Evolution of a Track: Real World Oval.

Las Vegas Motor Speedway.

This is a guide to how I made the track; I'm considering it more as a useful reference to show how I make a track to perhaps provide assistance to new track makers. it won't be overloaded with techniques, but should give you a general idea of the step by step processes I tend to use, both when creating an oval such as this, as well as any other type of track.

I should make it clear at this point, that the following method isn't applied by me in all the tracks I make, I often do things in various orders, whatever takes my fancy to do next, but whilst in the process of making this track I had numerous screenshots saved, so kept up the process for this very cause.

Also apologies if it gets a bit 'wordy' in places, with a lot to read

Please also note I use the following programs every time I make a track:

Snakeditor (v1.10)
Trackeditor
Photoshop (CS3)
GR HMap Edit

For RWL tracks, I also use Google Earth, as well as videos on YouTube and photographs wherever I can find them.

Some minor points. There were no actual reasons to why i took the screenshots when i did, at some points, there are very few changes, at others, quite a lot. I tend to just take them to give me reference to what needs to be changed when going back into TrackEditor.

Also this is A4 if anyone ever wanted to print it, and it seemed a logical size to use at the time.

To begin I need to work with some basics. I know that Las Vegas is a 1.5 mile oval, and having made Atlanta motor speedway before, which is also a 1.5 mile oval, I have a rough knowledge of the world size I am going to use, in this case 200. This I want to get set from early on before I place any objects in trackeditor, but the first program I am going to use is Snakeditor.

Having found it on Google Earth I can see the shape of the oval, noticing the following points:

The gentle curvature of the start straight.

The shortness of the straights between the tri-oval and the main corners.

The curvature of the pitlane, and its relative width to that of the racetrack and the Apron.
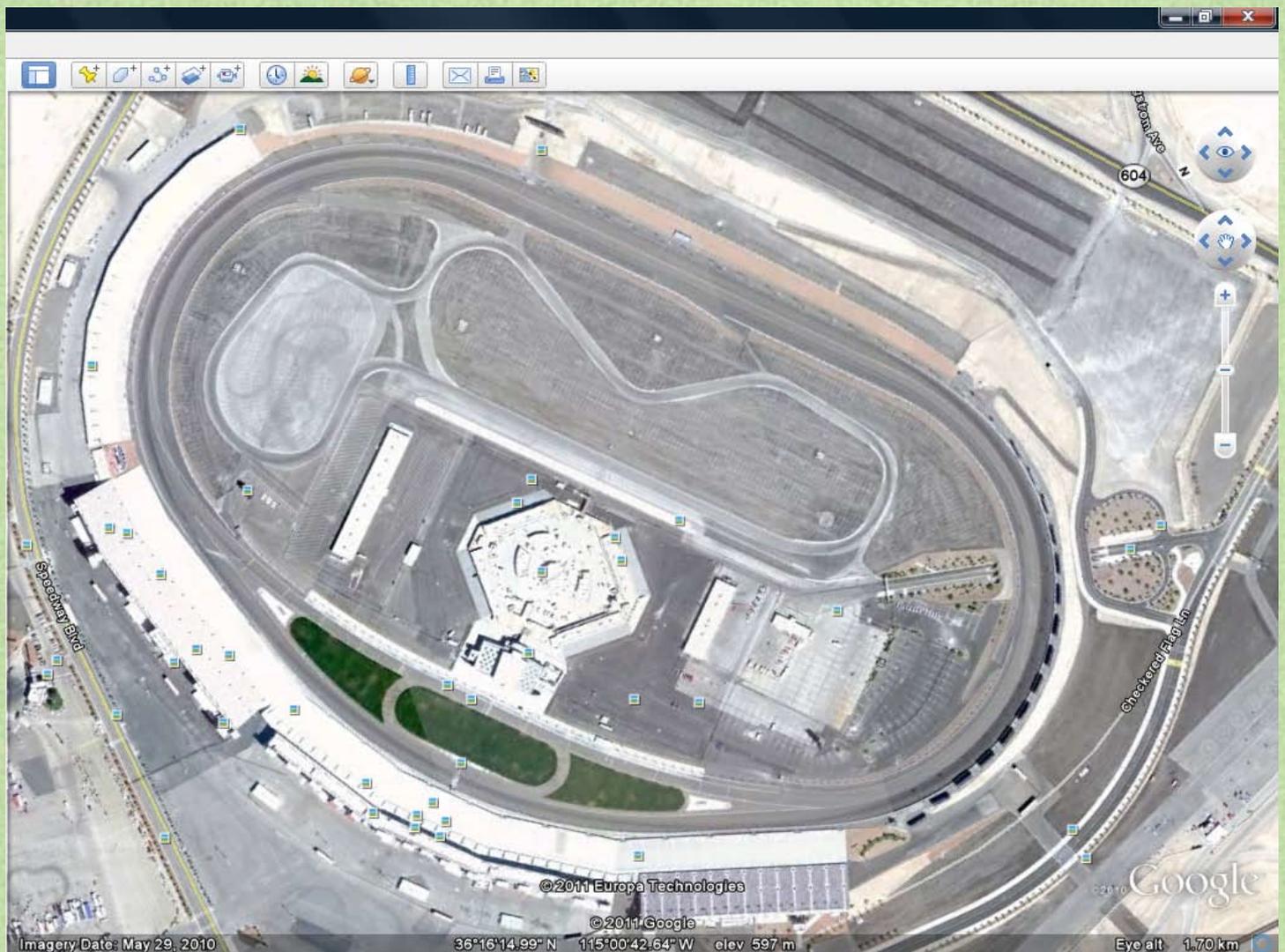
The first part is to get the settings right in Snakeditor, A WS of 200; I then use the start positions to estimate the width of the track for racing. As many will know, I tend to make my tracks quite narrow; this just allows me more room around the circuit.

Notice how I have used the pitlane. I have removed the pit stall areas and I have looped the pitlane around on itself to create the apron on the inside of the track.

I can tell you at this point, I did not get it right first time. This was probably the 8th or 9th variation of layout I created. I used a Google Earth screenshot resized to 512x512 as a background image to help me as a guide. I also used the Lmap from my Atlanta, ensuring the back straight was shorter on this one, but the corners had a larger radius, and that the track length was relatively similar.

The track positioning is also key for me. I am not a fan of the track getting near to the edge of the map unless there is good reason to, some trackmakers don't mind this so much, but I like to have the external room to play with. So the tracks rotation is key.
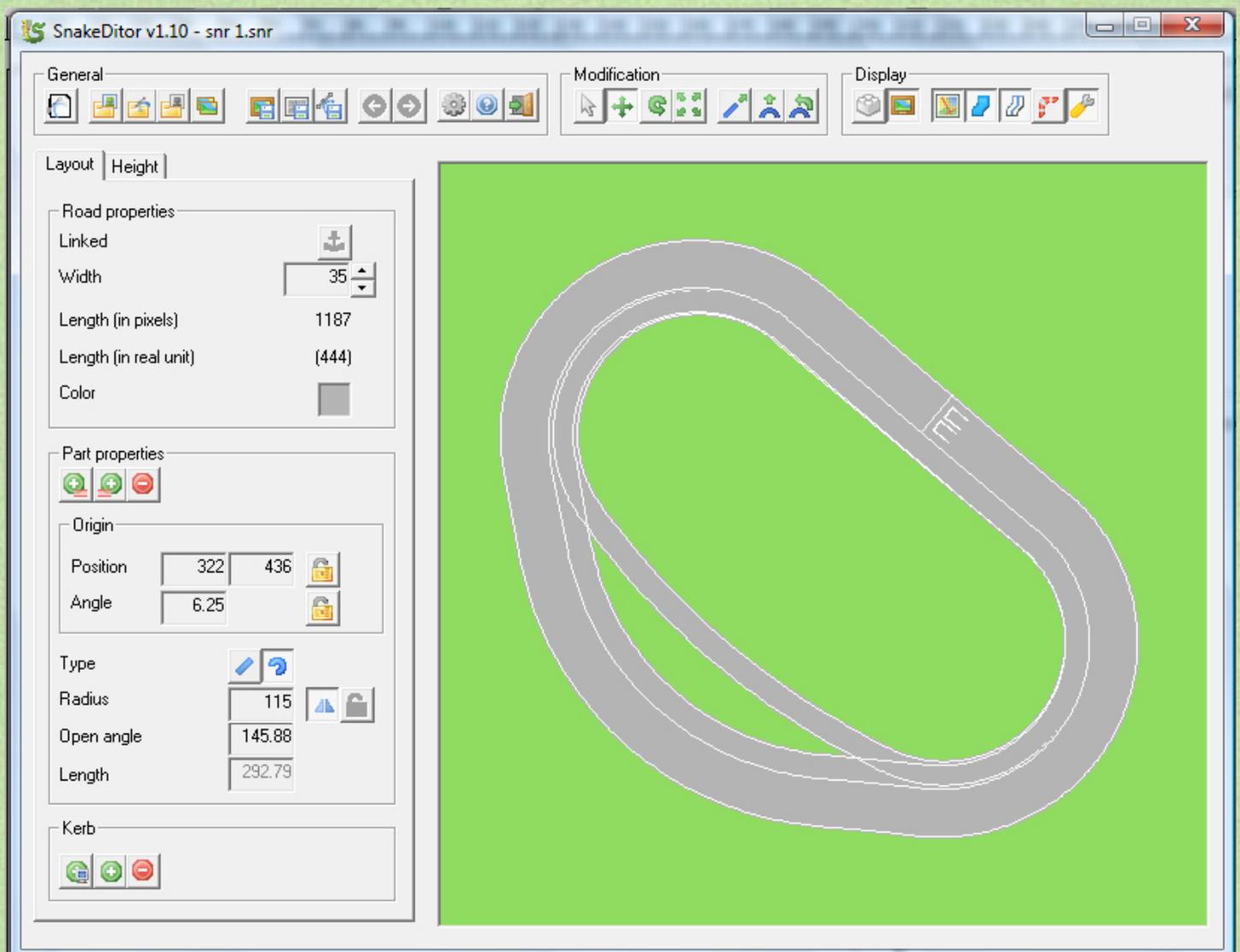
Having quickly placed the LMAP into a new Track file, and tested the layout for width compared to the cars, at this point I take the Lmap created into Photoshop for the first time. This is to begin tidying up the white lines, Snakeditor has the occasional untidy blip on white lines, but they are particularly bad in this case as the pitlane section runs so awkwardly next to the track.

For my oval tracks, I remove the white line around the outside of the track and replace it with a Tarmac 2 line to use as a guide.

Having done this I then began adding a few small Lmap details. This is a key point to use Google Earth, these Lmap details can be used as a good guide for other things such as object placement. In this case, the gap between the two corners in the grass in the infield are determined by the graphic on the tarmac. And the correct positioning of the mini infield track provides useful information. These things can always be added later, but I felt at the time that it was the easiest way to progress.

As well as Lmap giving information about object placement, the same can be said in the reverse as well. the Pit crews determine the width of the pit area, and the layout of the interior walls helps me to understand where the tarmac apron stretches to.

At this point I took the decision to rotate the track. Looking at the grandstands, they would perhaps be obstructing the view of the track slightly, but more fundamentally, the back stands would need Hmap to boost them, so to hide any untidiness the track gets rotated.

I also begin placing other key objects. The paddock area with its unusual garage layout unites the pitlane with the infield area.

Notice i have removed the cone at the pit entry, as it was going to get in the way and i was not sure on its exact placement.

I have also reworked some of the walling, particularly the gap that was on the outside of turn 3.

Only now have I chosen to make the surroundings sand colour. I removed the Gates behind the stand as they were untidy and I was still unsure about the Hmap involved in that area, something that I have added at this point. The Hmap flattens out on the straighter sections, but there is a viewing bank that runs parallel with the back straight, this could be seen on videos and photographs.

One issue with the sand texture is that it tends to 'bleed' and some of the sand has crept under the barriers onto the tarmac making it look more untidy. However I will begin resolving this later.

Around the outside of the oval I have added a tarmac edge. There is an access road around the majority of major ovals in the US like this, but it also helps to prevent the sand getting onto the track area.

I have re-addressed the area at the back of the stands. They're still not perfect, such as the positioning of the gates, but they sit above a small second tier of stands through the centre section. Again this can be seen on videos, photographs better than on Google Earth.

I also need to address the uneven Hmap around the exit of turn 4.

It's at this point I have chosen to add more Lmap details, this will help me grasp a better understanding of the placement of objects in the scenery.

I'm using the border colour a lot in this track, There are a lot of areas that use two colours of sand, so this is ideal. I've also drawn out the tarmac areas in the infield, of which the colour varies in places. I've also started looking at a few of the basic roads and the start of trying to get the access tunnel right.

There are also a lot of Lmap details being added now, the white adverts at the start and end of the pitlane, white lines, a couple of logos on the land. I have also re-added the cone. I've done these now just because it's nice to vary what you concentrate on. Having dealt with the roads and tarmac areas, a lot of focus shifted to the pitlane area, and so this was the result. Although there are still details to add in this area.

In the infield, I have replaced the tower block with a house. This was because the real building there was not as tall as I had originally assumed in comparison to the booth elements surrounding it.

I'm starting to begin adding finer elements now.

As many may know, I'm no Lmap artist; even tunnels are hard for me, so the one you see below took a few attempts. Particularly as I was working upside-down having rotated the PoV earlier.

I've added more roads and tarmac areas around the top. I've also added some objects. There's a ticket booth area that's just out of view, but because it is within the area I'm recreating, I still add it. at this point I'm a little unsure about the use of palms. They have very short palm like trees in these locations, and the Palm object is a little large, but I persist with its use for now.

Also a key point here. to try and prevent some of the sand bleeding onto the tarmac roads. I have added a 1 pixel line along the edge of all the tarmac areas to stop it a little. Some sand coming onto the tarmac isn't an issue, I just don't want it to be too much.
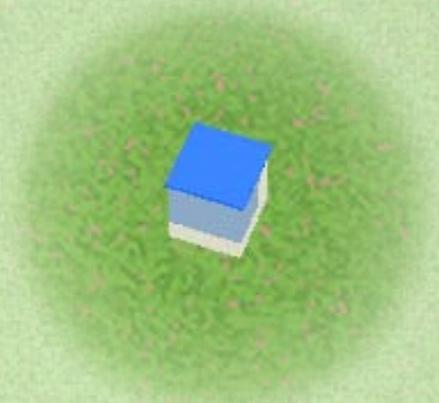
At this point, I've added the road in the bottom right, and added the palms to that area too. And they are overpowering in that region. They were on both sides of the road, but due to their size, they're now covering the road, which isn't what I was looking for as it isn't the case in real life.
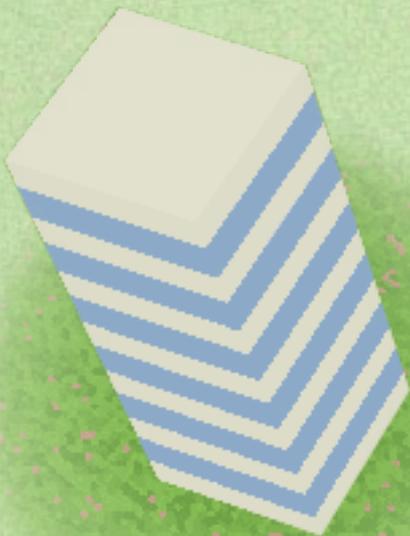
Again, not much has developed here; I'm beginning to add Lmap cars. Here I made a mistake. I refer back to earlier where I said I'm not a good Lmap artist, well I copied the cars from another track. They may be just about the right width for the road which I added in the bottom left, but they don't look so good when near to the racetrack and the actual cars themselves.*

I've also added base kerbs to the infield section.

I use red for both of these details to begin; the colour tends to only be used on things such as these so it's a good colour creating a lot of something, as it is then easy to select collectively using the Magic Wand tool in Photoshop. To then change the colour quickly by painting over it again.

*I still wait for a car object!

I have finally changed my mind about the Palm trees. They were too overpowering and large in comparison to what was there before. This was clarified for me when I added the objects in the bottom left. So instead, now we have 8 cacti rotated upon one another. I'm also slowly adding more Lmap cars.

Also a rare moment for me, I have chosen to draw an Lmap tent. There is a large canvas area in the middle of the paddock area which I had seen on photographs, and the only reasonable way to d this was to draw it myself, it is quite simple in design. In the image below, it's too short and not central, so I move it in the following image to give it more definition.

I have also finally managed to smooth out the Hmap a little more on the exit of turn 4 and under the nearby stand.

Having added yet more Lmap cars, I've also drawn out some rough white lines; these are more of a guide than anything, as I know they will become mostly hidden by the addition of more cars, but I'm delaying adding them as I know I have to redraw some to get them to park around the corner.

The addition of the Armco barrier in the infield I'm still a little uncertain of now. there were barriers evident (most likely wire fencing) in Google Earth, so I added something similar here, but of what purpose they would serve in reality I don't know, as you could just walk around them...

I've also added the Lights. I use this system for the large billboard advertisements you see around ovals. When I made Pocono, I drew them, but they weren't particularly good. So I started using this technique and I feel it works better, although I think some may disagree.

A number of additions in the image below.

I have added some telegraph poles. These I reckon also work well as replicas of floodlights at a circuit of this type. You may ask why I haven't used the Light object for lights. This is because I already know i will be using the light object as a replica of catch fencing. A technique you will no doubt have seen before.

There are also some lights at the bottom, this is more of a creative licence decision, as this area usually accommodates motor homes and appears to have some short poles there, so a little improvisation.

I've added the cars at 90 degrees to the original ones, but I now need to look at cars at 45 degree angles and the ones on the outside of the track to the left.

I have added the 'warwagons' that the pitcrews use during the race next to the pit stalls. I made a mistake here in that I didn't leave enough room between the building (house) and the pitwall, but i squeezed them in. these are just made up of various objects.

and finally, above the tarmac road near the bottom you will see a concrete wall and two Lights. I like this technique and have used it on a few of my tracks now, the combination of the three objects forms a nice 'mini gate' , but obviously this is only suitable for scenery as you cannot drive under it. As you can see below, my first guess at the location of the concrete wall (it's supposed to align with the two white parts of the Light object) was a bit out.

Finally i got round to adding the last of the Lmap cars and colouring them. I've added them to the exterior parking lots too. Notice how not every space is full, and that the further away from the track, the less frequent the cars become. I just think that having the whole area completely full just seems a bit odd, there will always be empty spaces if a place has this much parking. Also I noticed on Google earth that some of the exterior tarmac areas were quite dusty, so presumably very few had parked there.

I have also coloured the kerbs red and white, although I did miss one.

As for the 'fake Gate', position is better (the Hmap gave it a slight bend, but I'm not fussed about this) and I've added a shadow underneath.

The track is nearly complete, and it's time for some dithering.

More often than not, I actually add the tarmac dithering right near the start. But leave the other areas alone. This is because it's more pleasant for me to see early on, yet leaves it easier to make changes on the grass areas such as adding additional roads. This is just down to technique, there are other tutorials around explaining the ins and outs of dithering, I know I've messed it up a few times before. But just pays practice here. I've changed my technique numerous times since I started trackmaking.

And I have also added people and a couple of trucks to the paddock. Again if I was a good Lmapper I could perhaps draw them.

The Lmap drawing area is personally something it seems i need to improve on in the future.

Final touches now. I've added the lights as i mentioned before around the concrete wall to replicate catch fencing and added a few logos that are in the grass areas by the pitlane (although smaller than in real life as they would look bad, the central logo was huge!).

I have also finally added an AI line and correct checkpoints.

And there we have it. Be sure to look at the track in trackeditor to see combinations of objects and Lmap details.

I hope this may somehow prove beneficial to some of you, and if you have any questions just ask, or if there is anything I have missed, I will try and update it.

Cheers,

Bouncebackability