

OK, now lets go get a satellite photo. For this example we'll go to www.terraserver.com

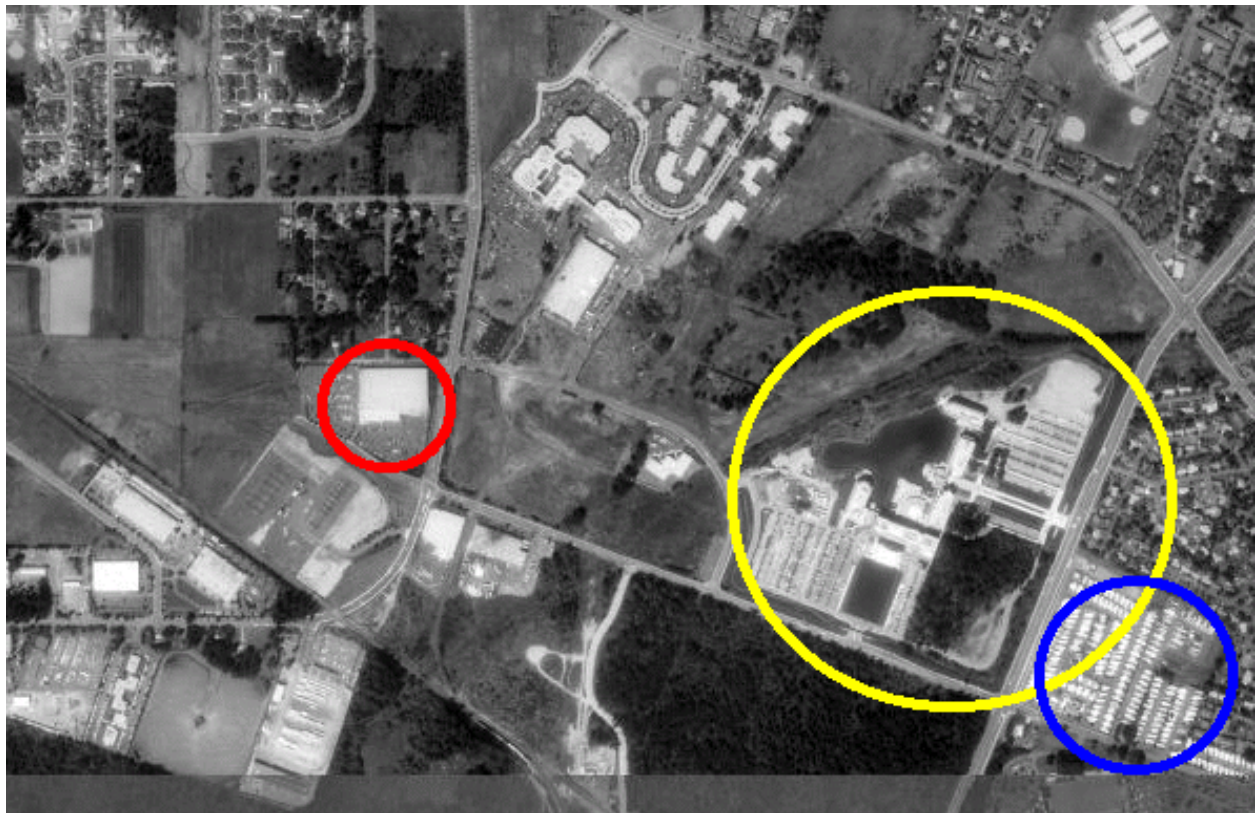
Note: The CAD Zone does not guarantee the availability or quality of the information found on the Terraserver web site. This is just one site you can use to obtain satellite images. If this site goes out of service you will need to search for a new site.

Another source for aerial and satellite imagery is The Gemi Store (Geographic, Earth, Mapping Information). 1-888-333-GEMI or www.gemistore.com

A magazine that covers geographic, mapping, and earth information is EOM (Earth Observation Magazine). www.eomonline.com

The Latitude and Longitude will be either in degrees, minutes, seconds or decimal degrees. The Advanced Search page for Terraserver www.terraserver.com/advfind.asp lets you use either.

Once I entered in the longitude and latitude I could zoom up or out of the area I was interested in. The world looks a lot different from up here so I had to find landmarks and intersections I was familiar with to be sure I found the location of Nike. Also, this photo was taken in 1993. There have been a lot of changes in the last eight years (this document was created in 2001) and new buildings have been added since then. In the following picture I circled the Nike campus in yellow, Costco is circled in red, and the trailer park is circled in blue.



Preparing the Photo for the Diagram Program

I zoomed in on the Nike campus a little more and exported it out of Terraserver as a jpg file. The jpg file can be imported into the diagram program or Windows Paint and other similar programs. For this example I brought the photo into Windows Paint first and cut out a smaller section of the photo.



Note: I needed to use Paint to cutout the portion of the image I wanted to work with. The diagram program only allows you to scale or move an image (no other editing options are available for bitmaps).

Tip: A great way to take any image off your screen and into a format you can work with is to use the “Print Scrn” button on your keyboard. I use this method all the time. If there’s anything on the screen you want to work with then:

- 1) Make sure the image you’re working with is displayed correctly. What you see is what you’ll get.
- 2) Press the “Print Scrn” button on your keyboard.
- 3) Open up Windows Paint or similar product.
- 4) Use the “Paste” feature to bring the captured image into Paint.
- 5) Cut out the portion of the image you want and make any other changes using the available feature of the program you’re in.
- 6) Save the image as a bmp or jpg file.

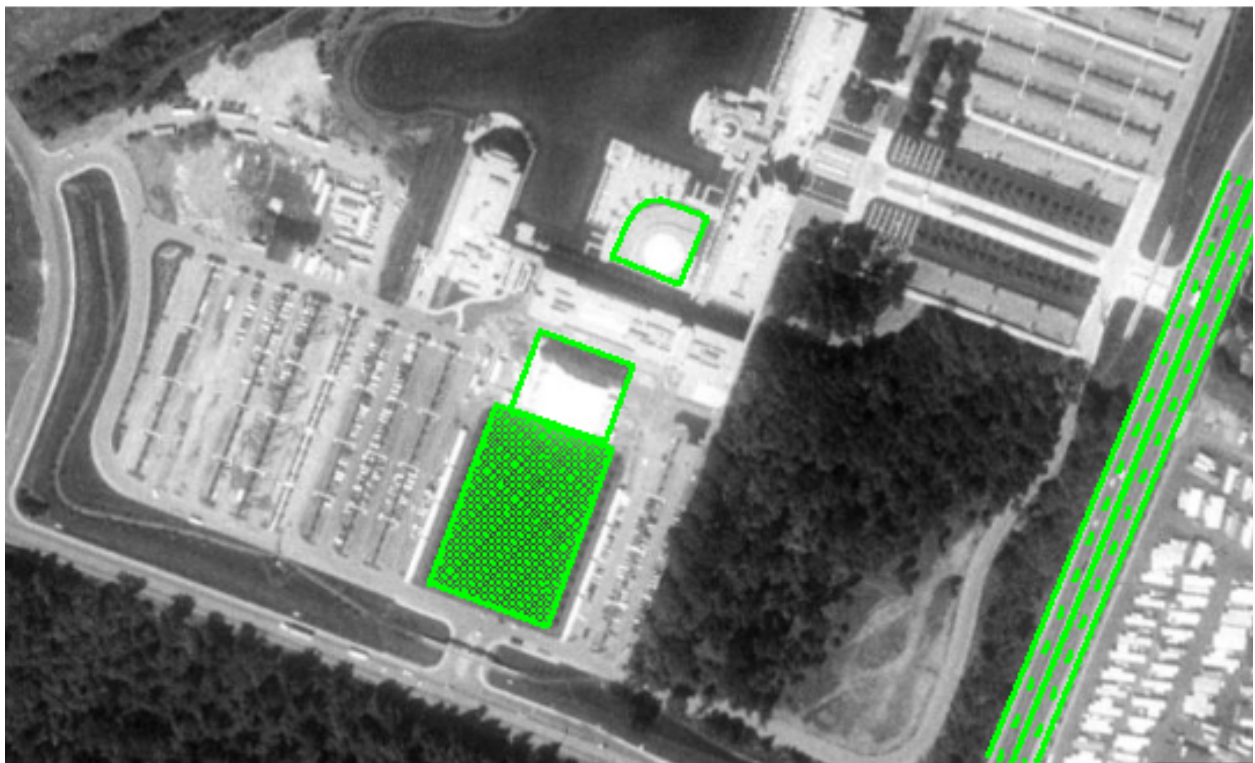
Working with the Photo in the Diagram Program

Bring the photo into the diagram program using the “Import Image” feature from the “File” pull-down menu.

Select the photo and change its properties to put it on a different layer for tracing. I put the photo on layer 1 and did all the drawing (tracing) on layer 0.

Tip: For more detailed instructions on working with images review the document, “Photos - Bitmaps - Scanned Images”. You’ll find it in the Learning Center in the same location you found this document.

Switch to another layer other than the photo layer and lock all layers, making all other layers except for the current layer un-editable, and start tracing.



Scaling the Photo Bitmap to Real World Scale

Used the main road next to the campus to scale the photo to actual (real world) size. We measured the width of the road of the imported image in the diagram program. For this example lets say it was one 2' 3" wide. It's a four lane road so we'll estimate its width at 48 ft. So, we can select the photo image, then select the "Scale" feature in the "Edit/Modify" tools and re-scale the photo up by a factor of 21.333 (48 divided by 2.25 equals 21.333). If we measure the width of the road now it measures 48 ft. Now we can take measurements directly off the photo. They won't be exact, but fairly close.

We find that with a little practice, the tracings are generally within plus or minus 5 feet of the true dimensions, depending on the clarity of the satellite photo.