



**European road elements Lite**

**Description:**

Two-lane and four-lane roads and streets, parkings, bust stops, intersections, road signs used in european countries.  
151 elements

- 8 straight elements
- 16 curve elements
- 15 intersections (7 animated)
- 4 connection elements
- 2 bus stop elements
- 2 cross-walk elements
- 6 parking elements
- 97 road signs
- 1 street lamp

**Formats:**

**Autodesk 3ds Max (.max)**
**version: 9**

151 files  
107 809 649 byte (102,81 Mbyte)  
materials, textures, UVW coordinates,  
smoothing groups, animation

**Autodesk FBX (.fbx)**
**version: 2009**

151 files  
90 379 185 byte (86,19 Mbyte)  
materials, textures, UVW coordinates,  
smoothing groups, animation


**Autodesk Maya (.ma)**
**version: 2011**

151 files  
85 913 969 byte (81,93 Mbyte)  
materials, textures, UVW coordinates,  
smoothing groups, animation

**Maxon Cinema 4D (.c4d)**
**version: 10**

151 files  
75 494 197 byte (71,99 Mbyte)  
materials, textures, UVW coordinates,  
smoothing groups, animation


**Wavefront OBJ (.obj)**

151 files  
51 046 243 byte (48,68 Mbyte)  
materials, textures, UVW coordinates,  
smoothing groups, **no animation**

**NewTek Lightwave (.lwo, .lws)**
**version: 8**

151 scene files, 156 object files  
29 427 949 byte (28,06 Mbyte)  
materials, textures, UVW coordinates,  
smoothing groups, animation


**Collada (.dae)**
**version: 1.4**

151 files  
73 172 690 byte (69,78 Mbyte)  
materials, textures, UVW coordinates,  
smoothing groups, animation

**Geometry:**

- each file contains only one object
- polygonal based objects
- polygons are quads and triangles
- objects have custom pivots (easy aligning objects)
- logically named files and objects
- smoothing groups

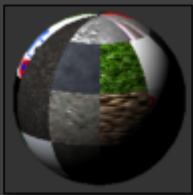
**Whole pack (151 objects):** 114709 polygons, 128517 vertices

Object name	poly	vert	Object name	poly	vert
100m sign double 2 lane road	124	112	straight road 4 lane 6m	18	38
100m sign double 4 lane road	124	112	straight street 2 lane 24m	45	112
100m sign single	62	56	straight street 2 lane 6m	45	112
bus stop street 2 lane 2 side	3211	3724	straight street 4 lane 24m	55	132
bus stop street 4 lane 2 side	2655	2972	straight street 4 lane 6m	55	132
connection 2 lane road - 4 lane road	493	540	street lamp	192	234
connection 2 lane street - 2 lane road	599	791	traffic sign 1000m	66	84
connection 2 lane street - 4 lane street	1306	1632	traffic sign 100m	66	84
connection 4 lane road - 4 lane street	812	996	traffic sign 500m	66	84
crosswalk street 2 lane	369	516	traffic sign 50m	66	84
crosswalk street 4 lane	618	766	traffic sign 800m	66	84
curve road 2 lane 48m 30deg	132	156	traffic sign airport	74	96
curve road 2 lane 48m 45deg	198	228	traffic sign animals	74	96
curve road 2 lane 48m 60deg	264	300	traffic sign both way	74	96
curve road 2 lane 48m 90deg	396	444	traffic sign bus stop	79	102
curve road 4 lane 60m 30deg	288	323	traffic sign children	74	96
curve road 4 lane 60m 45deg	432	475	traffic sign city end	79	102
curve road 4 lane 60m 60deg	576	627	traffic sign city	79	102
curve road 4 lane 60m 90deg	864	931	traffic sign construction	74	96
curve street 2 lane 18m 30deg	360	504	traffic sign cycle way end	103	126
curve street 2 lane 18m 45deg	540	728	traffic sign cycle way	103	126
curve street 2 lane 18m 60deg	720	952	traffic sign danger	74	96
curve street 2 lane 18m 90deg	1080	1400	traffic sign dead end	79	102
curve street 4 lane 24m 30deg	440	594	traffic sign dock	74	96
curve street 4 lane 24m 45deg	660	858	traffic sign double curve left	74	96
curve street 4 lane 24m 60deg	880	1122	traffic sign double curve right	74	96
curve street 4 lane 24m 90deg	1320	1650	traffic sign end of limit	103	126
intersection road 2 lane - 2 lane	1078	1036	traffic sign give way	74	96
intersection road 2 lane - 4 lane	1464	1499	traffic sign go left or right	103	126
intersection road 4 lane - 4 lane	1846	1787	traffic sign go left	103	126
intersection street 2 lane - 2 lane	3506	4267	traffic sign go right	103	126
intersection T road 2 lane - 2 lane	596	585	traffic sign go straight or left or right	103	126
intersection T road 2 lane - 4 lane	1014	1034	traffic sign go straight or left	103	126
intersection T road 4 lane - 4 lane	1440	1419	traffic sign go straight or right	103	126
intersection T street 2 lane - 2 lane	2429	2985	traffic sign go straight	103	126
parking street 2 lane 2 side center lamp	619	726	traffic sign gravel	74	96
parking street 2 lane 2 side center	235	258	traffic sign guarded rail crossing	74	96
parking street 2 lane 2 side start	454	568	traffic sign height restriction	103	126
parking street 4 lane 2 side center lamp	641	778	traffic sign home zone end	79	102
parking street 4 lane 2 side center	257	310	traffic sign home zone	79	102
parking street 4 lane 2 side start	462	586	traffic sign intersection	74	96
sign road direction forward left right	255	304	traffic sign keep left or right	93	116
sign road direction forward left	213	261	traffic sign keep left	93	116
sign road direction forward right	213	261	traffic sign keep right	93	116
sign road direction left right	208	258	traffic sign main road end	79	102
sign road direction left	180	227	traffic sign main road	79	102
sign road direction right	180	227	traffic sign no cars entry	103	126
straight road 2 lane 24m	11	24	traffic sign no cycles entry	103	126
straight road 2 lane 6m	11	24	traffic sign no entry	103	126
straight road 4 lane 24m	18	38	traffic sign no horses entry	103	126

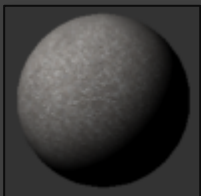
Object name	poly	vert	Object name	poly	vert
traffic sign no motorbikes entry	103	126	traffic sign speed limit 50	103	126
traffic sign no overtaking for trucks	103	126	traffic sign speed limit 60	103	126
traffic sign no overtaking	103	126	traffic sign speed limit 70	103	126
traffic sign no stopping	103	126	traffic sign speed limit 80	103	126
traffic sign no tractors entry	103	126	traffic sign speed limit 90	103	126
traffic sign no traffic both ways	103	126	traffic sign steep ascent	74	96
traffic sign no trailer	103	126	traffic sign steep descent	74	96
traffic sign no turn back	103	126	traffic sign stones	74	96
traffic sign no turn left	103	126	traffic sign stop	69	94
traffic sign no turn right	103	126	traffic sign swing bridge	74	96
traffic sign no waiting	103	126	traffic sign taxi station	79	102
traffic sign one way	79	102	traffic sign trafficlights	74	96
traffic sign parking	79	102	traffic sign tunnel	74	96
traffic sign pedestrian cross	79	102	traffic sign uneven road	74	96
traffic sign road narrow both	74	96	traffic sign warning pedestrian cross	74	96
traffic sign road narrow left	74	96	traffic sign warning roundabout	74	96
traffic sign road narrow right	74	96	traffic sign weight restriction for trucks	103	126
traffic sign roundabout	103	126	traffic sign weight restriction	103	126
traffic sign semi-motorway end	79	102	intersection street 2 lane - 2 lane trafficlights	9502	10413
traffic sign semi-motorway	79	102	intersection street 4 lane - 2 lane trafficlights	11717	12586
traffic sign slippery road	74	96	intersection street 4 lane - 4 lane trafficlights	13905	14841
traffic sign speed limit 100	103	126	intersection T street 2 lane - 2 lane trafficlights	6919	7605
traffic sign speed limit 110	103	126	intersection T street 2 lane - 4 lane trafficlights	7970	8635
traffic sign speed limit 120	103	126	intersection T street 4 lane - 2 lane trafficlights	9193	9819
traffic sign speed limit 130	103	126	intersection T street 4 lane - 4 lane trafficlights	10515	11187
traffic sign speed limit 30	103	126			

**Materials:**

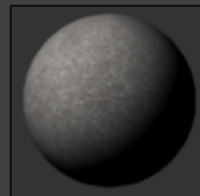
- **max:** All objects use the same material (sub object material with 23 sub material). If you merge objects into one scene, you can use the same material for all objects.
- **fbx:** Each object file contains only the used sub-materials.
- **maya:** Each object file contains only the used sub-materials.
- **c4d:** Each object file contains only the used sub-materials.
- **obj:** All objects use the same material file (european road collection.mtl), that contains 23 sub-material.
- **dae:** Each object file contains only the used sub-materials.
- **lwo:** Each object file contains only the used sub-materials.



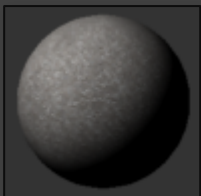
**european road collection** (multi/sub-object)  
sub-materials: 23



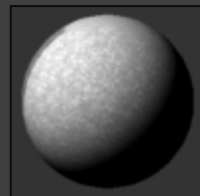
**asphalt normal** (standard material)  
material ID: 1  
diffuse map: map01.jpg (bitmap)



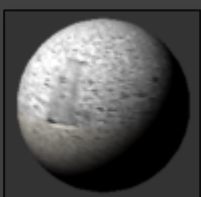
**asphalt wan** (standard material)  
material ID: 2  
diffuse map: map02.jpg (bitmap)



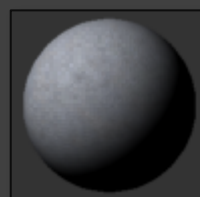
**asphalt fade** (standard material)  
material ID: 3  
diffuse map: map04.jpg (bitmap)



**asphalt line** (standard material)  
material ID: 5  
diffuse map: map03.jpg (bitmap)



**curb** (standard material)  
material ID: 6  
diffuse map: map05.jpg (bitmap)  
bump map: map05b.jpg (bitmap)



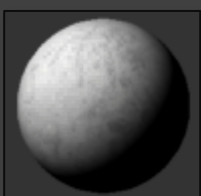
**sidewalk** (standard material)  
material ID: 7  
diffuse map: map07.jpg (bitmap)



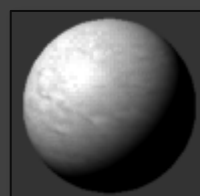
**concrete 01** (standard material)  
material ID: 8  
diffuse map: map11.jpg (bitmap)



**concrete 02** (standard material)  
material ID: 9  
diffuse map: map12.jpg (bitmap)  
bump map: map12b.jpg (bitmap)

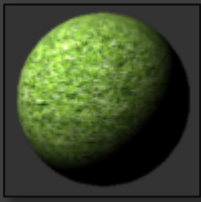


**concrete 03** (standard material)  
material ID: 10  
diffuse map: map16.jpg (bitmap)



**crush barrier** (standard material)  
material ID: 11  
diffuse map: map09.jpg (bitmap)

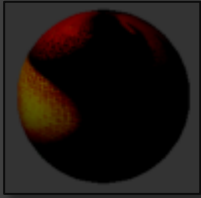




grass (standard material)  
material ID: 12  
diffuse map: map06.jpg (bitmap)



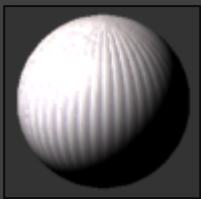
gravel (standard material)  
material ID:13  
diffuse map: map08.jpg (bitmap)  
bump map: map08b.jpg (bitmap)



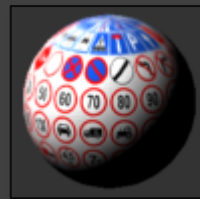
traffic light dark (standard material)  
material ID: 14  
diffuse map: map13.jpg (bitmap)



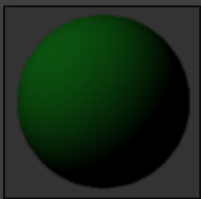
traffic light light (standard material)  
material ID: 15  
diffuse map: map14.jpg (bitmap)



lampglass (standard material)  
material ID: 16  
diffuse map: map15.jpg (bitmap)



traffic sign (standard material)  
material ID: 18  
diffuse map: map17.jpg (bitmap)



green (standard material)  
material ID: 20  
diffuse color: rgb(8,55,10)



light gray (standard material)  
material ID: 21  
diffuse color: rgb(112,112,112)



dark gray (standard material)  
material ID: 22  
diffuse color: rgb(37,37,37)



black (standard material)  
material ID: 23  
diffuse color: rgb(0,0,0)



white (standard material)  
material ID: 23  
diffuse color: rgb(230,230,230)



white illuminate (standard material)  
material ID: 25  
diffuse color: rgb(255,255,255)  
self-illumination: 50



red illuminate (standard material)  
material ID: 26  
diffuse color: rgb(221,0,0)  
self-illumination: 50

Textures:



**map01.jpg**

1000 x 1000 pixels

72 DPI

colors: 4336

938 801 bytes (0,89 Mbyte)



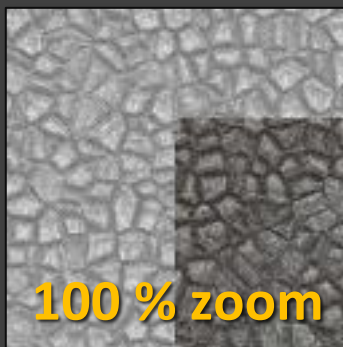
**map02.jpg**

1000 x 1000 pixels

72 DPI

colors: 4253

936 388 bytes (0,89 Mbyte)



**map03.jpg**

700 x 750 pixels

96 DPI

colors: 2234

403 717 bytes (0,38 Mbyte)



**map04.jpg**

1000 x 1000 pixels

90 DPI

colors: 7654

1 270 441 bytes (1,21 Mbyte)



**map05.jpg**

600 x 800 pixels

96 DPI

colors: 1700

351 691 bytes (0,33 Mbyte)



**map05b.jpg**

600 x 800 pixels

96 DPI

colors: 332

15 215 bytes (0,01 Mbyte)



**map06.jpg**

820 x 820 pixels

72 DPI

colors: 100914

858 023 bytes (0,81 Mbyte)



**map07.jpg**

640 x 640 pixels

72 DPI

colors: 1212

376 471 bytes (0,35 Mbyte)





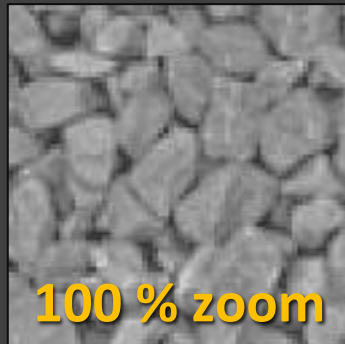
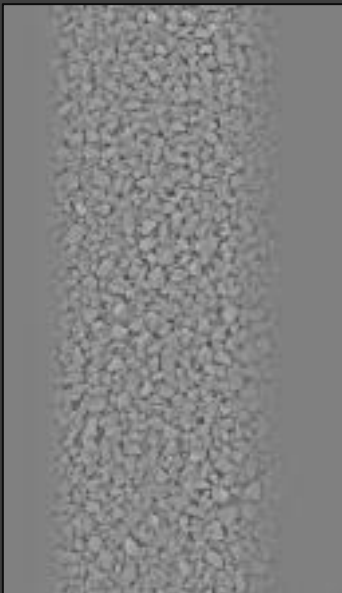
[map08.jpg](#)

590 x 1024 pixels

89 DPI

colors: 122283

769 376 bytes (0,73 Mbyte)



[map08b.jpg](#)

590 x 1024 pixels

89 DPI

colors: 165

280 541 bytes (0,26 Mbyte)



[map09.jpg](#)

1024 x 1024 pixels

72 DPI

colors: 135

290 576 bytes (0,27 Mbyte)



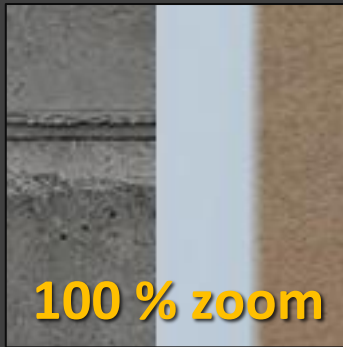
**map11.jpg**

785 x 785 pixels

100 DPI

colors: 7902

328 326 bytes (0,31 Mbyte)



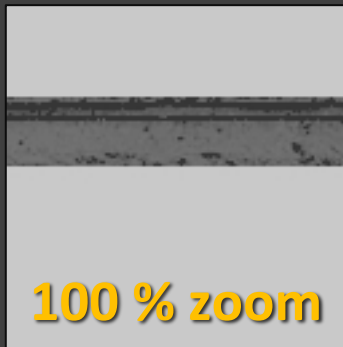
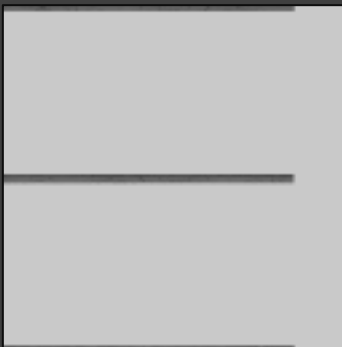
**map12.jpg**

1024 x 1024 pixels

72 DPI

colors: 4466

722 747 bytes (0,68 Mbyte)



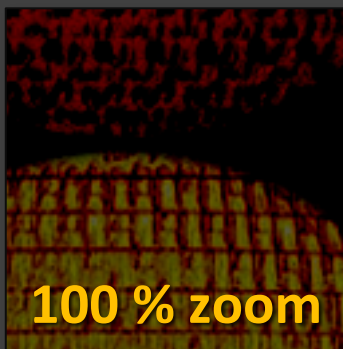
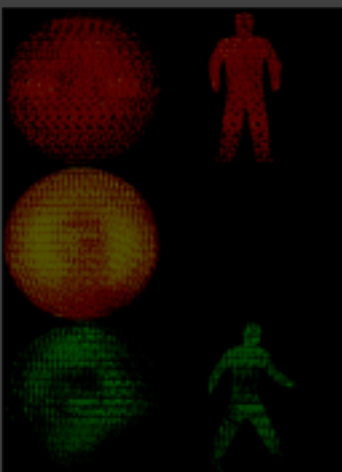
**map12b.jpg**

1024 x 1024 pixels

72 DPI

colors: 53

41 312 bytes (0,03 Mbyte)



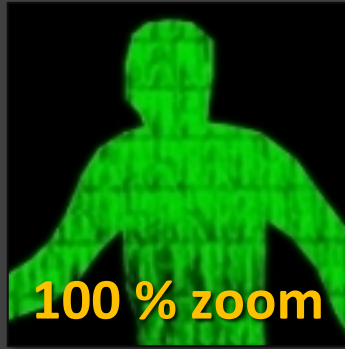
**map13.jpg**

604 x 825 pixels

72 DPI

colors: 4729

450 721 bytes (0,42 Mbyte)



map14.jpg

604 x 825 pixels

90 DPI

colors: 99386

274 558 bytes (0,26 Mbyte)



map15.jpg

284 x 281 pixels

72 DPI

colors: 9980

55 340 bytes (0,05 Mbyte)



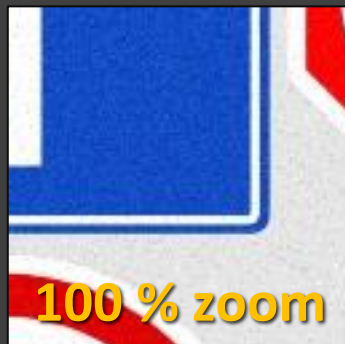
map16.jpg

720 x 512 pixels

72 DPI

colors: 234

204 256 bytes (0,19 Mbyte)



map17.jpg

1679 x 2488 pixels

72 DPI

colors: 61642

4 005 995 bytes (3,82 Mbyte)



[custom\\_map08.png](#)  
[custom\\_map08b.png](#)

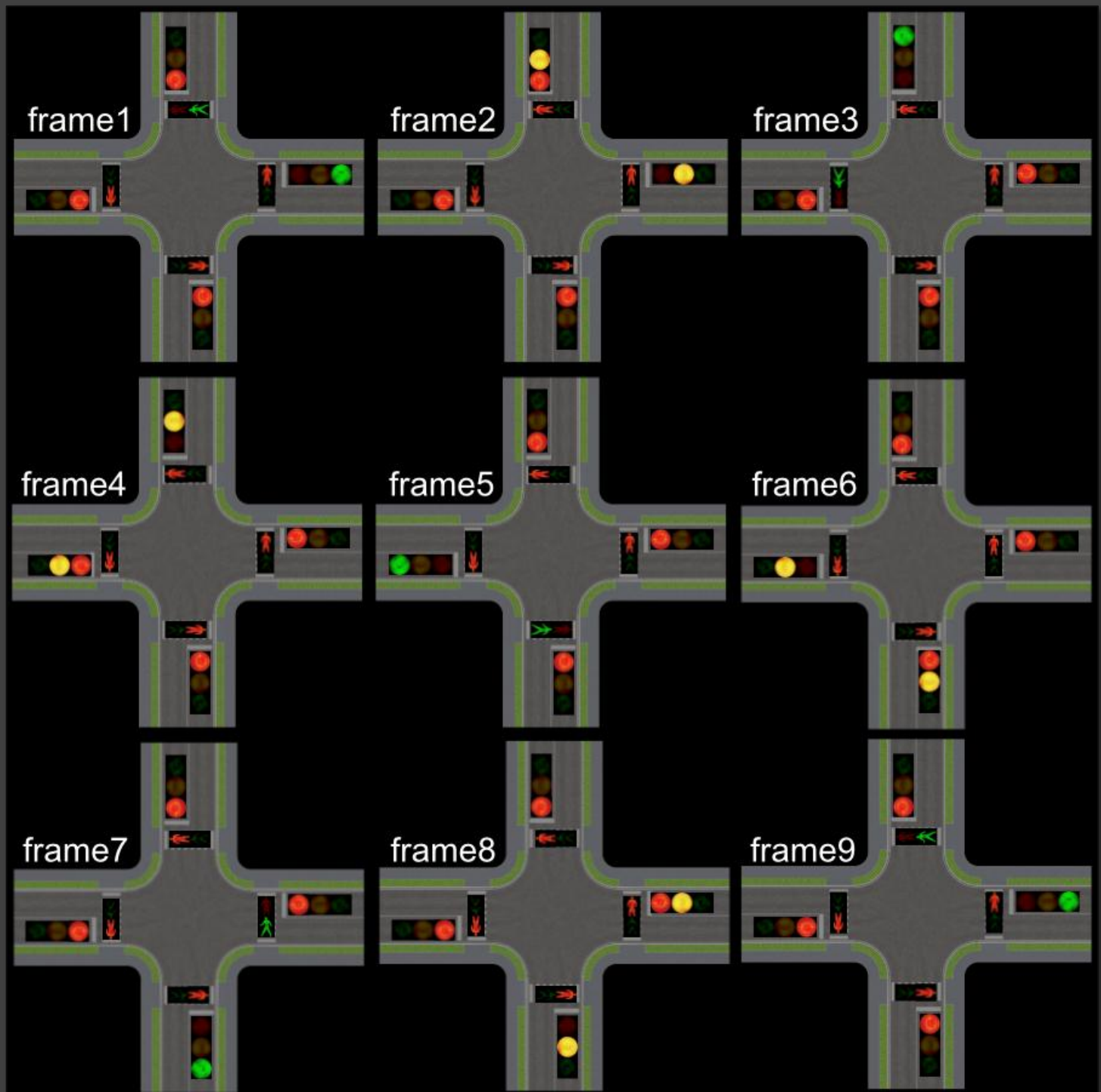
If you want to use a custom grass texture, replace the existing grass texture (map06.jpg), and the gravel texture (map08.jpg, map08b.jpg) with your own one. A custom gravel texture without grass has included in the pack. Create a 590 x 1024 pixel image from your grass texture, open it with an editor (eg. Gimp 2, Photoshop), create a new layer, and paste the custom\_map08.png into the new layer. Do the same with the gravel bump texture too.



**Animation:**

Wavefront OBJ format doesn't contain animation!!

Intersections with traffic lights are animated. You can easily control the traffic-lights in game, by splitting the animation, (animation1: frame0 – frame1; animation2: frame1 – frame2; ...) and run the specified part-animation when you want to switch the lamp. The lamps are named logically, so you can easily control the lamps by yourself, if you don't want to use the built-in animation. Just turn the lamps by 180 degrees around the up axis. Here's an example how the built-in animation works:



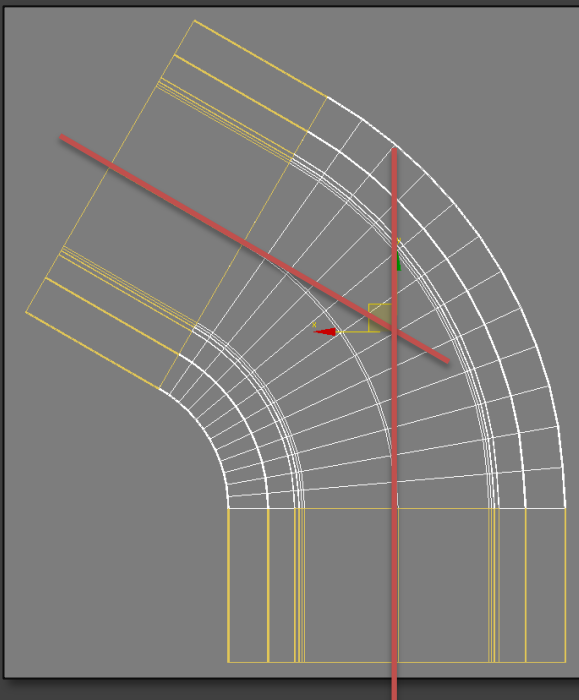


The following objects are animated:

- intersection street 2 lane - 2 lane trafficlights (9 frames, 24 fps)
- intersection street 4 lane - 2 lane trafficlights (11 frames, 24 fps)
- intersection street 4 lane - 4 lane trafficlights (9 frames, 24 fps)
- intersection T street 2 lane - 2 lane trafficlights (9 frames, 24 fps)
- intersection T street 2 lane - 4 lane trafficlights (9 frames, 24 fps)
- intersection T street 4 lane - 2 lane trafficlights (7 frames, 24 fps)
- intersection T street 4 lane - 4 lane trafficlights (9 frames, 24 fps)

### Usage:

All elements are compatible with each other, and all elements have the same base-size (600m, 1200m, 1800, 2400m, ...). So you can easily connect the elements, and don't need custom size connectors. Use the pivots in local coordinate system to align the elements.



Heavenly Pictures 3D