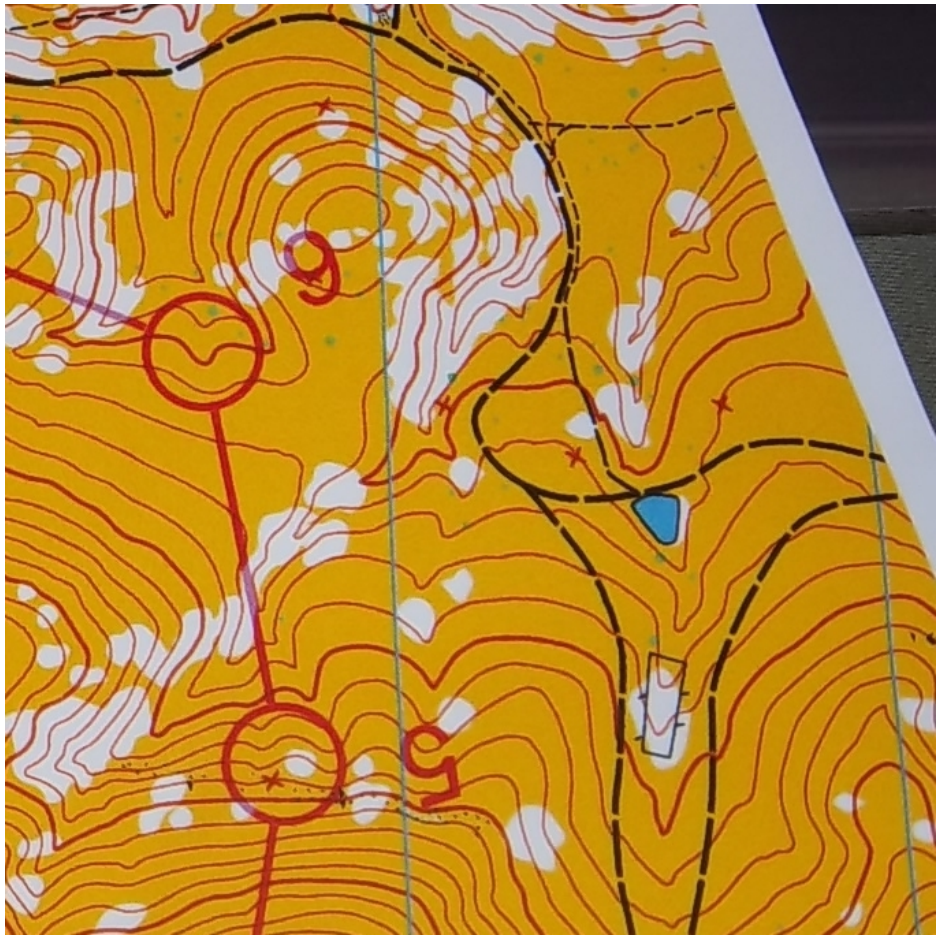
Using the new map of Shell Ridge.

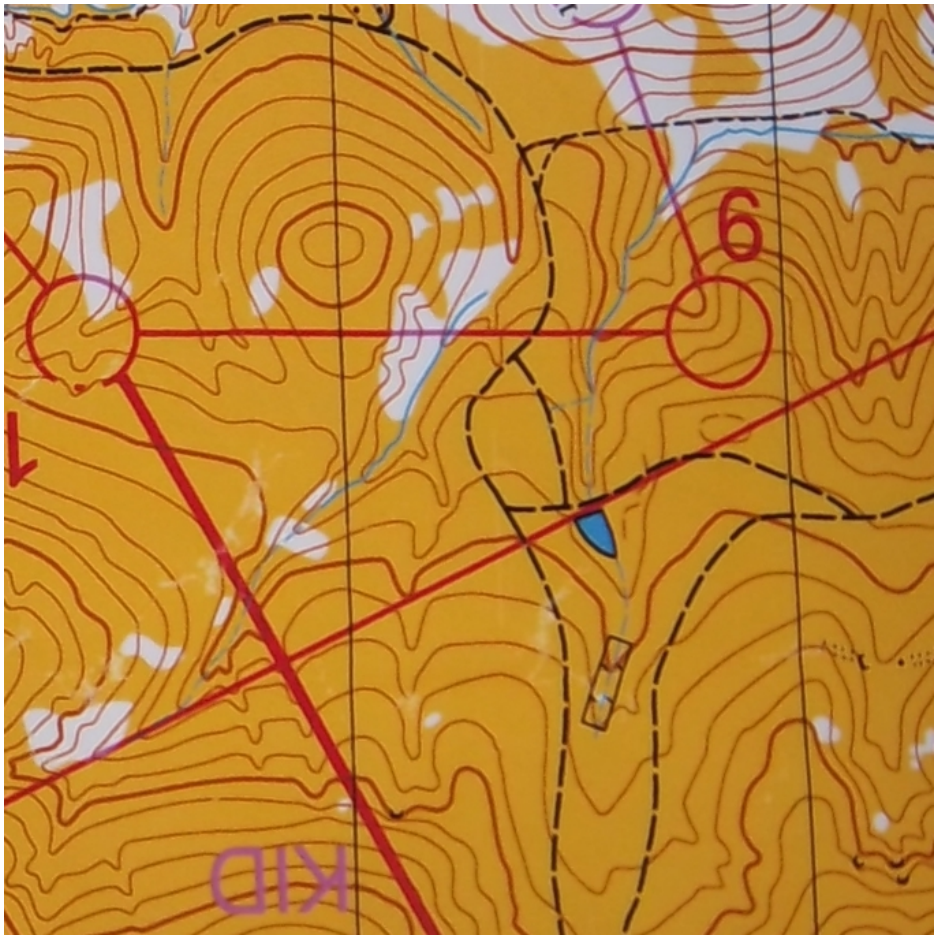
January 2012.

Introducing the new map

New Map: 2012



Old Map: 1985

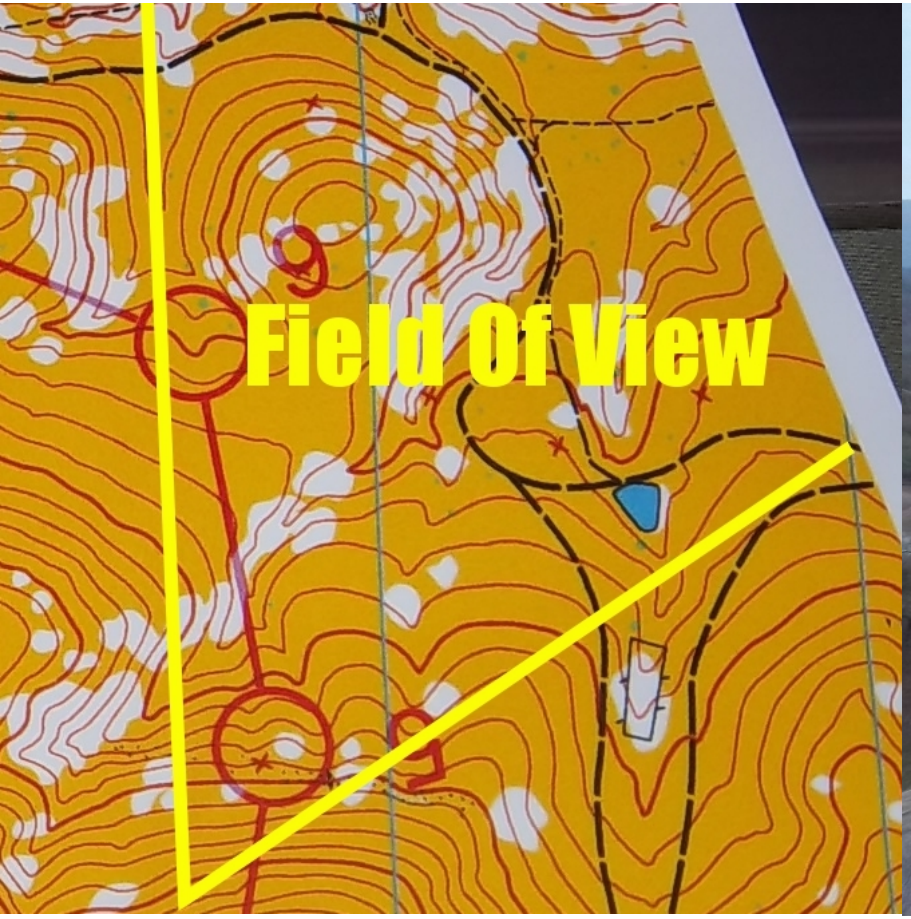


- New LIDAR (laser) contours
- Vegetation (white patches) traced from high resolution aerial photography. Very precise.

- Hand drawn contours from photogrammetry and field survey. Note how the mapper has exaggerated reentrants for clarity.
- Highly generalized vegetation. Easy to read, but very outdated. Not in the right spots!

Matching the map with reality

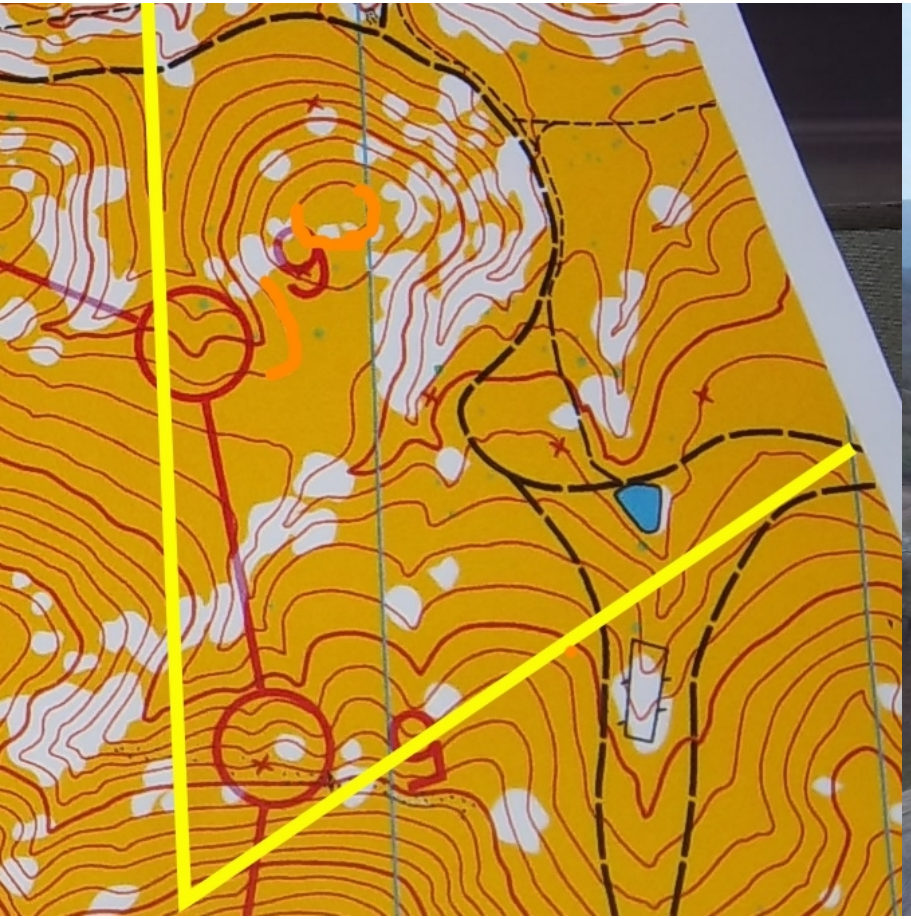
I took this photo from high on a hillside, looking south, while approaching checkpoint 5. It's a great panoramic view. Can you match up the features in the photo with the features on the map? Zoom in close, so you can see all the detail!



(Notice that the map is oriented upside down – for easier reading)

Matching the map with reality

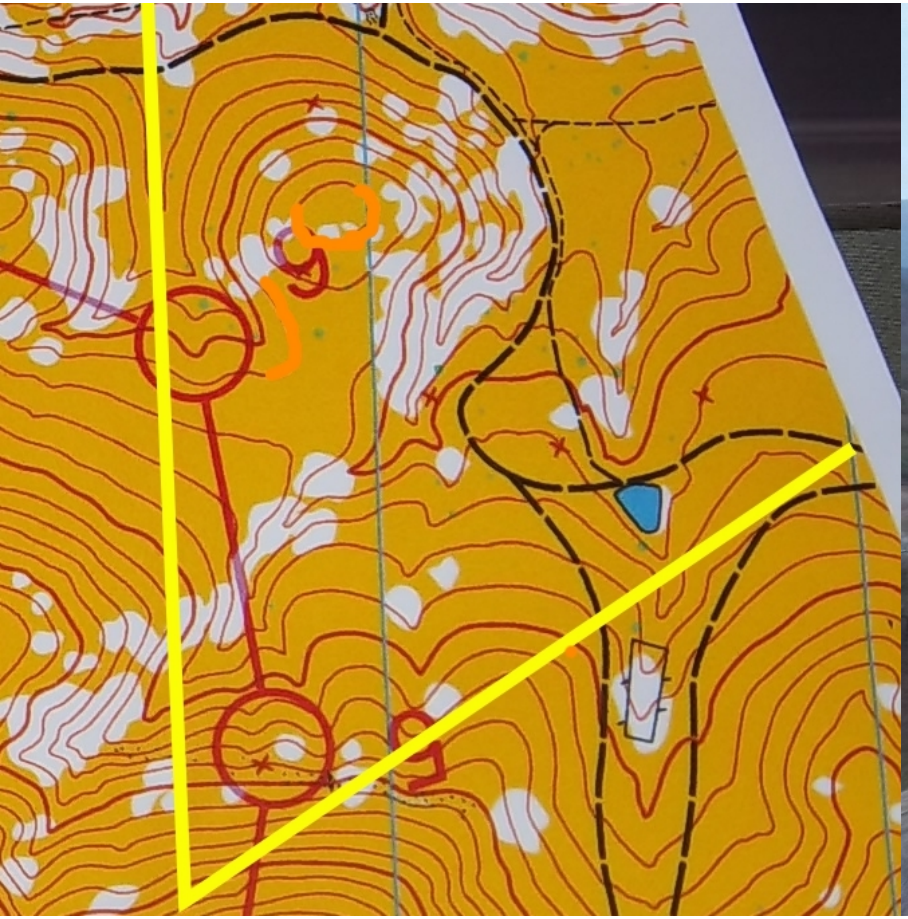
In this first test, the challenge is to identify some topographic features. I've highlighted two contour lines in orange. One is a hilltop, the other sits near a broad saddle. Click ahead to the next page, for the answer.



Notice that some of those tree covered hills on the far right, are just off the edge of the map...

Matching the map with reality

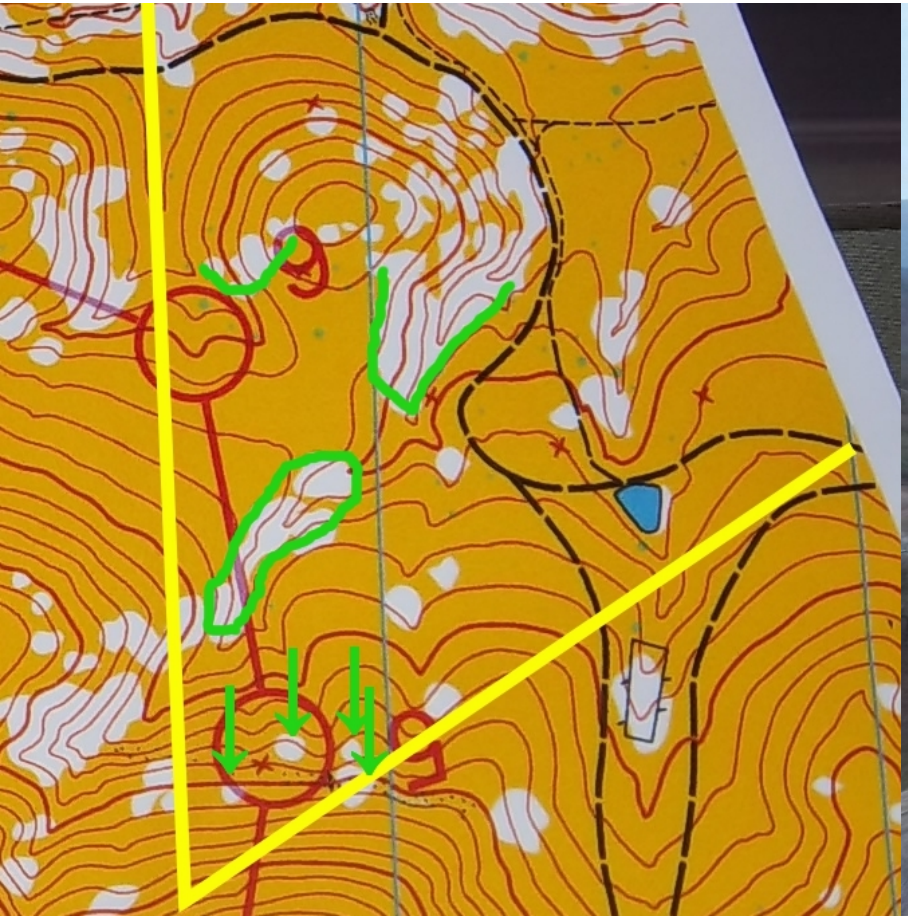
See how those contours encircle the top of the hill, and the back side of the saddle?



Finding that first hilltop is important! It will give us a solid object that we can use to keep oriented, and refer to as we identify other objects.

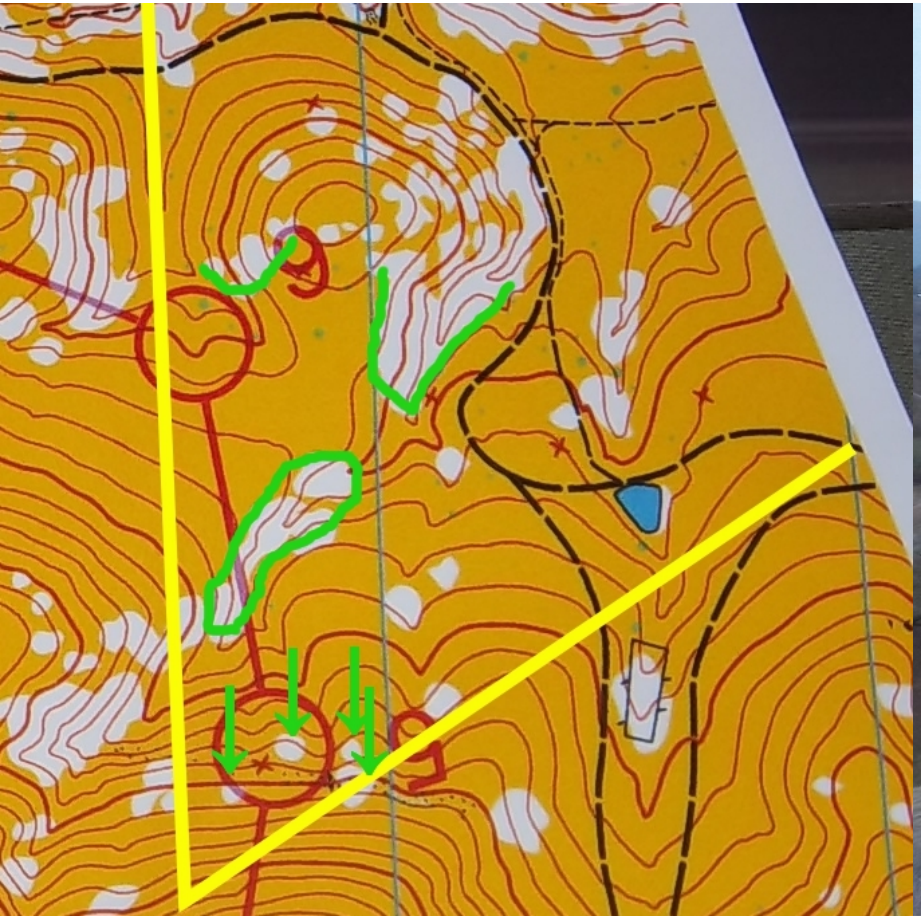
Matching the map with reality

Now let's try the vegetation features! How well does this new map really match with reality? I've marked three large patches of trees, and for small patches, with green.



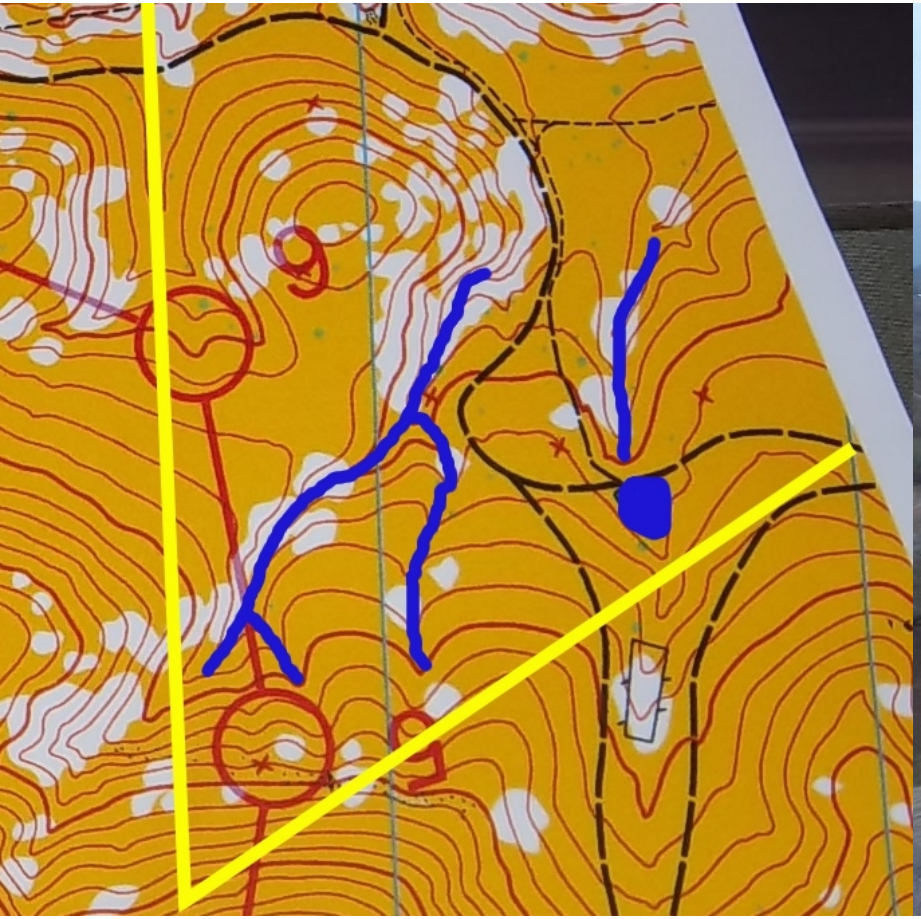
Matching the map with reality

Notice how some of these small patches are just a single tree? It only takes one windstorm to change this map! But right now, the shapes are quite accurate! And now that I have confirmed these vegetation features, this makes me 100% confident that I found the correct hill earlier.



Matching the map with reality

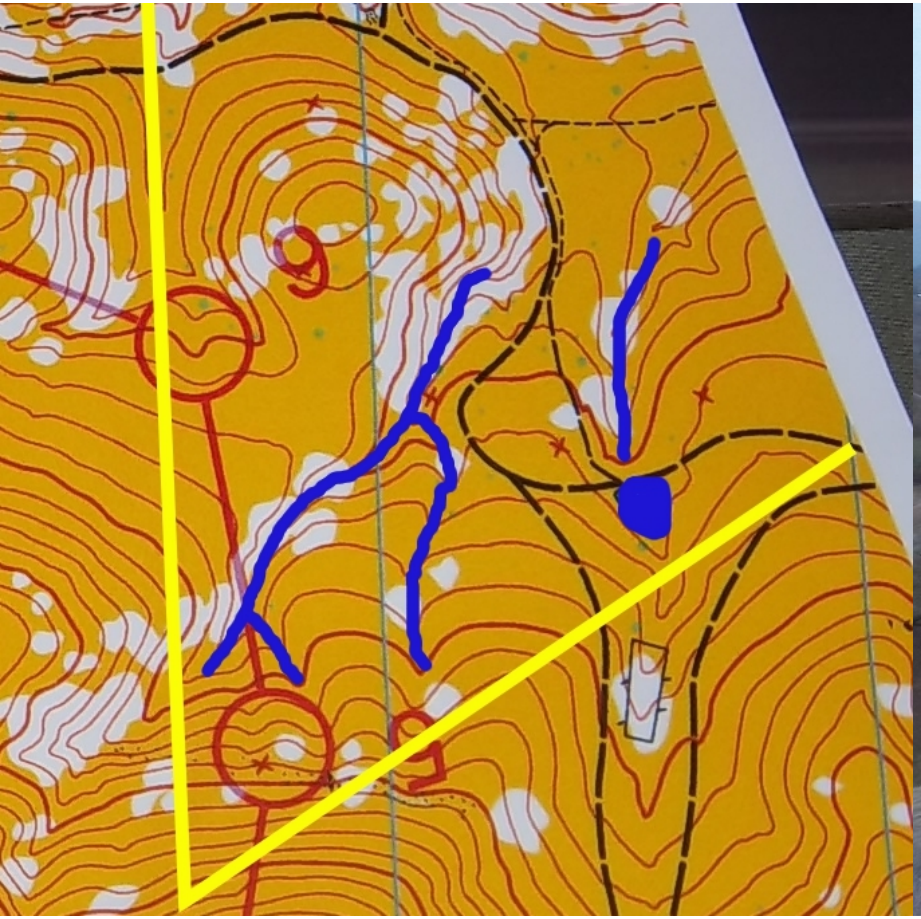
Now some really important terrain features – the valleys! These ones have a lot of influence on route choice. Since valleys often have creeks in them, I've highlighted a few in blue. I highlighted a pond too. You can't see the pond from here, and it wasn't filled with water this time. But can you tell where it should be?



Remember that you can use other features (vegetation, roads) to help figure this out!

Matching the map with reality

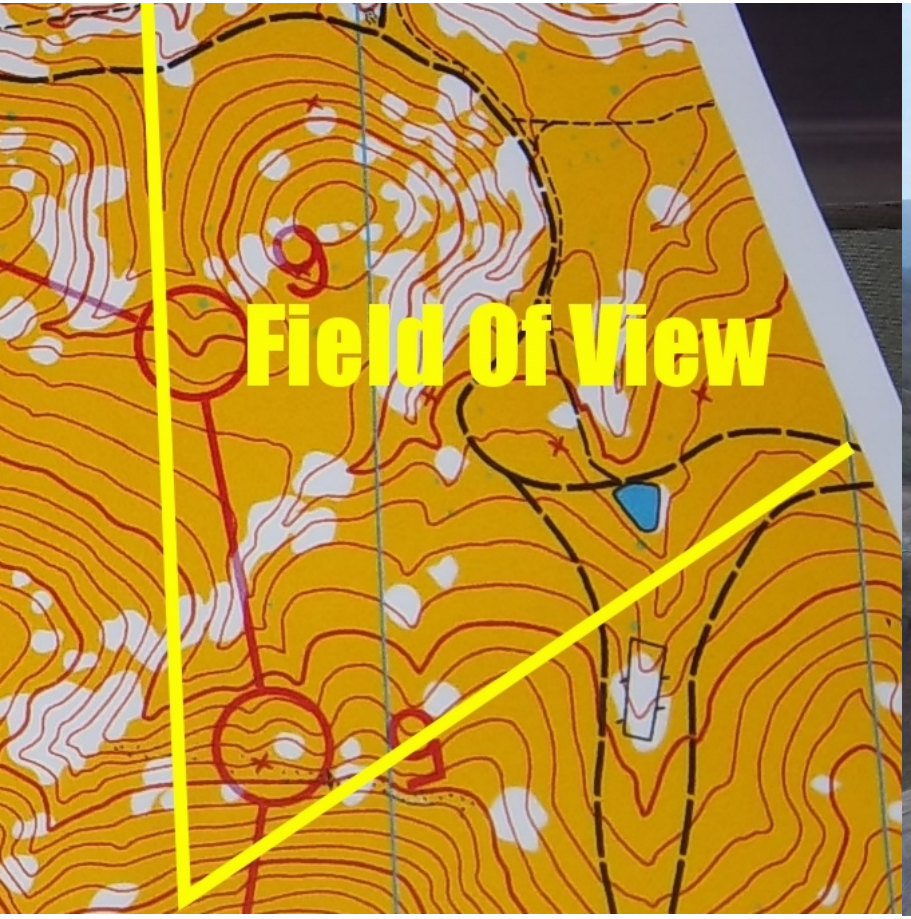
Notice how the valley floor can kindof duck out of view, here and there? Sometimes the perspective can make angles seem funny. But when you aren't sure about something, you can confirm it with other features. Notice how the second stream junction comes together at the base of a large patch of trees?



Can you tell which features I used to locate the pond? You might have to zoom in to see.

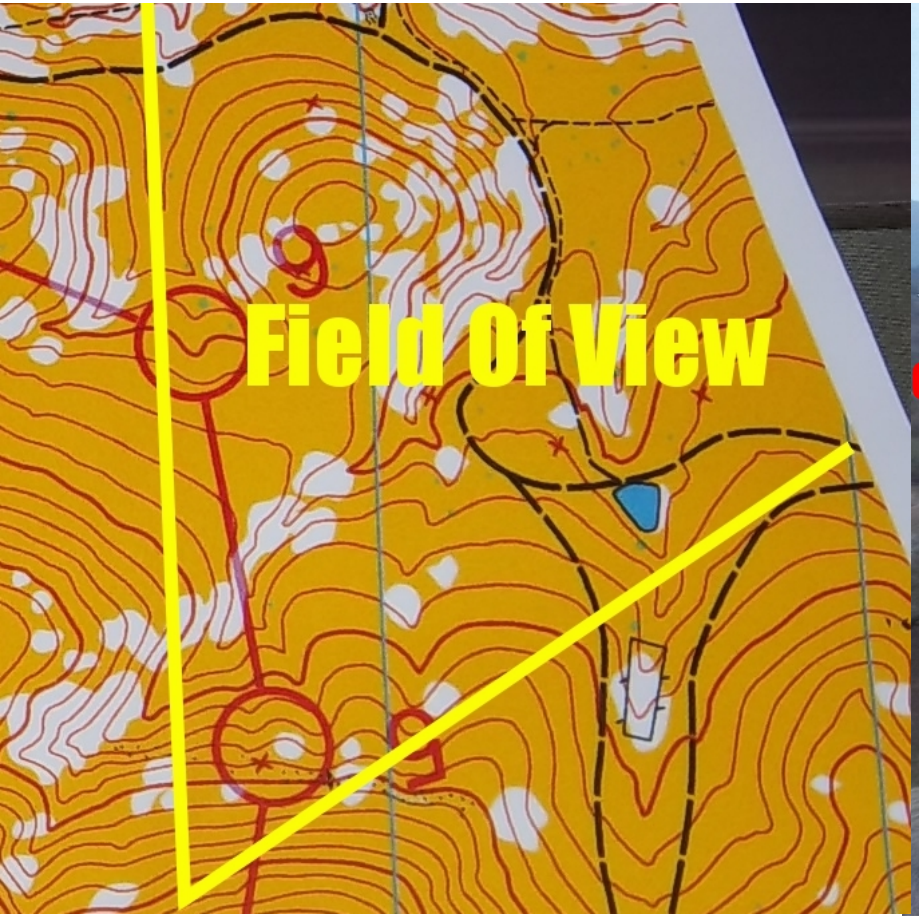
Matching the map with reality

Last problem: now that you've matched up the map with terrain, how are you going to use it? Where are those checkpoints you need to find? Can you pick out a nice smooth route to #5 and then #6?



Matching the map with reality

How's that look? The path from 5 to 6 would practically be a straight line on the map. Maybe all I really needed to identify was that first hilltop! But now I'm sure my plan is good.



Looks like 250m of fast running ahead. Time to have fun!