GUIDE TO MATTE PAINTING 2

This guide is an extension to the "Guide to Matte Painting 1", which shows you how to create a more advanced matte painting scene, without the basic steps in matte painting creation.

This guide is not a step by step description of the process of the creation, but rather a description of some techniques you can use to make your matte painting more interesting to look at.

The matte painting we will be creating could look like this when you are done (complete with lightning effects and rain):

The size of our composition will be FULL HD (1920x1080px).

Just like you have seen in the previous guide, the first step in any matte painting creation is to cut the picture up into the pieces we want to use. You can find the layers included in the project folder/zip file.
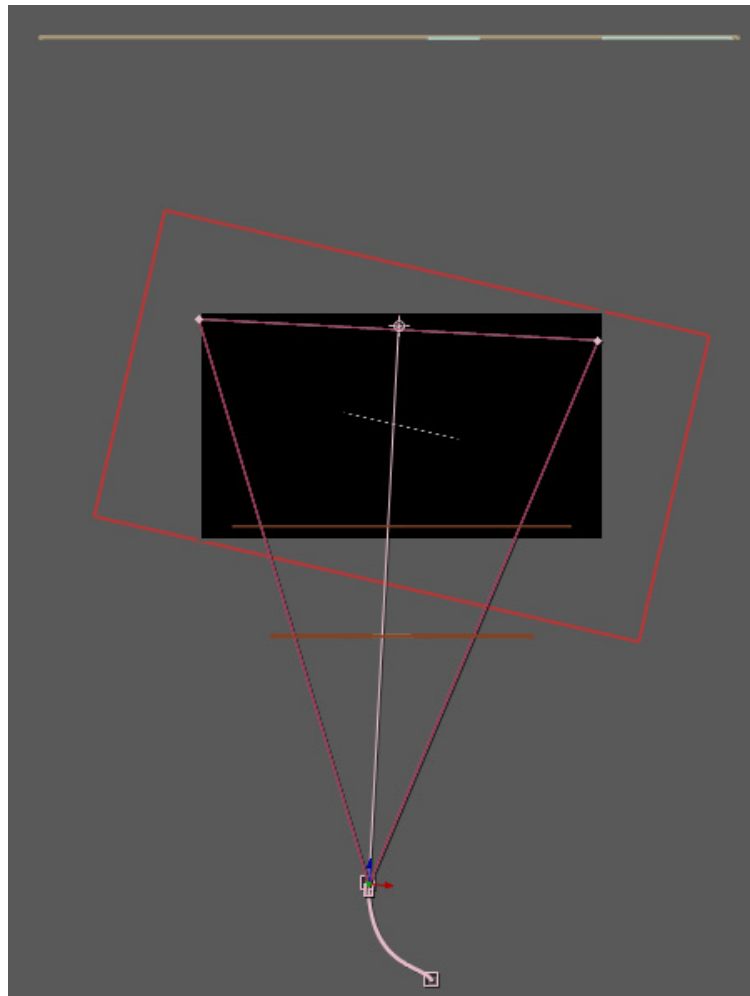
The layers look like this:
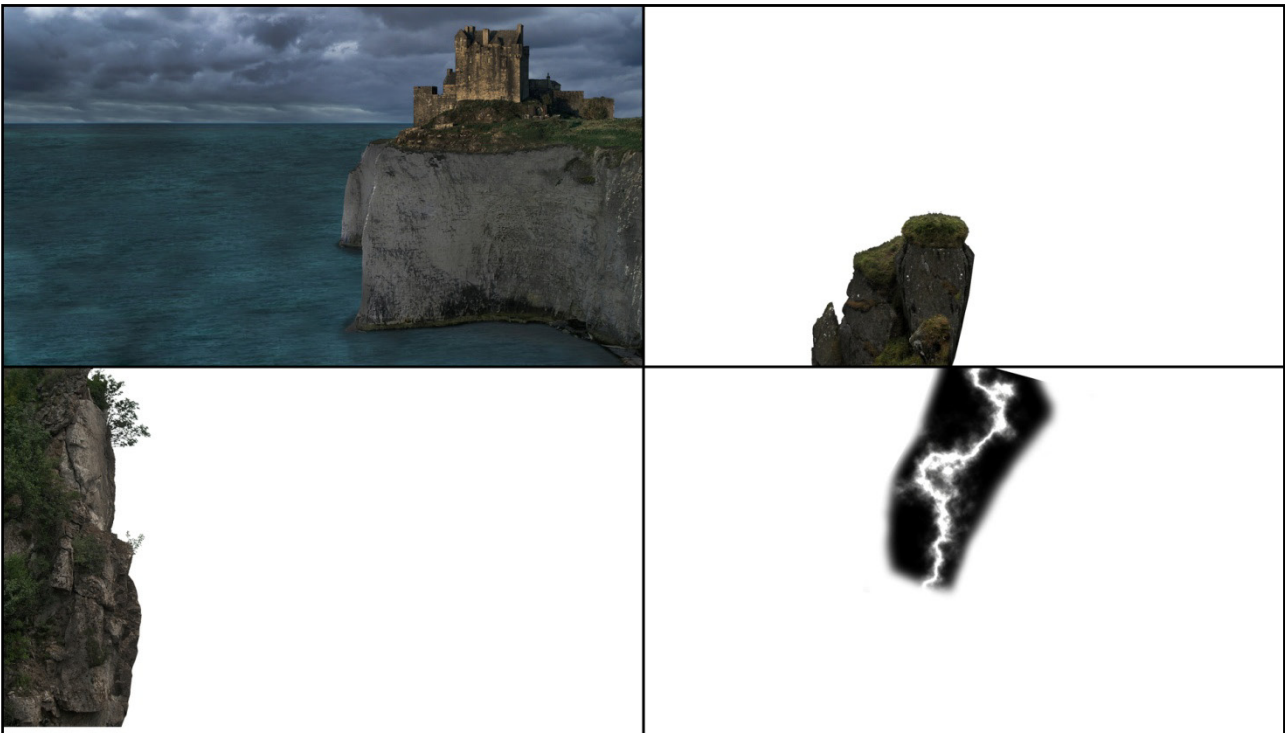
Open After Effects, and Create the composition, just like you did in Guide number 1.

The layers and camera are placed like this (seen from above):

Layer description:

Light brown and light blue: Background and fire/smoke.

Brown: Fore and middle ground images.

Red square (not a 3D Layer): Rain overlay

MOVING/LIVING BACKGROUND (WATER AND SKY)

To create the effects, of a moving/living background, we will be using the "liquify" modifier on an adjustment layer.

Start by selecting your background layer, and choose: layer → pre-compose (Ctrl+Shift+C):
Give the new composition a name, and click "OK".
Now our background has a composition of its own inside the main comp.

Double click the new comp in the timeline.
With the new comp open, we need to add an adjustment layer above the background image.
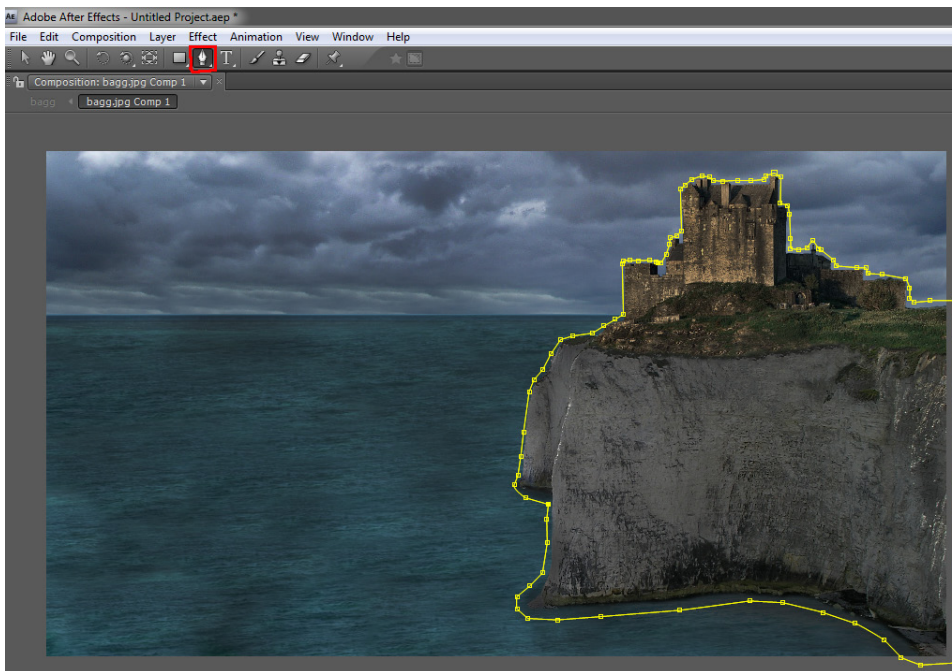
Choose: Layer → New → Adjustment layer (Ctrl+Alt+Y):
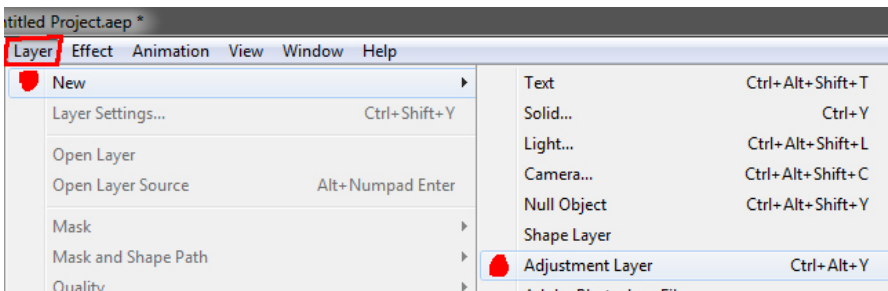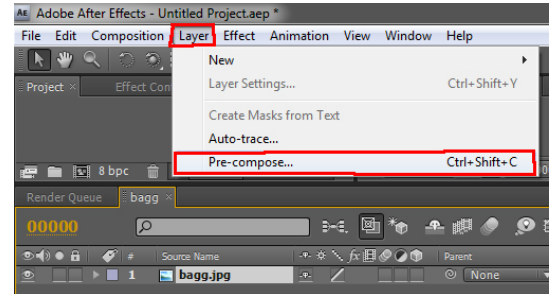
Select the new adjustment layer in the timeline.

Because our castle is part of the background image, we need to mask out the castle.

Select the mask tool, and draw a line all the way around the castle and cliff:
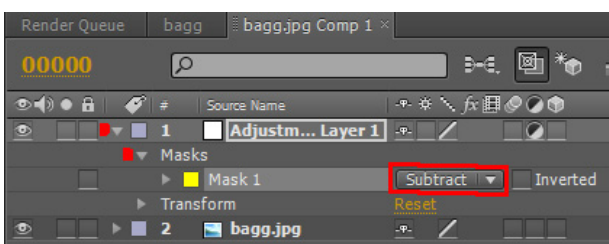

The default for the mask is to keep everything inside the mask, but we want to change everything outside the mask.
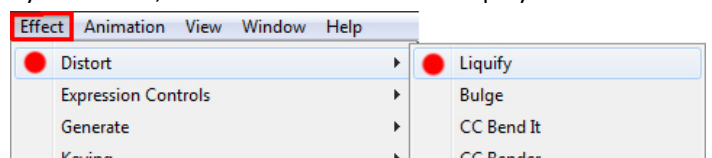
Therefore we need to change the mask setting from add, to subtract.

In the timeline, click the arrow next to the adjustment layer, and then the arrow next to the "Masks" setting.

Now you can choose the drop down menu, and change it from add to subtract:

Now we will add the "liquify" effect. With the adjustment layer selected, choose effect → distort → liquify:

Now you can start "distorting" the sky, and the water. Try to distort the sky and water in different ways, and without dragging over the horizon.
In the "effects" field, you can change the different "brushes" you want to use, to get the moving effect you want. Don't be shy to distort the image a lot.

Note: *don't drag the brush from the cliff/castle and out into the water or sky, because the brush will drag the cliff/castle with it and it will look terrible.*

When you are satisfied with the distortion, you need to animate it.

In the timeline click the arrow next to the effects rollout, and then the liquify rollout:
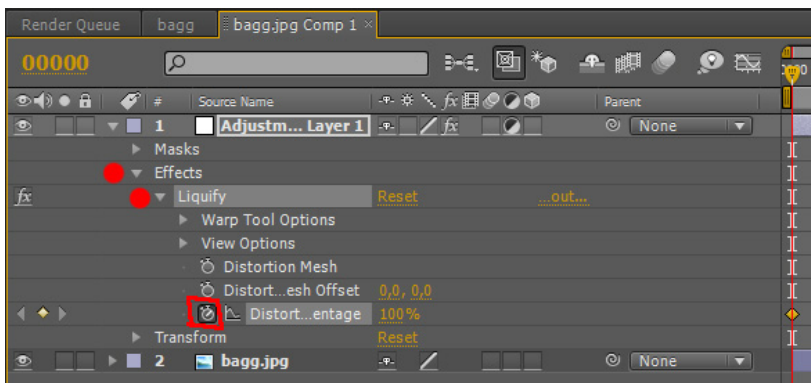
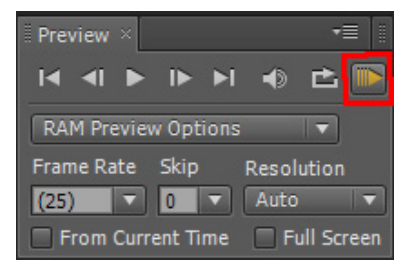

Then choose the stopwatch next to the "Distort Percentage"

Note: *the timeline should be at frame 0.*

Now set the "Distort Percentage" to 0% (at frame 0), and drag the timeline to about frame 250, and set the "Distort Percentage" to 100%:
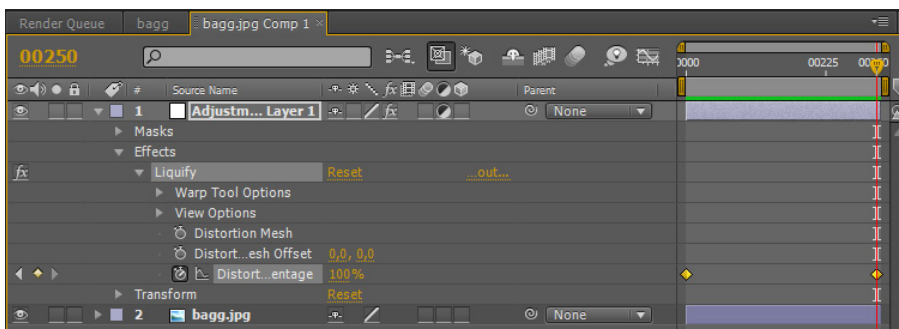
Now you have animated the moving of the sky and water.

To play back the animation, click the RAM Preview in the Preview field:


FIRE AND SMOKE

If you want to add some life to your scene, it is always a good idea to add smoke, fire or some moving objects of any kind.

I will now show you how to place a video of some fire and smoke into your scene, and make it look like there is a bonfire on the far end of the cliff.

The videos we will be using (fire.mov and smoke01.mov), can be found in the project zip file in the folder named video:
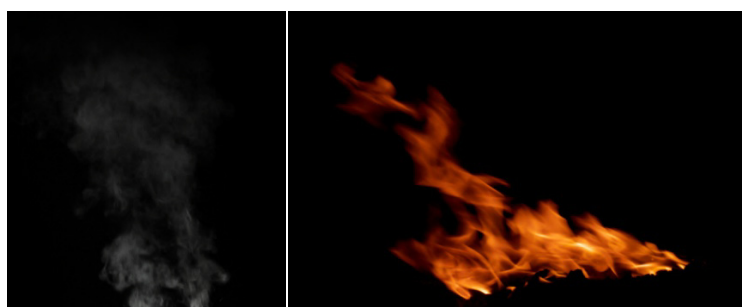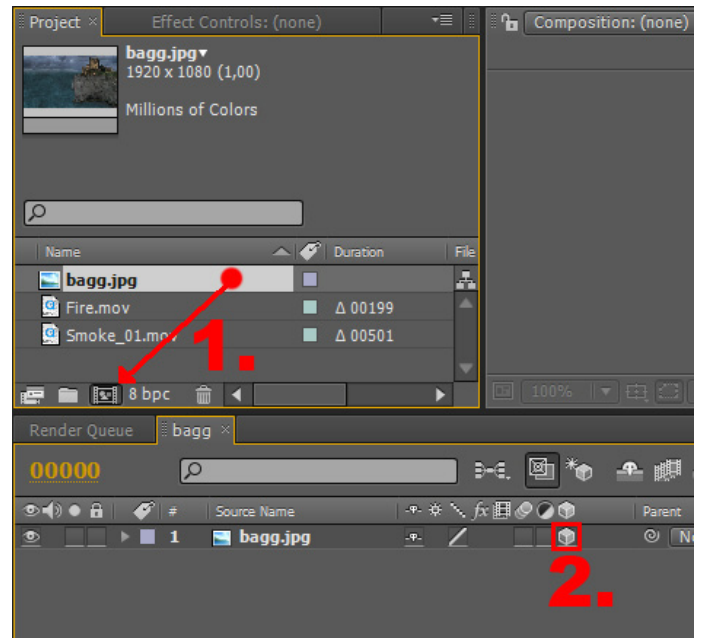
We start by importing the files we need.

Drag and drop the files (bagg.jpg, smoke01.mov and fire.mov) into the project field in after effects.
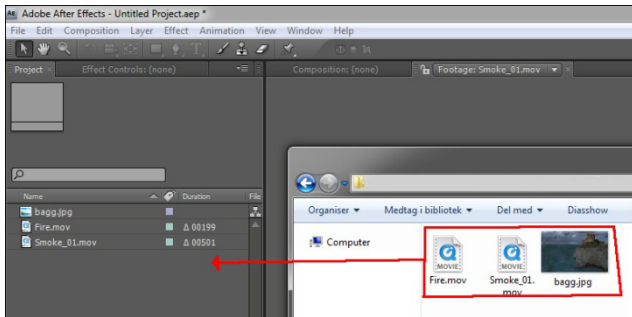
Now drag the background image (bagg.jpg) onto the new composition button, and convert the bagg.jpg layer to a 3d object:


Drag and drop the two mov files (fire.mov and smoke01.mov) down above the bagg.jpg layer in the timeline, and check the 3D layer box.

Note: *the reason why we convert the layers to 3D layers is that we want the background to move when we move the camera. If the layer isn't 3D, the layers would stay in the same place, without moving contrary to the camera.*

The next step is to place the videos onto the background layer, to make is look like there is a bonfire on the cliff edge in the middle of the frame.

Go to frame 150, click the individual layers, and resize and reposition them, to place the layers on the "cliff".

Hint: *hold down shift while dragging the corner points, to keep the aspect ratio.*
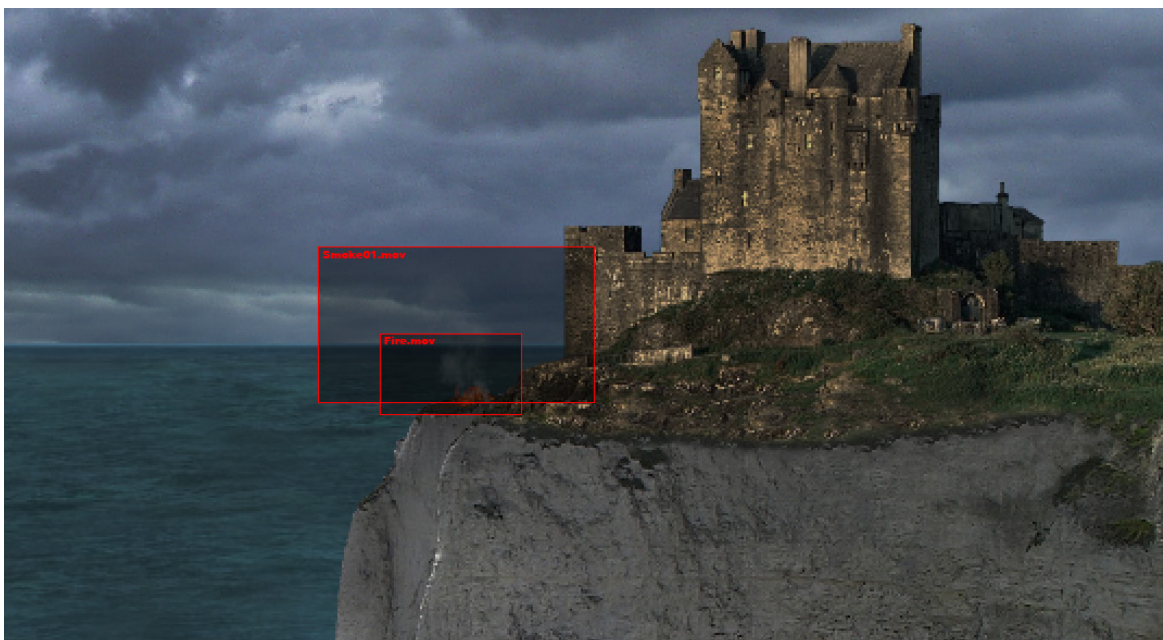
The last step is to make the fire, smoke and background the same length in the timeline.
In the timeline, click and drag the longest layers, to the length of the shortest (in this it is the fire layer (207 frames)):

Now go to frame 207, and click "N", to set the end of the work area to the end of the layers. Then click the Ram Preview, and see the "cliff bonfire" burn.
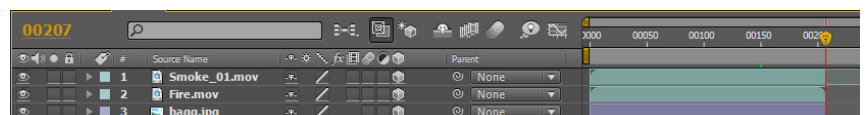
PHOTOSHOP PART

To create a simple lightning effect, we first need a picture of some lightning. The problem with the images you find at google.com is that the lightning is very hard to copy out of the image.
Therefore we will in Photoshop create our own lightning bolt.

If you don't want to create your own lightning bolt, you can just use the one I made for you (ligthning.png) and go directly to the "After Effects part":

In Photoshop, create a new image that is the size of your composition (1920x1080).
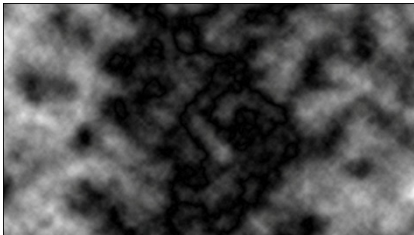
On a new layer create a black to white gradient, from left to right:
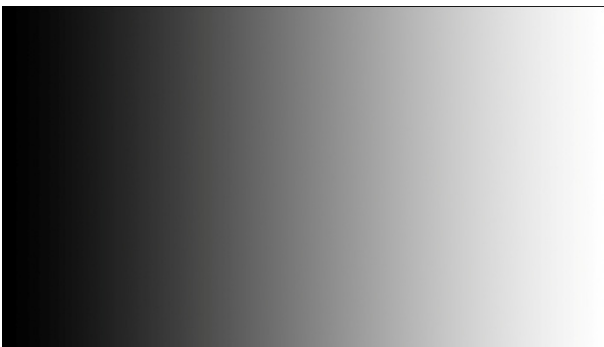
Make sure your main colors are also set to black and white:

Now choose Filters→Render→Difference Clouds:

Note: *your clouds probably look very different to mine. This is because the filter is randomly generating the clouds.*

Now you have to adjust the levels to bring out the lightning, choose: Image→ Adjustments→ Levels (Ctrl+L).

In the levels box: slide the two arrows in the "lowest" part of the histogram to the other side, until you are satisfied with the result:
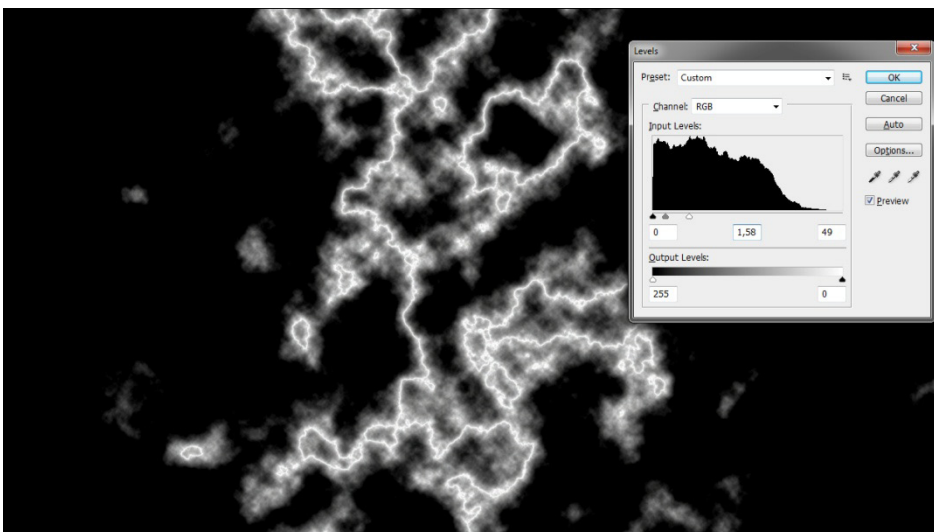
Now take a black soft brush, and color out the parts of your lightning that you don't want:
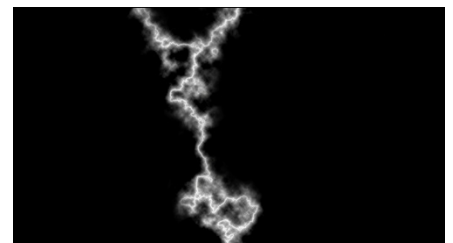
Save the image, and import it to your project field in after effects, along with the bagg.jpg and 1.png images (from the project zip).

If you skipped the Photoshop part, then import the lightning.png to your project field in after effects, along with the bagg.jpg and 1.png images (from the project zip).

Create a new composition from the bagg.jpg image. (Drag and drop the image to the new composition icon).

Now drag and drop the rest of the images onto the timeline above the bagg.jpg image. Make sure the lightning image is on top, and the "cliff pedestal" (1.png) is in the middle:
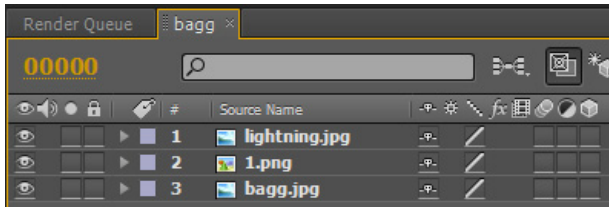
The lightning image is currently overlaying the entire composition, because of the black background.

To make the background transparent, we need to convert the layer to "screen". This is done by first clicking the button labeled "Toggle Switches / Modes" at the bottom of the timeline, and afterward choosing "Screen" in the "mode" rollout:
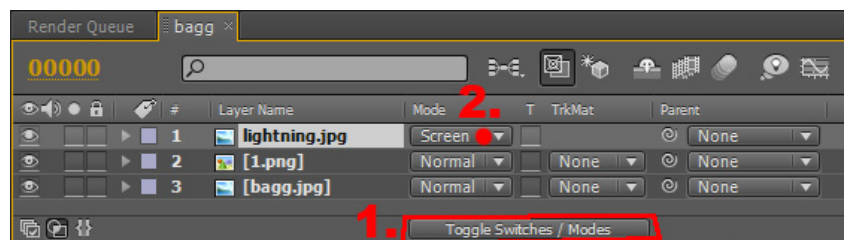
The lightning layer should only display the white lightning.

Now you have to resize the lightning layer, to look like it is hitting the top of the pedestal.

After resizing, my comp looks like this:

Now our Comp is only 200 frames long.

Note: *you can always increase the number of frames (length of the Comp), by selecting and right clicking the Comp in the project field and choose "Composition Settings". Here you can then set the duration of the Comp.*
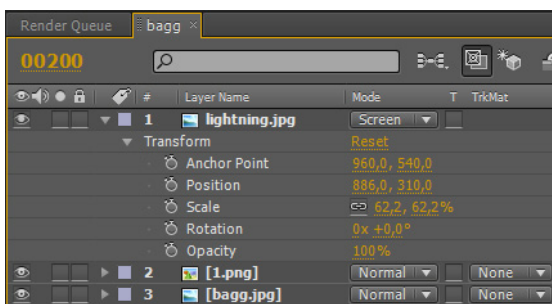
The next step is to make the lightning appear and disappear two times in a row.

This is archived by setting some opacity values to the lightning layer.

Start by setting the time slider to frame 200, and hit "N". Then right click the work area bar, and choose "Trim Comp to Work Area":
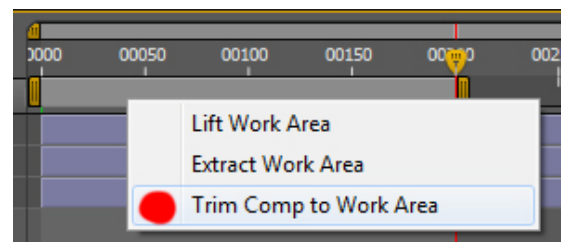
Now rollout the settings for the lightning layer, and then the transform controls:

Here we have the ability to set keyframes, and values to the opacity.

Go to frame 0 in the timeline and click the little stopwatch next to the opacity label. Then set the value to 0%.

Now let's say we want the lightning to strike at frame 100, and again at frame 130.

Go to frame 100, and set the opacity to 100%. Then go back one frame, to frame 99, and set the value to 0%.
We want the lightning to be visible for two frames, so we go to frame 103 and set the opacity to 0% and back one frame (102) and set it to 100%.
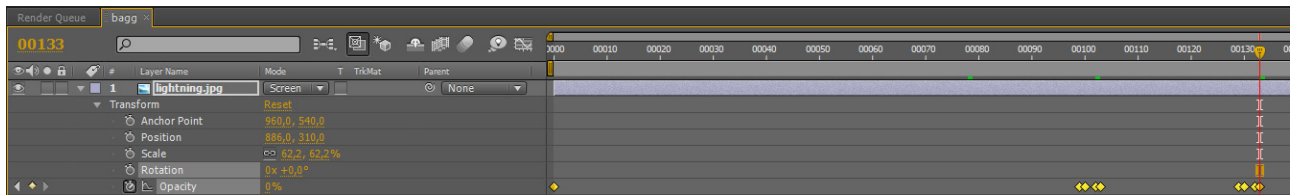
Note: *this is done, to prevent the lightning from fading to frame 103 rather than just disappearing.*

Now you make the lightning appear at frame 130.
The values in the order you need to set them are:

1. Frame 130 = Opacity at 100%
2. Frame 129 = Opacity at 0%
3. Frame 133 = Opacity at 0%
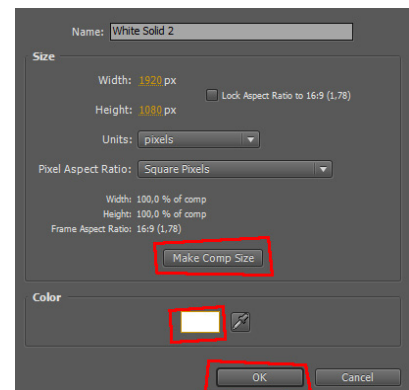4. Frame 132 = Opacity at 100%

My result looks like this:

Right now the lightning looks a little lame, because it is just a blinking image. To make it look better, we will be adding some "environment" effects to the lightning.

First we will start by lighting up the pedestal every time the lightning hits.

Go to "Layer→ New→ solid" (Ctrl+Y), make it comp size, and white.

Now select the ellipse tool, and draw a small ellipse approximately the size of the pedestal top:
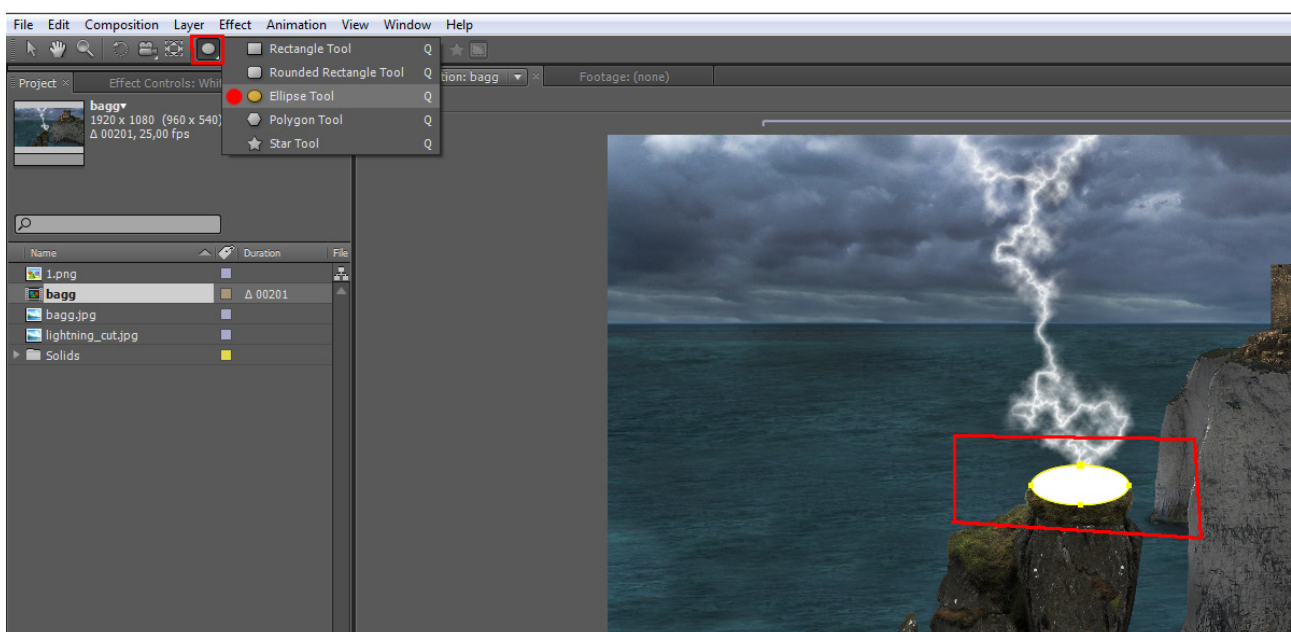
Note: *You may need to tweak the position and size of the ellipse a little.*

Go to the settings for the "white solid", and rollout the "Masks" and "Mask 1" settings. Set the "Mask Feather" to about 55 pixels:

Now we have a nice feather to the edges of our pedestal illumination.

The next thing to do is to have the opacity of the illumination layer to follow the lightning.

To do this we need to add an auto generated expression to the opacity of the lightning.

Rollout the transform settings for the illumination layer (white solid), and hold down "Alt" while clicking the little stopwatch next to the "Opacity" label.
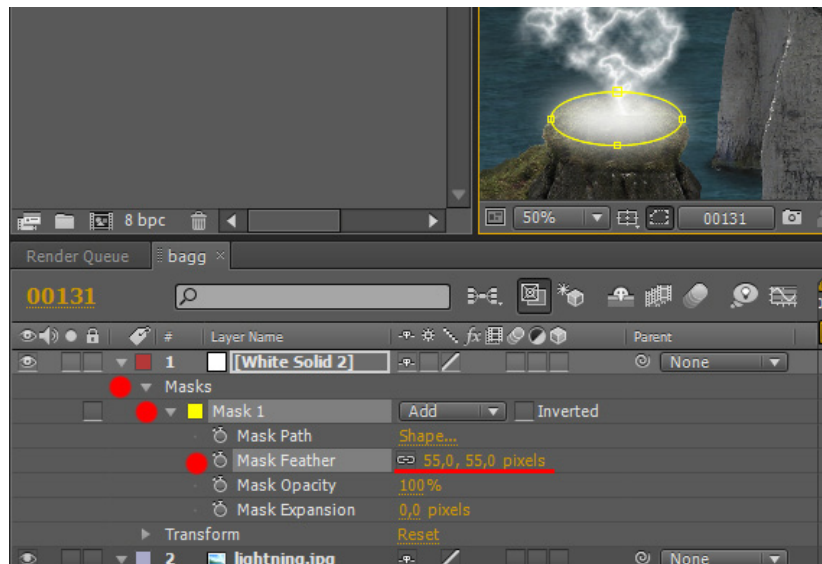
Now click and drag the "pick whip" from the expression rollout to the "Opacity" label of the lightning layer:
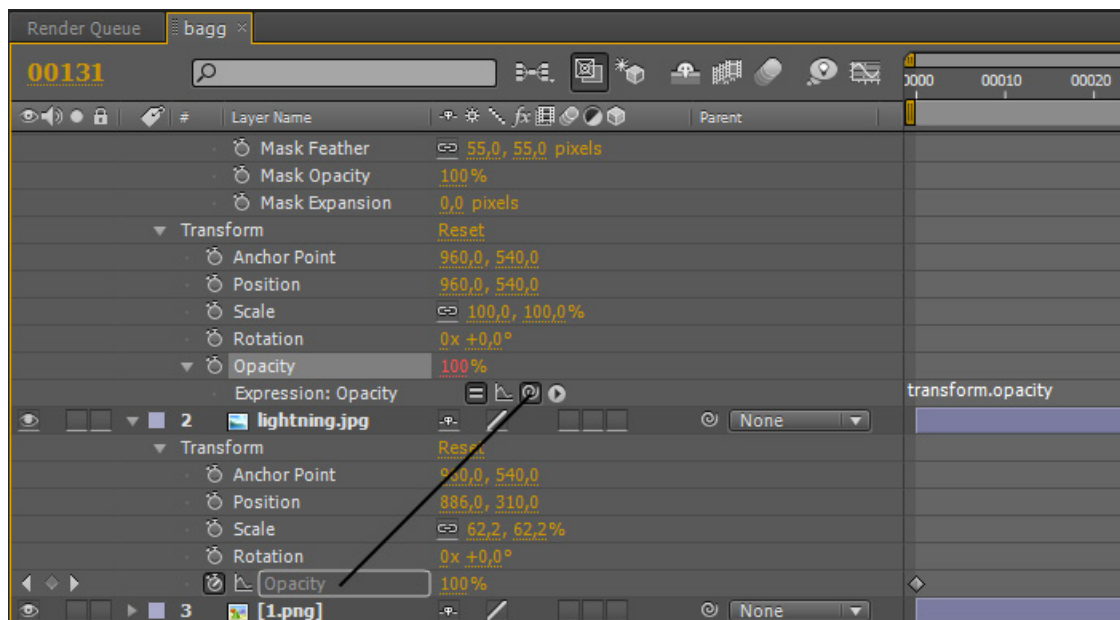
If you RAM Preview the comp now, you will see that the two layers opacity follow along.

You can probably see that it still doesn't look quite right. We still need the blinding effect of a lightning, where everything is lit up.

To create this effect, you just need to add another "White Solid" by choosing "Layer → New → Solid" (Ctrl+Y).

Then you need to set the opacity. Click the rollout and the "Transform" rollout for the new "White Solid".

We don't want the layer to be 100% visible, and we don't want it to follow the opacity of the other layers. We want it to reach about 60% opacity, and fade away after the lightning strikes.

Go to frame 100, and click the little stop watch next to the opacity label. Set the opacity to 60%. Then go back one frame (99) and set the opacity to 0%. Now go to the frame right after the lightning has disappeared (103), and set the opacity to 0%.

Now the "White Solid" will appear together with the lightning, but it will slowly fade out until it reaches one frame after the lightning has disappeared.

Now we need to do the same for lightning number two.

The values in the order you need to set them are:

1. Frame 130 = Opacity at 60%
2. Frame 129 = Opacity at 0%
3. Frame 133 = Opacity at 0%

My result looks like this:

This is how you create some simple lightning effects.
If you want to move the lightning together with the pedestal, you just need to convert it to a 3D layer and position it in the same place as the "Cliff pedestal".
The "White Solid" we use as an overlay to illuminate the scene, needs to be at the very top of the timeline, and not a 3D layer.
Otherwise some objects in the scene might not get illuminated, and this would kill the illusion.
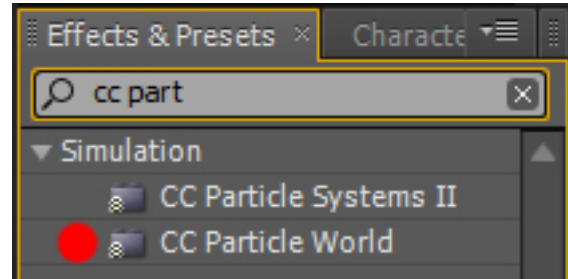
RAIN

To create some simple rain in a scene, we will be using the build in particle system in after effects.

Start After Effects, import the bagg.jpg image, and create a new comp by dragging the image onto the "create new comp button".

Create a new White solid (Ctrl+Y).

Now apply the "CC Particle World" effect. Just search for "cc part" in the "Effects & Presets" field. Then double click the "CC Particle World" effect:

We want the particles to fill the screen from frame 0, therefore you need to click and drag the "bar" in the timeline to the left, until the particle fill the screen:
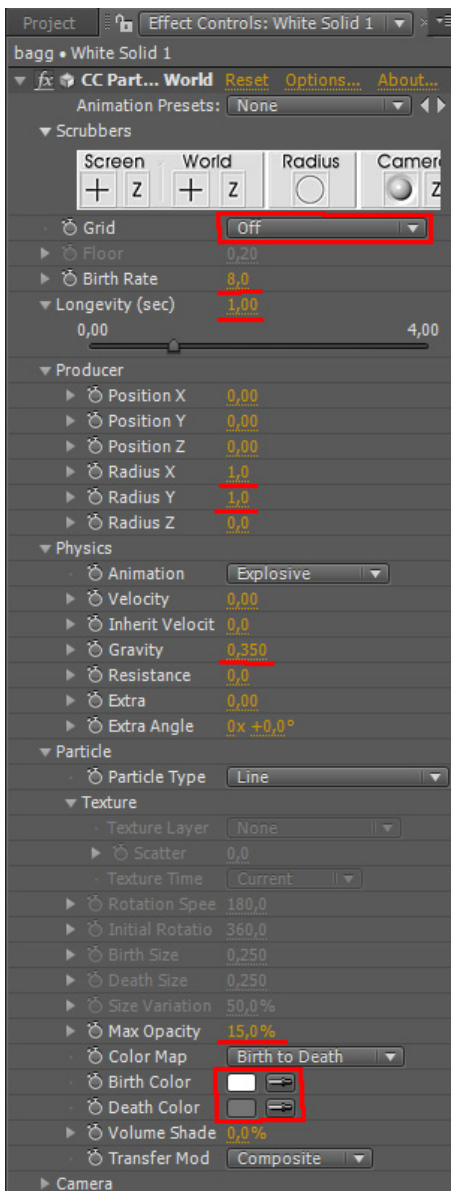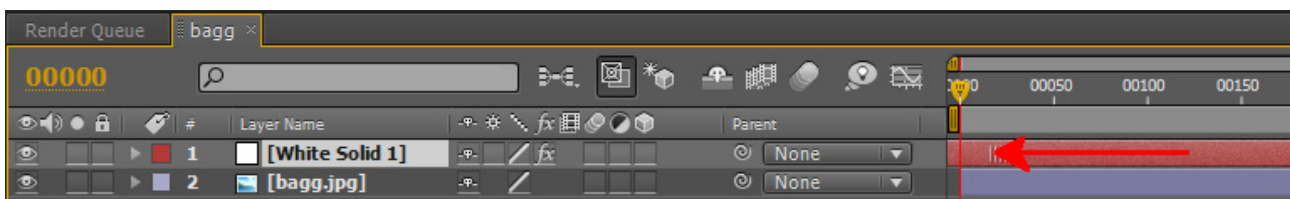
You can see the settings for the rain in this image:

If you want the rain to fall at an angle, (like if the wind is pushing it) you can just rotate the "White Solid", and resize it to fill the screen.

You can off course play around with the values to make the rain go faster or slower, be more or less visible etc.

My result looks like this:

RENDERING

Some people render their AE results via an export. This is considered bad practice. The right way to render your results is to use the render queue.
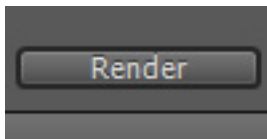
Choose "Composition" → "Add to Render Queue"

As a default the settings are set to a lossless AVI format, which is okay for this composition.

Click the "output to:" filename, (01.avi) and choose your output directory:
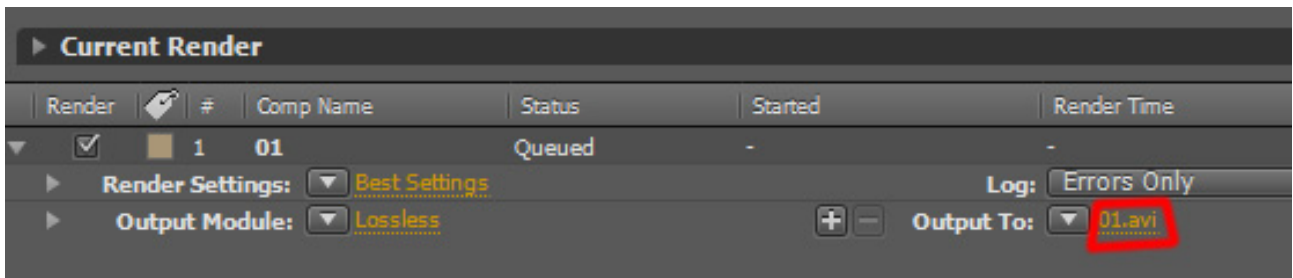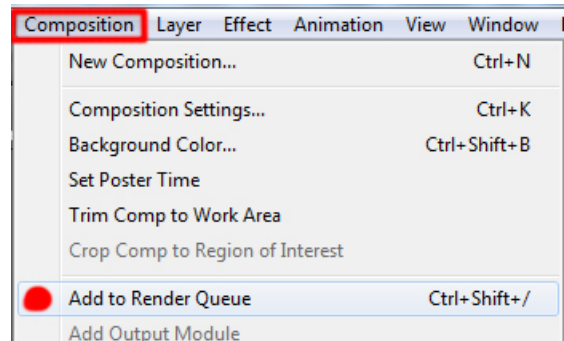
Then Click "Render":

Now you are done.

I hope this basic guide has given you some insight into the basics of creating a matte painting setup.

Off course this was a very basic setup of a matte painting, and you could probably create some really astounding compositions.