, 38, 40, 41
AddFace, 41, 40, 42, 43
GenerateNormals

LoadTexture, railr.bmp
SetTextureCoordinates, 0, 1, 9
SetTextureCoordinates, 1, 0, 9
SetTextureCoordinates, 2, 1, 8.55
SetTextureCoordinates, 3, 0, 8.55
SetTextureCoordinates, 4, 1, 8.1
SetTextureCoordinates, 5, 0, 8.1
SetTextureCoordinates, 6, 1, 7.65
SetTextureCoordinates, 7, 0, 7.65
SetTextureCoordinates, 8, 1, 7.2
SetTextureCoordinates, 9, 0, 7.2
SetTextureCoordinates, 10, 1, 6.75
SetTextureCoordinates, 11, 0, 6.75
SetTextureCoordinates, 12, 1, 6.3
SetTextureCoordinates, 13, 0, 6.3
SetTextureCoordinates, 14, 1, 5.85
SetTextureCoordinates, 15, 0, 5.85
SetTextureCoordinates, 16, 1, 5.4
SetTextureCoordinates, 17, 0, 5.4
SetTextureCoordinates, 18, 1, 4.95
SetTextureCoordinates, 19, 0, 4.95
SetTextureCoordinates, 20, 1, 4.5
SetTextureCoordinates, 21, 0, 4.5
SetTextureCoordinates, 22, 1, 4.05
SetTextureCoordinates, 23, 0, 4.05
SetTextureCoordinates, 24, 1, 3.6
SetTextureCoordinates, 25, 0, 3.6
SetTextureCoordinates, 26, 1, 3.15
SetTextureCoordinates, 27, 0, 3.15
SetTextureCoordinates, 28, 1, 2.7
SetTextureCoordinates, 29, 0, 2.7
SetTextureCoordinates, 30, 1, 2.25
SetTextureCoordinates, 31, 0, 2.25
SetTextureCoordinates, 32, 1, 1.8


```
SetTextureCoordinates,33,0,1.8  
SetTextureCoordinates,34,1,1.35  
SetTextureCoordinates,35,0,1.35  
SetTextureCoordinates,36,1,.9  
SetTextureCoordinates,37,0,.9  
SetTextureCoordinates,38,1,.45  
SetTextureCoordinates,39,0,.45  
SetTextureCoordinates,40,1,0  
SetTextureCoordinates,41,0,0  
SetTextureCoordinates,42,1,-.072  
SetTextureCoordinates,43,0,-.072
```

Resource

We've placed the code for the above sharp curve at:

<http://www.virtualrailroader.com/Library/SharpCurve.txt>

Luigi

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Visit VR Reading Room at <http://www.virtualrailroader.com>