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General Information

NAVIGATION requirement 4a

4a Using a map and compass, complete an orienteering course that covers at least one mile and requires measuring the height and/or width of designated items (tree, tower, canyon, ditch, etc.).

The First Class requirements checklist can be opened and printed here:

https://www.troop2bsa.org/_files/ugd/142822_0c0e9ae332c34d9d901083fa751e3045.pdf

You can find guidance or the actual answer for every First Class requirement in the Scout Handbook.

Troop 2 Orienteering Course Summary Information

This orienteering course is at Will Rogers State Park.

https://www.parks.ca.gov/?page_id=626

TOTAL DISTANCE: about 4 miles

TOTAL GAIN IN ELEVATION: about 775 feet

TIME needed to walk the course: 2 - 4 hours

TIME needed to prepare your map in advance, about 30 - 45 minutes.

Parking Fee and Locked Gates - For Parents

There is a parking fee at Will Rogers State Park: \$12 per car

Park gates will be closed and locked at sunset. If the gates are locked, you cannot drive your car out until the next day.

Walk with Other Scouts for Fun, Parents for Adult Supervision

This course is more fun if you walk it with one or two other scouts.

Scouts younger than age 14 should walk the course with a parent, or an adult approved by all parents scouts who walk the course together.

This is a 'do-it-yourself' orienteering course and is not a Troop 2 organized event. Parents, please provide supervision as normally would be done on a family outing.

At Home - Prepare Your Map

1. Print the topographical map of Will Rogers State Park.

If you don't have a printer at home, contact your First Class rank advisors. They will print a map for you.

https://drive.google.com/file/d/1_xF2VtrZkgKJ5DMNI_pAOCtQTjMnVBtM/view?usp=share_link

2. Ask your parents to help create a user account at GAIgps.

<https://www.gaiagps.com>

3. Open the list of orienteering course waypoints.

On a computer, open this list of orienteering course waypoints. (Google sheet)

<https://docs.google.com/spreadsheets/d/1YW-EFAGmLs3Ux-Oq2xcD4H571Knva6JFGibKCIW8xo/edit?usp=sharing>

4 Plot each waypoint on your printed map.

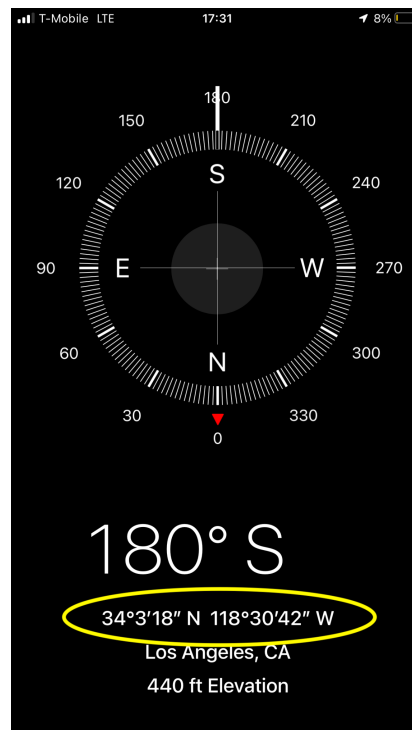
Sign-in to GAIAGps.com

Copy each waypoint from the list of waypoints in the Google sheet (already open in a browser tab), and paste each coordinate (latitude, longitude) into the search field of the GAIAGps website. This will show you the location of the waypoint.

On your printed map of Will Rogers state park, draw a small circle or dot on the location indicated by the GAIAGps map on your computer. Then write the number of the waypoint number next to the circle or dot.

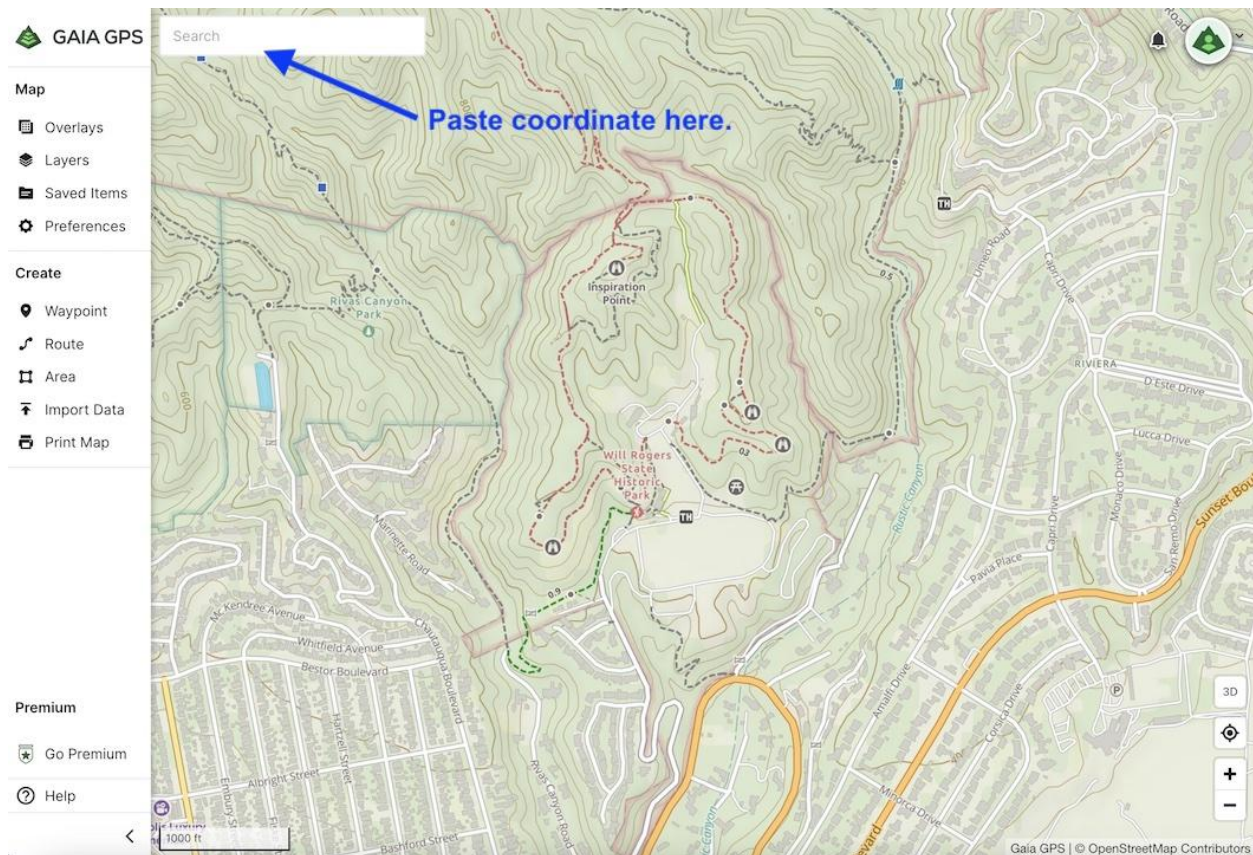
You can also plot waypoints on GAIAGps and then print a map, but this requires some learning.

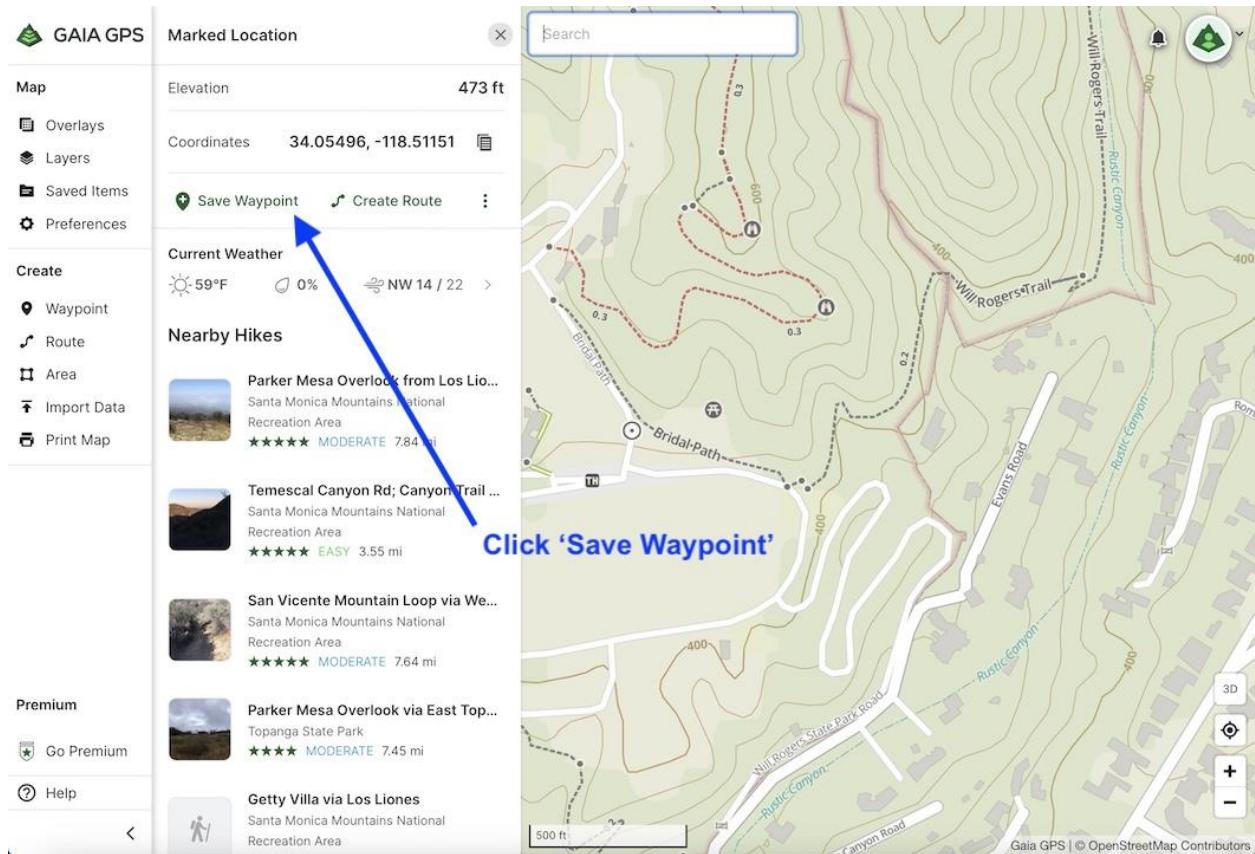
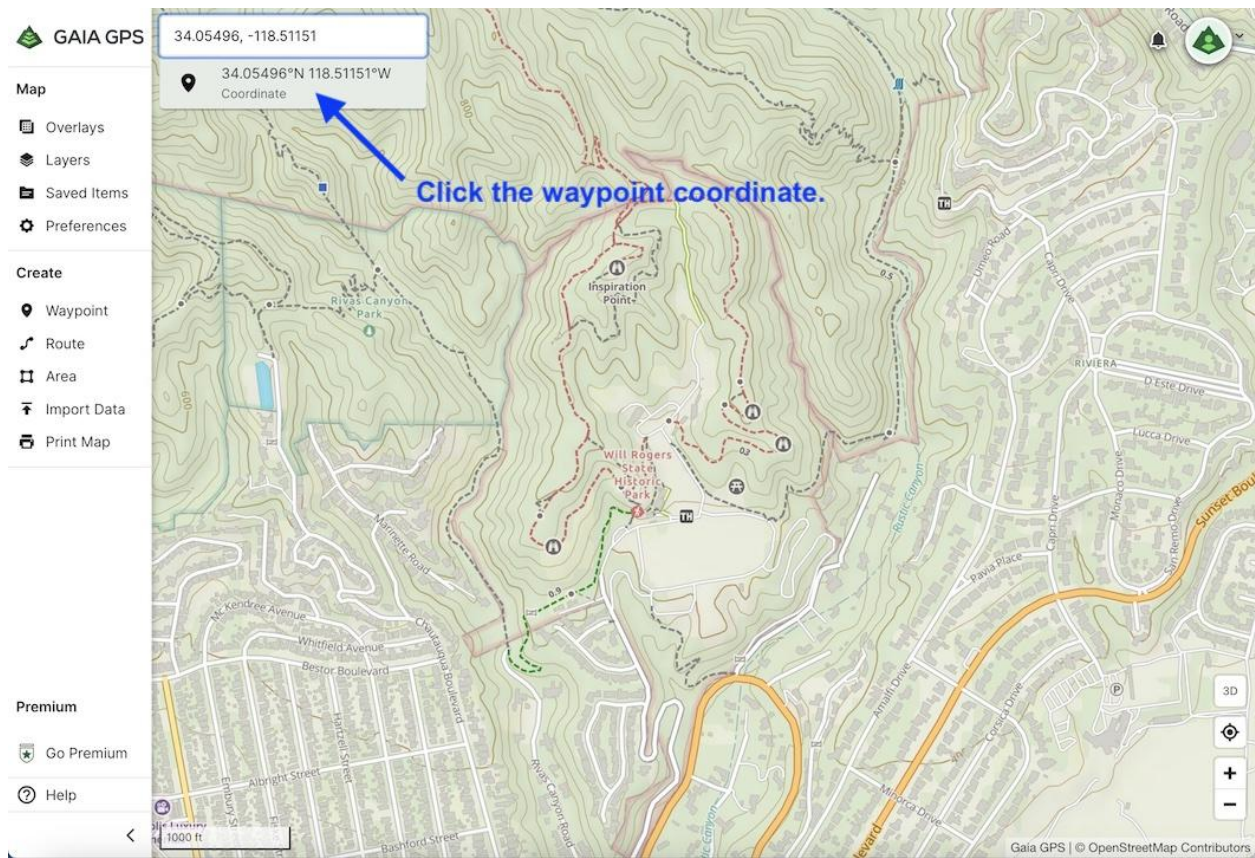
NOTE: The alternate coordinates under the column labeled **Degrees Minutes Seconds** are provided only for reference, should you wish to use the compass app on your phone while walking the course. The **Apple compass app** only shows Degrees Minutes Seconds. This is less accurate than Decimal Degree Coordinates.

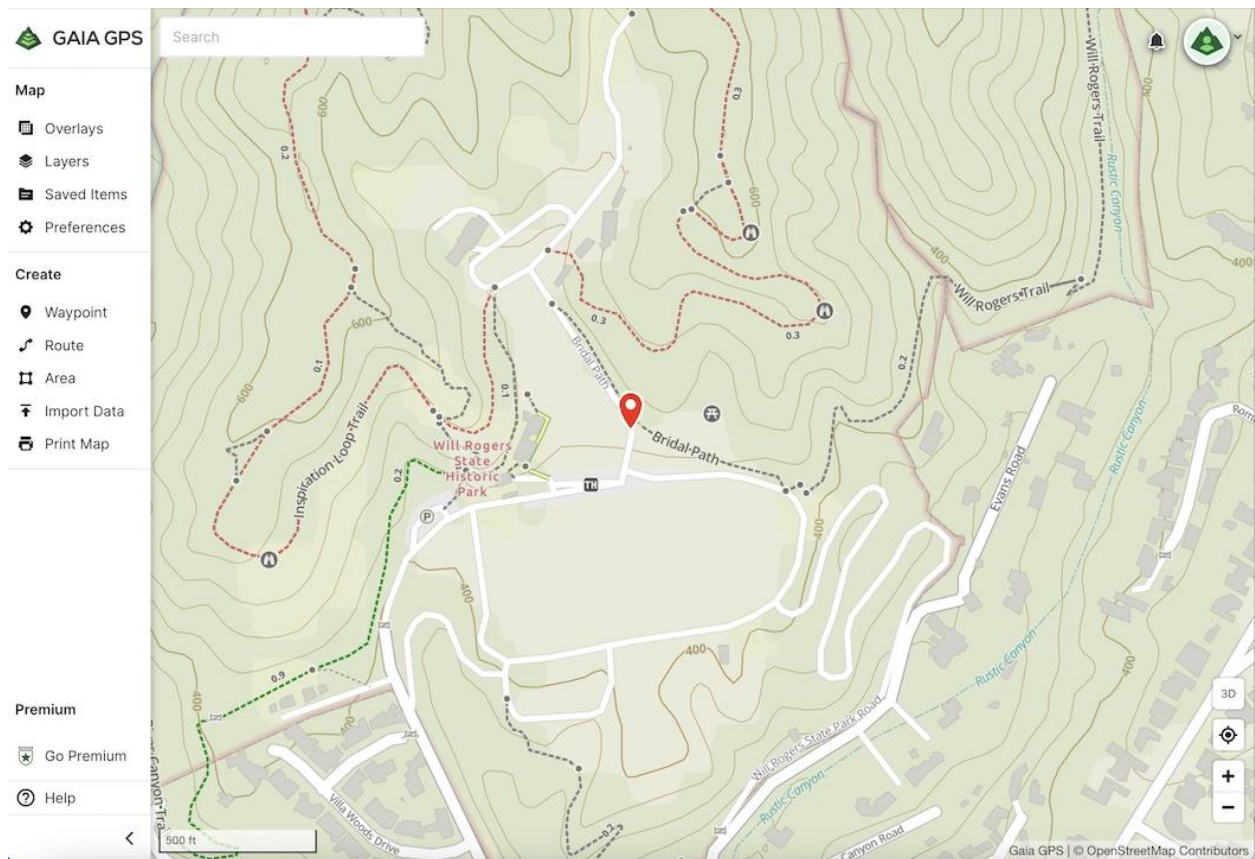
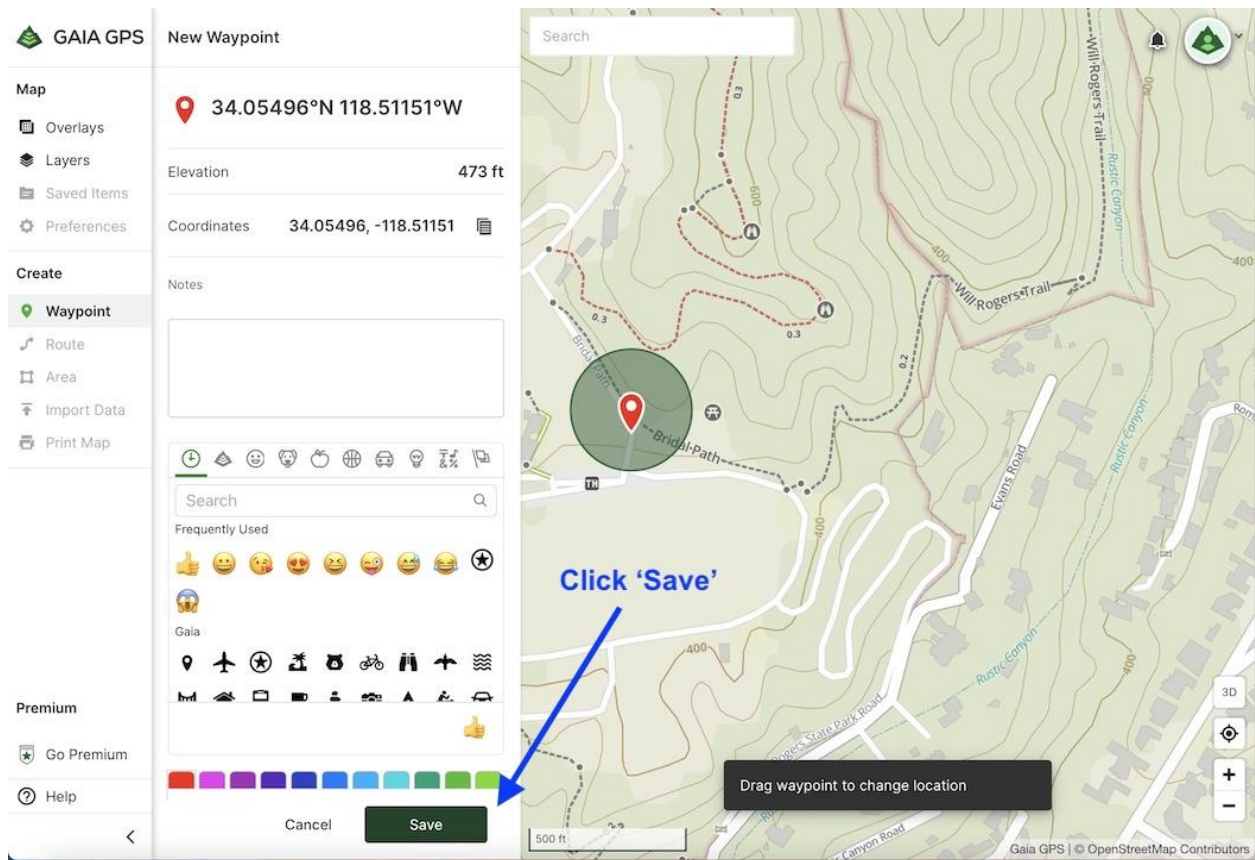


Here are screenshots of the steps to draw waypoints on your map.

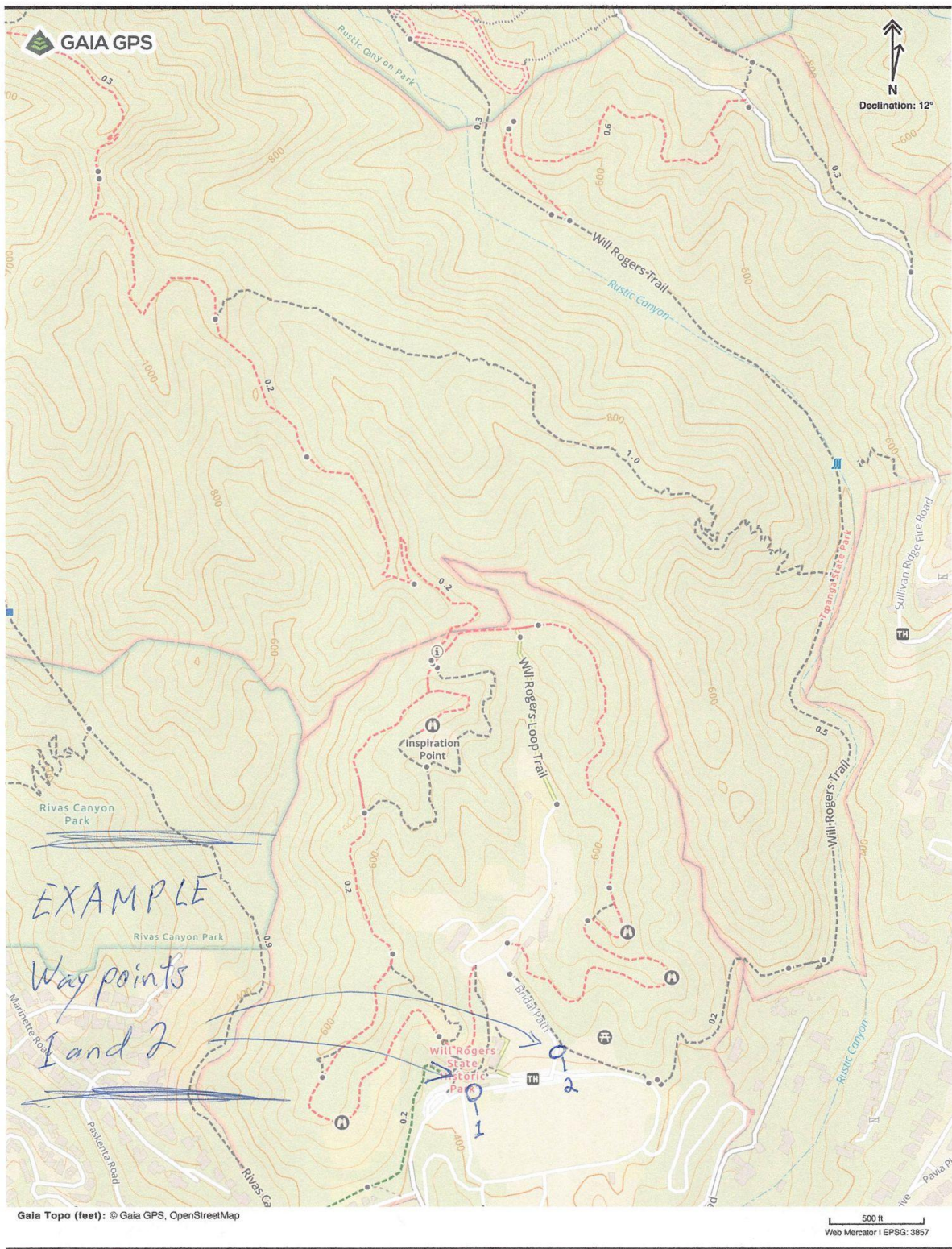
Troop 2 First Class Orienteering Waypoints					
File Edit View Insert Format Data Tools Extensions Help					
34.05496, -118.51151					
	A	B	C	D	E
1	Waypoint	Decimal Degree Coordinates	Degrees Minutes Seconds	Description and Clues	When you get to the waypoint
2	1	34.05447, -118.51267	34° 3' 16.092" N, 118° 30' 45.6114" W	Start at the restrooms. Walk along the edge of the field toward a row of picnic tables among trees. Stay out of the parking lot, out of the way of cars.	Before you leave this point, orient your map to magnetic north using your compass. When your map is oriented (pointed North) illustrations on the map represent your actual surroundings.
3	2	34.05496, -118.51151	34° 3' 17.856" N, 118° 30' 41.436" W	There is a paved path that heads left (northward) just before the area with picnic tables. There is a big tree that begins a row of trees along the "Bridal Path".	Point your compass to heading 180° Take a picture in that direction.
4		coordinates not applicable			Using the stick method, measure the height of the first big tree in the row of trees along the bridal path. Write down your measurement and report the height in your notes for this waypoint.
5	3	34.05652, -118.51216	34° 3' 23.4714" N, 118° 30' 43.7754" W	A walking path passes between 2 buildings.	Point your compass to heading 120° Take a picture in that direction.







Here is an example of waypoints 1 and 2 drawn on a printed map.



5. Show your map to a rank advisor.

When you have finished plotting your waypoints on the map, scan it or take a picture and send it to First Class rank advisors for approval. Let's make sure the waypoints you've plotted don't lead you to some place over the Sepulveda Pass. 😊

6. Print the list of waypoints

Print the list of orienteering course waypoints on paper to carry with you on the trail. Here is a PDF copy which may be easier to print than the Google sheet.

https://drive.google.com/file/d/1ZRxig5SLe5V4FubQ2RiA6wuYcOp2RtEw/view?usp=share_link

Information about converting between coordinate types

OPTIONAL INFORMATION provided for those who are curious. You are not required to use this.

Here is a tool for converting between Decimal Degree Coordinates and Degrees Minutes Seconds.

<https://www.fcc.gov/media/radio/dms-decimal>

At Home - Learn how to orient your map

Instructional Video - Orient a Map

When you arrive at waypoint 1 (restrooms), which is the starting point, you need to orient your map.

Here's a short instructional video that explains how to do it.

<https://www.youtube.com/watch?v=gVckFHa7aV8>

The second method, which starts at 24 seconds into the video, is the simpler way to do it:

- Set compass index to North
- Place the straight edge of your compass on the magnetic north line.
- Rotate map with the compass on it until the compass pointer is pointing directly North.
- Now your map represents your surroundings.

At Home - Learn how to measure height and distance

Instructional Video - Measure Height and Distance

You will be asked to measure the height of a big tree at waypoint 2.

Here's a short instructional video that explains how to do it.

<https://troopresources.scouting.org/measuring-heights-and-widths/>

The Hike

Prepare for your hike.

1 Put essential items into your day pack (list on the next page).

2 On the day you walk the orienteering course, tell your plans to at least one family member who will stay at home:

- When you are leaving.
- Where you are going.
- When you plan to return.
- Whom to call if you do not return within a reasonable amount of time for this outing.

Day Pack Essentials

10 ESSENTIAL ITEMS

The usual list of 10 essentials has been modified for this orienteering course.

1. FOOD AND WATER

Bottle of water. 1-2 liters per person

Optional: snack food or lunch,

2. FIRE - not for this hike

No matches or fire starter. Fires are not allowed in Will Rogers State Park.

3. FIX IT

Optional: knife, duct tape, bandana

4. FIRST AID

Small first aid kit. You may get thorns from bushes or blisters from walking.

5. INSULATION

Layers of clothing that can be added and taken off.

6. ILLUMINATION

Flashlight or headlamp in case the sun goes down before you return.

7. SUN

Sunscreen, 360° brimmed hat, protective clothing - long sleeve shirt.

Optional: sunglasses

8. SHELTER

Raingear or poncho depending on the weather forecast.

Optional: an emergency blanket.

9. NAVIGATION

IMPORTANT: orienteering course map, printed list of waypoints, compass

Mobile phone for taking pictures and notes at waypoints

10. COMMUNICATION

Whistle

Mobile phone

Itinerary: one or more family members at home knows your plans

After The Hike

Put your pictures into a Google Document

After your hike, put pictures into a google document. Identify each picture with the waypoint number. Add notes which answer questions from some of the waypoints.

Send the link to your document by email, to your First Class rank advisors.