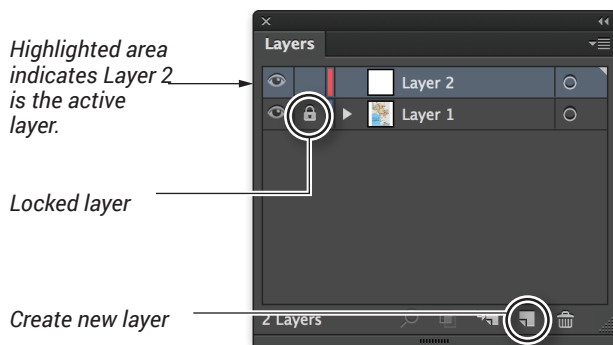


How to locator map

GETTING STARTED

1. Place the reference map (a scan of Los Angeles) in a new Illustrator document. The keyboard shortcut for placing is Command-Shift-P, or you can pull down the **File** menu to **Place...** to bring in the file.

2. In the Layers panel, create a new layer by clicking the “Create New Layer” button at the bottom right. Lock the layer that has the placed map (by clicking the small area to the right of the eyeball), and click on the new layer to make it the active layer. This is where you’ll begin drawing.



DRAWING THE LAND AREAS

3. Using the pen tool, draw around the perimeter of the land area on the map. Zoom in tightly when needed, and be sure to pull out handles for bezier curves as you go. When tracing an organic shape (i.e., curved and not straight lines) you will find it easier if you use the space bar to correctly position your anchor points as you draw.

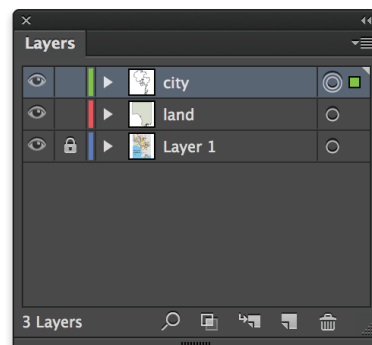


4. You will find that the land area includes two shapes — one for the city and a second for Terminal Island in the south. Select both of these by either shift-clicking them OR click the open circle to the right of the name of the layer in the Layers panel. Turn these two paths into a compound path by hitting Command-8.

5. Once you’ve finished tracing the land, double-click the words Layer 2 in the Layers panel and change its name to “land.”

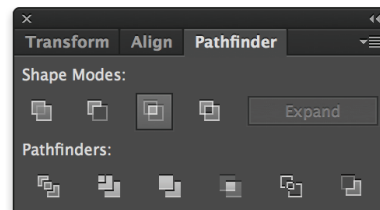
6. Create a third layer, name it “city,” and begin tracing the outline of the City of Los Angeles (the city is made up of a number of communities, including Hollywood, which is what our map is intended to locate). You’ll need to closely follow the borders of the city outside within the land area, but once you get to the coast, you can draw very roughly to connect the paths. This is because we will be “intersecting” the city shape with the land shape, meaning you needn’t draw the coastline twice.

7. The shape of the city includes several “holes” — areas like Beverly Hills. After you’ve traced all of these, select them and the main city shape — that is, all of the paths on the “city” layer. You can do this by shift-clicking your paths on

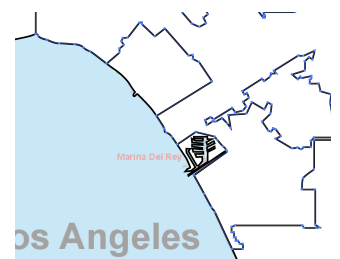
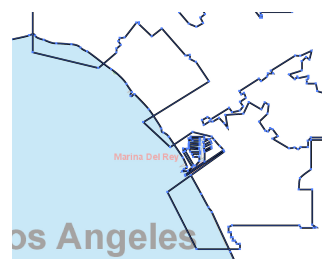


that layer, or more simply by clicking the target circle to the right of the city layer in the Layers panel. Once these are selected, hit Command-8 to create a compound path, and all of the holes will punch through.

8. Now, we’ll intersect the land and city layers. We’ll need to keep the land paths, of course, so the first Select the land path from the land layer, and copy it (Command-C). Deselect, and paste in front (Command-F). Shift-select the compound path on the city layer — the one you drew roughly in the Pacific Ocean area. We’ll eliminate this roughness by intersecting these two shapes.



9. Call up the Pathfinder panel (Window > Pathfinder). Click the intersect button, the third button from the left of the top row.



How to locator map

10. Create a new layer for Hollywood itself, and trace its shape.

ROADS

1. Create a new layer for the major highways. (Our source map includes only portions of these roads that go through the City itself, but this is fine for the sake of practice). Trace the U.S. interstates first – we will use a heavier line for them in the final map.

2. Once you have all the interstate highways traced, rename their layer “interstates” and create another new layer. Trace the major U.S. highways and California highways on this one.

Once you have finished drawing all of the roads, you can create an “in-line” effect that will show the roads in the finished graphic as white lines bordered by gray lines. This requires a few steps.

3. First, select both the interstates and the highways layers in the Layers panel, and in the flyout (at the right), choose “Merge Selected.” The two layers are now one, named for whichever layer was the highest in the stacking order.

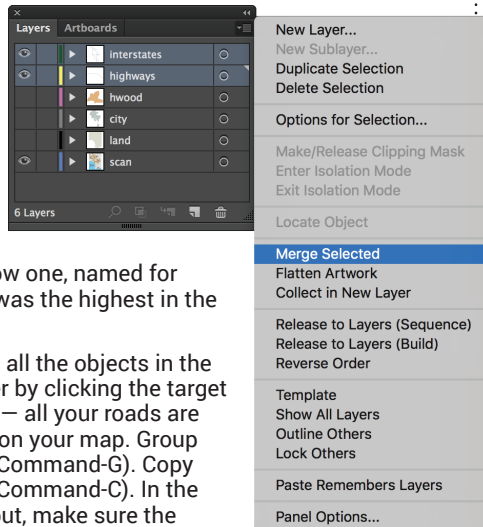
4. You can select all the objects in the new merged layer by clicking the target circle to its right – all your roads are now highlighted on your map. Group them (by hitting Command-G). Copy them (by hitting Command-C). In the Layers panel flyout, make sure the “Paste Remembers Layers” option is unchecked.

5. Create a new layers, and hit Command-F. A copy of your roads will paste in place in the new layer. With those roads still selected, change the stroke color to white. Change the layer name to “whiteroads.”

6. Reduce the point size of each line by 1 point. An easy way to do this is to select one of your (heavier) interstate paths, then choose Select > Same > Fill and stroke. Then do the same for the smaller roads.

WATER PARTS

1. Create a new layer below the land layer. Draw a rectangle that is within the width of your Land layer (so the land will show from edge to edge) and a little deeper. Color this rectangle blue.

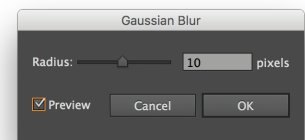
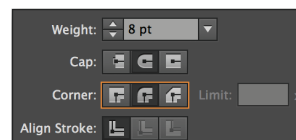


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2. Select the land on the Land layer and copy it (Command-C). You have to make sure, again, that “Paste Remembers Layers” is unchecked; if it is checked, pasting this will put it back on the Land layer.

3. Create a new layer between the water and the land, and name it “Coast.” Paste in place (Command-F). Change the line weight to something much larger, and round the caps and joint. For a lightning effect, change the stroke to white; for a darkening effect, make it dark blue.

4. Under the Effect menu, pull down to “Blur,” and over to “Gaussian Blur.” Check the “Preview” box so you can see the effect before committing to it.



How to locator map

SCALING

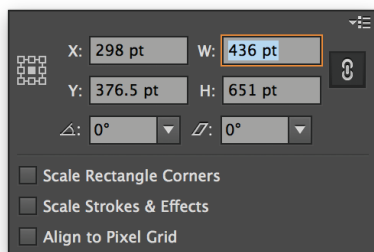
Our map is mostly finished, but we need to do a few more critical things to make it ready for publication. We'll start by scaling it to the correct width.

1. Make sure none of your layers are locked or hidden, and that you don't have any locked or hidden objects. (You can lock individual elements by selecting them and hitting Command-2, and hide them by selecting them and hitting Command-3. To unlock or unhide all elements, simply hit Command-Option-2 or Command-Option-3, respectively.)

2. Select your water rectangle from Step 1 in the previous section. This will be the final crop of your map — see the next section — and we will use this to judge when we have scaled to the correct dimensions.

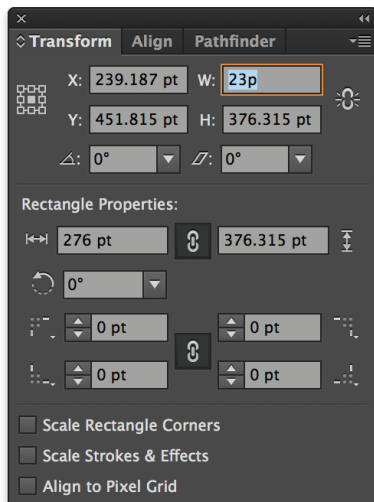
3. You can see the dimensions (as well as the X and Y position) of this rectangle in Illustrator's Options Bar (across the top) or in the Transform panel. In this example, our rectangle is 436 points wide — which would mean a locator map that is 36p4. Given the level of detail and information in our map, this is much too large. We will instead shrink our graphic down to two columns on an 11-pica grid.

4. To help your re-scaling, draw a box in the center of the screen that is exactly 23 picas wide (two columns based on our grid). Turn it into a guide (by hitting Command-5).



5. Position the graphic to allow you to closely match the width of the 23-pica guide with the "water" rectangle on your map. When resizing, you can choose to either scale the strokes, where they will get smaller as you decrease the size of the graphic, or to remain at the same weights no matter how the size is changed. For our locator, we will not scale strokes — leave this box unchecked.

6. Once your graphic is scaled to the approximate size of the guide, you can use the Transform panel to make the width of the rectangle exactly 23 picas.

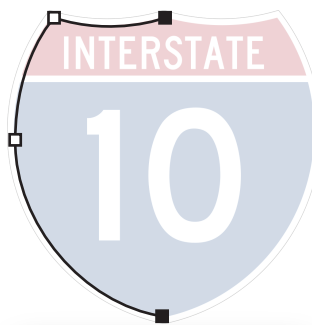


HIGHWAY SYMBOL

Next, we will create symbols we can use for the highways on the map. We will need to start by getting reference for drawing them.

1. Do a Google image search for "interstate symbol," and after you download one, place it in Illustrator by pulling down File > Place (or hitting Command-Shift-P).

2. Make sure the placed symbol is in a blank area of the page, away from the map. These are symmetrical objects, so we will draw half of it, then copy that shape to create the full symbol. An interstate symbol is relatively simple, so you should be able to draw half of it with only a few points.



3. Select the top and bottom points with the white arrow tool. To make sure they are perfectly aligned, pull down Object > Path > Average, or hit Command-Option-J. Average these two points along the vertical axis.

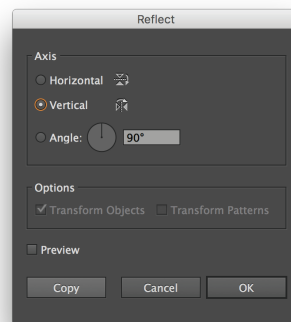
4. Hit Command-J. That will join (close) the polygon.

5. With the white arrow, select the straight line connecting the two points from Step 4. Cut it (Command-X).

6. Paste it in place by hitting Command-F.

7. Choose the reflect tool (it's hidden with the Rotate tool), and double-click it.

8. Set the axis to Vertical, and click Copy.

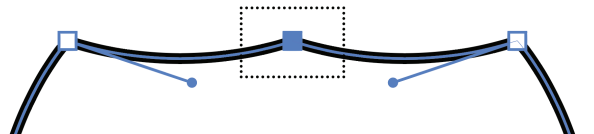


9. Now, delete both the copy you just made and the line you added in Step 6.

The reason for these last four steps was to make a transformation; Illustrator remembers your most recent transformation — a move, rotation, scale, shear or reflection — as well as the fact that you created a copy AND where on the page that transformation took place. This is a long way of saying ...

10. Select your half-shield and hit Command-D. (Command-D repeats the last transformation.)

11. Use the white arrow to select the top two overlapping points, and hit Command-J to join. Do the same at the bottom. Fill your new shape with a blue color.



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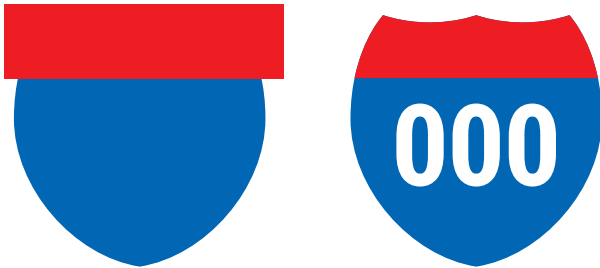
We will finish the shield symbol by using the same Intersect strategy we used for the city outline on the first page of this tutorial.

12. Use the rectangle tool to draw a red box to represent the top section of this symbol.

13. Copy the blue shield shape (Command-C), and paste it between the blue shield and red box from step 12 (select the blue shield and hit Command-F to paste in front of that item).

14. Call up the Pathfinder panel (Window > Pathfinder), and shift-select the red box so that you have the second blue shield and the red box selected.

15. Click the Intersect button on the Pathfinder panel. The red box now follows the contours of the blue shield.



16. Finally, add the number for the highway symbol. Use a condensed, sans serif and bold typeface. Use center alignment (Command-Shift-C) and carefully align the number to the horizontal center of the shield. Make the number "000" (so you will remember to change it!) and white. Group the shield, red bar and type, and scale.

ADDING TEXT

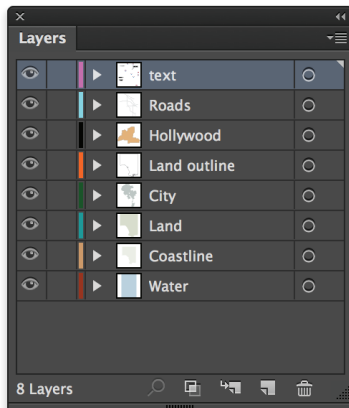
1. With the highway symbols scaled and ready, hide the parts of the Hollywood map that are obscuring the scan. Make a new layer, and call it "Text." Add your "000" Interstate symbol to this layer.

2. Add the relevant highway symbols to your map, option-dragging to make new ones. Be careful not to accidentally duplicate a highway!

3. Style the scale, and add labels for the city of Los Angeles and the Pacific Ocean.

4. Add a pointer box that shows the reader where Hollywood is.

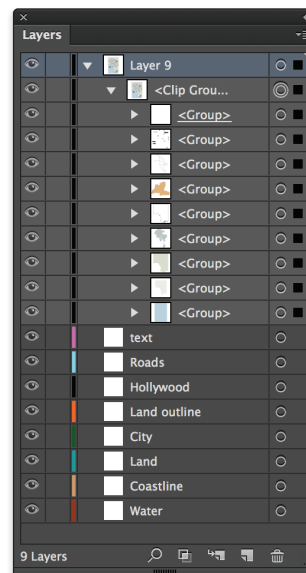
5. Delete the scan.



CLIPPING MASKS

Clipping masks are a powerful feature of Illustrator documents. They allow you to "trim away" excess material in your file and create clean, modular graphics. A good way of thinking about clipping masks is as windows — we can see the world through a window, but we don't see through the walls.

1. Layer by layer, select all the elements on each layer and group (Command-G). This is to preserve layer structures after you execute the clipping mask, because making a mask will automatically group everything into a single layer.*



2. Copy the water rectangle and paste it in front of everything else. This will be the clipping path for your map — the clipping path is always the top element in the clipping group.

3. Select all (Command-A), making sure you have no locked/hidden elements or layers.

4. Pull down Object > Clipping Mask > Make, or hit Command-7. Notice that all your layers are now empty, but because of the groups we made in Step 1, you can still easily access and edit the former layers.

The clipping mask will now move as a single object with the black arrow tool, but you can edit the

contents by double-clicking or using the white arrow.

* You can preserve layer structure though the use of sub-layers, where you drag the existing layers into a new layer, but this method does not always work as expected, and keeps your masked elements selectable with the black arrow.

INSET

Use an inset when additional frame of reference is needed.

1. Download and open the US-map file from Course Materials.



2. Determine what you think your inset should include, and use a clipping mask for the bounds of the inset. After it is ready, copy the inset, and paste it on its own layer in the Hollywood file.

3. Scale and style the text in the inset. Use a technique of some sort, like a drop shadow, to visually "separate" it from the main map.