

An introduction to Collector for ArcGIS

This document contains step-by-step instructions on how to prepare for data collection in the field using Collector for ArcGIS.

Collector for ArcGIS is a mobile data collection app that allows anybody in the field to capture accurate data and return it to the office or classroom for further use. Fieldworkers use web maps on mobile devices to capture and edit data. Collector for ArcGIS works even when disconnected from the Internet; the next time your device is connected to the internet, the collected data will automatically transfer to your ArcGIS map. It is free to download and can be downloaded onto personal phone devices or tablets. All you need is your ArcGIS login credentials.

Overview of Collector for ArcGIS

1. Create

In ArcGIS, create a map for your data collection project. Design the data form your field workers, or students, will use.

2. Collect

Efficiently collect and capture your data and observations on your mobile device by filling out map-driven forms.

3. Collate

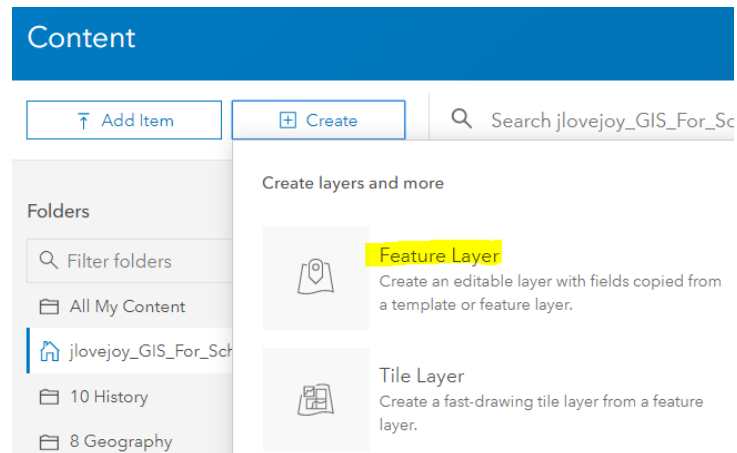
Return to the classroom to view your data in ArcGIS Online. Perform analysis according to your objectives.

Context for training

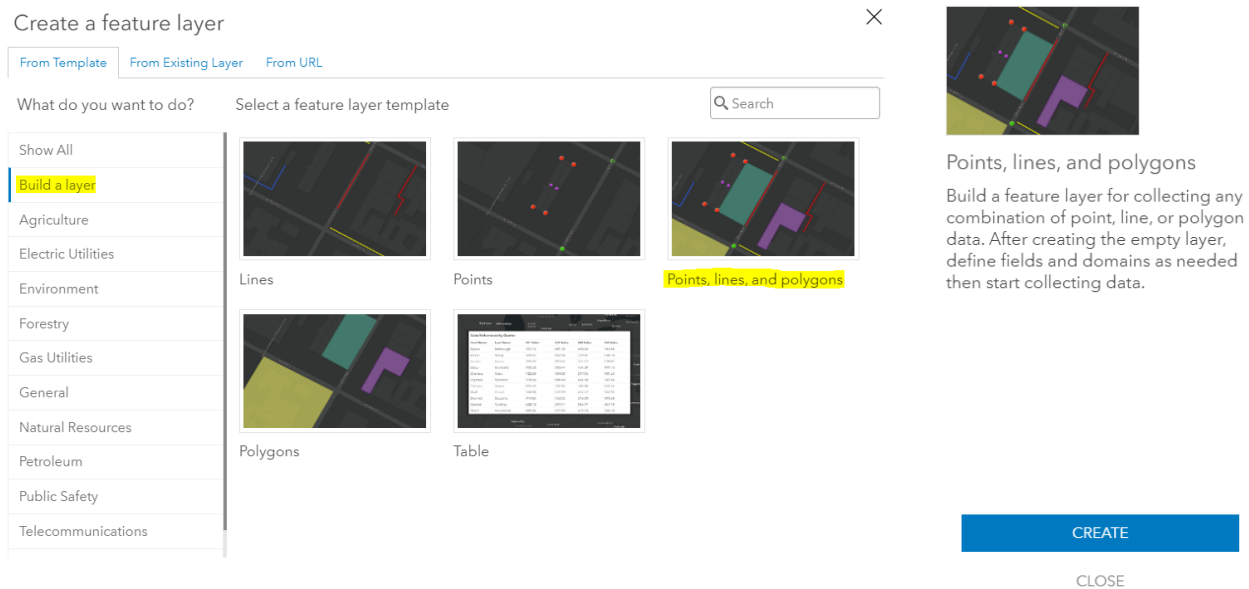
For this guide, you will prepare a map and data form to collect data from a public park. Optionally, if you had a specific objective in mind, you are able to apply the steps in this document to your needs.

Step 1: Create your map and design a form

1. Sign into your ArcGIS organisation in a browser (ArcGIS Online).
2. Go to **Content**, and in **My Content** click **Create** and choose **Feature Layer** to open the **Create a feature layer** form.



3. Select the **Build a layer** category. Choose **Points, lines, and polygons**, and click **Create**.



- Click on **Point layer**. Rename it to **Amenities**. Click **Save**. Repeat this for **Line layer** and **Polygon layer**, renaming the layers **Paths** and **Fields and Courts**.




- Click **Next**.
- Set the map extent for your new hosted layer. This is the portion of area that will show in a map by default. Click **Next**.

Create a feature layer

×

Pan and zoom this map to set the map extent for the new hosted layer.



+

-

Left: 63.954

Right: 180

Top: -6.9

Bottom: -46.48

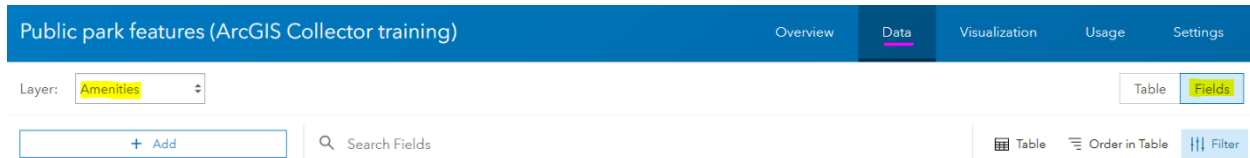
Back

Next Cancel

- Enter a title, tags and summary for your feature layer. Click **Done**.

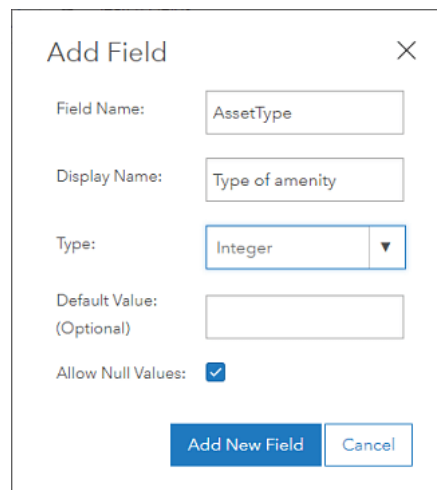
Your **Public parks layer** is now created, and its item page opens. In the following steps you'll create the fields that define the form for the **Amenities** layer.

- Go to the **Data** tab of the item page and go to **Fields**. If you created layers for points, lines and polygons, verify that **Amenities** (points) is selected.



- Click **Add**. In Field Name, type **AssetType**. In Display Name, enter **Type of amenity**. Note that field names cannot have spaces however, display names will be what data collectors see.

Choose **Integer** for Type. Accept the other defaults and click **Add New Field**.



- Click the newly created field, **Type of amenity**. Click **Create List** to create a list of choices for the type of amenity.



11. Type a label of **Water bubbler** with a code of **0**.

Label	Code
Water bubbler	0

12. Click **Add**. Add entries for **Restroom** (code **1**) and **Picnic table** (code **2**). Add as many amenities as you want.

Label	Code
Water bubbler	0
Restroom	1
Picnic table	2
BBQ facilities	3
Bicycle racks	4

+ Add

13. Click **Save**.

14. Add another field. Name it **Notes**. Set the type as **String**. This will allow fieldworkers to make notes against the amenities they map.

Add Field
×

Field Name:

Display Name:

Type:
 ▼


Length:

Default Value: (Optional)

Allow Null Values:
☒

Add New Field
Cancel









15. You may wish to repeat these steps for your **Paths** and **Fields and Courts** layers. If so, do this now before moving on to the next steps.
16. Since you want your field workers to be able to attach pictures showing the features of the parks, enable attachments. Go to the **Overview** tab of the item page, scroll to the layers list, and click **Enable Attachments** for the relevant layers.

Public park features (ArcGIS Collector training) 









OverviewData

Layers









Amenities

 Open In   Export To   Time Settings  Enable Attachments  Service URL  Metadata

Paths

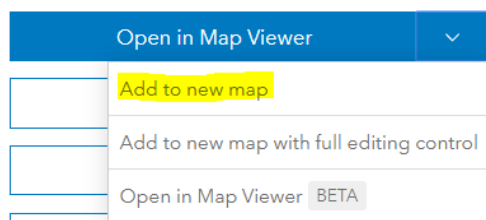
 Open In   Export To   Time Settings  Enable Attachments  Service URL  Metadata

Fields and Courts

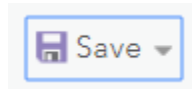
 Open In   Export To   Time Settings  Enable Attachments  Service URL  Metadata

Step 2: Make a map

1. On the item page of your layer, in the drop-down list for **Open in Map Viewer** pick **Add to new map** to start making your map.



2. Save your map, give it an appropriate title and tag so that it is easily identifiable.



Save Map



Title:

Categories: ▾

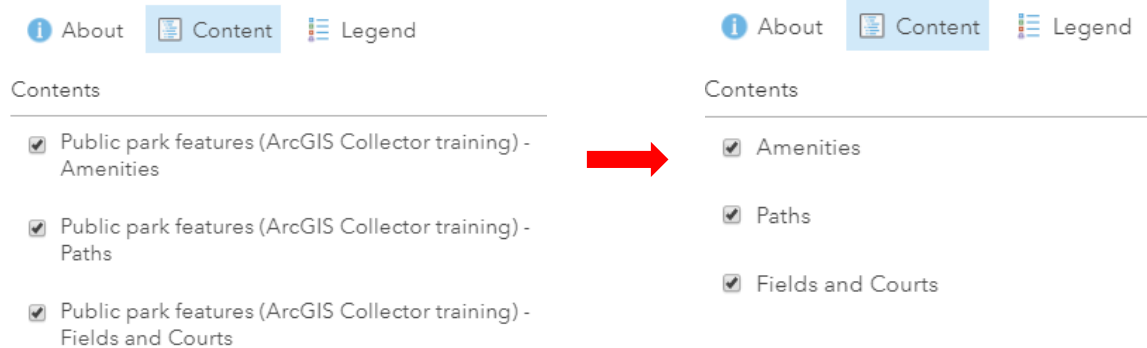
Tags: × | *Add tags*


Summary:

Save in folder: ▾

SAVE MAP**CANCEL**

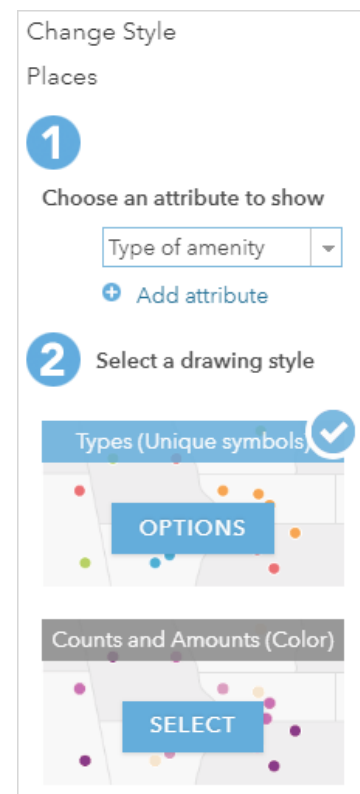
3. In the **Contents** pane, hover over the layer of Amenities, click **More Options** ^{...}, choose **Rename**, and rename the layer to **Amenities**. Repeat this process for the other layers.



4. Hover over the Amenities layer. Click **Change Style** .

5. Choose to show the **Type of amenity** attribute.

6. Click **Options** for the **Types (Unique symbols)** drawing style.

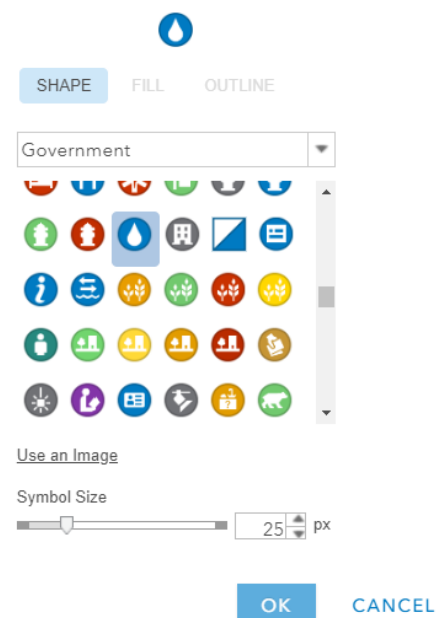




7. Click the symbol next to **Water bubbler**, click **Shape**, choose the **Government** category, and click the **water** icon. Set it to a size of **25** and click **OK**.

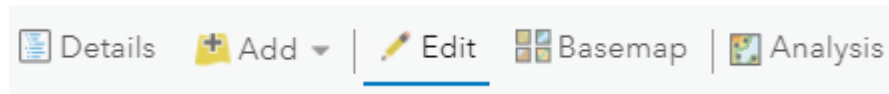
Type of amenity

Click to edit symbol or label.

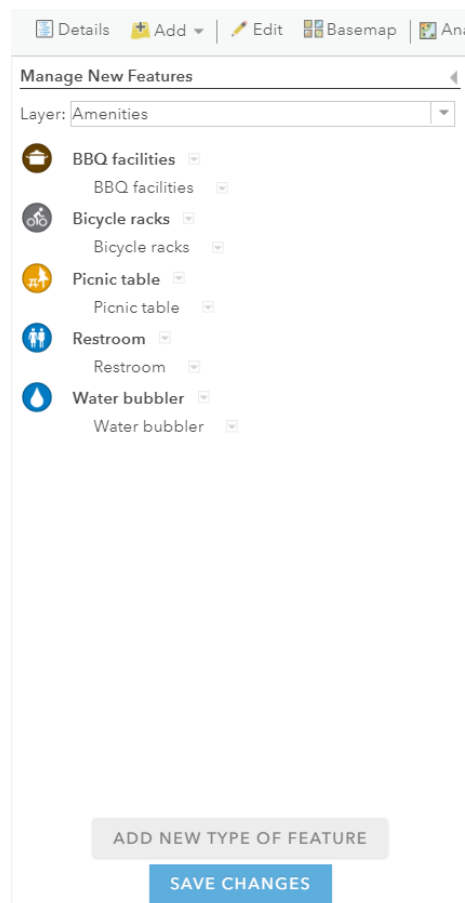
	LABEL	COUNT	
⋮	BBQ facilities	0	
⋮	Bicycle racks	0	
⋮	Picnic table	0	
⋮	Restroom	0	
⋮	Water bubbler	0	



8. Repeat this step, configuring the symbols for **Restroom**  and **Picnic table**  types, also in the **Government** category. If you added additional amenities, do this step for them as well.
9. Click **OK**, then **DONE**.
10. Click **Edit**, then **Manage**.



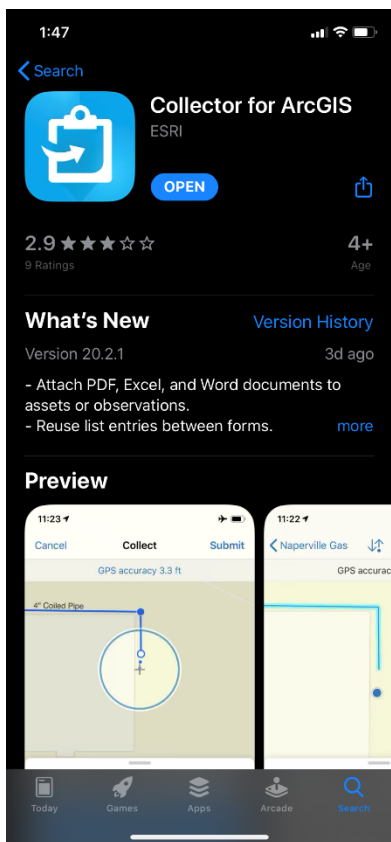
11. Click **Save Changes**. Alternatively, you may wish to add an additional type of amenity. For example, you may wish to be able to collect data on waste and recycle bins too. Note, you can revisit the **Edit** function at any time to manage (delete and add) more features in a layer.



12. If required, repeat steps 1 – 11 in this section for your **Paths** and **Fields and courts** layers.
13. If you want others to be able to access this map, set your share settings appropriately.

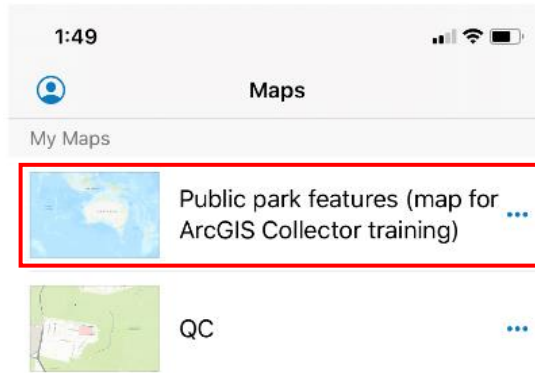
Step 3: Capture data in public parks using Collector

1. On your mobile device or tablet, Open the Collector App. Alternatively, download it from the App Store.



2. Choose **Sign in with ArcGIS Online** and enter your ArcGIS login credentials.

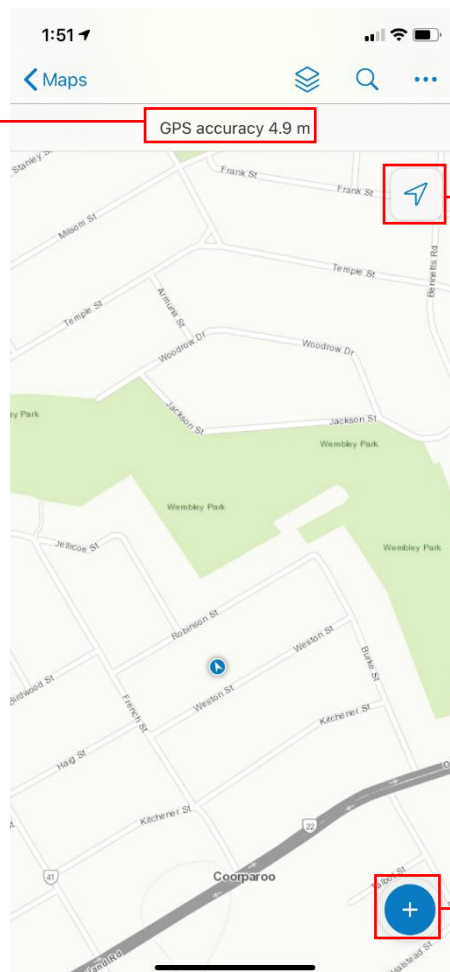
3. In Collector, select the map you created in ArcGIS Online (Step 2 of this guide).



4. Walk around in your local park, adding amenities, paths and fields as you go. Alternatively, you can manually move your GPS location if you are at home and are just experimenting for training purposes.

GPS accuracy:

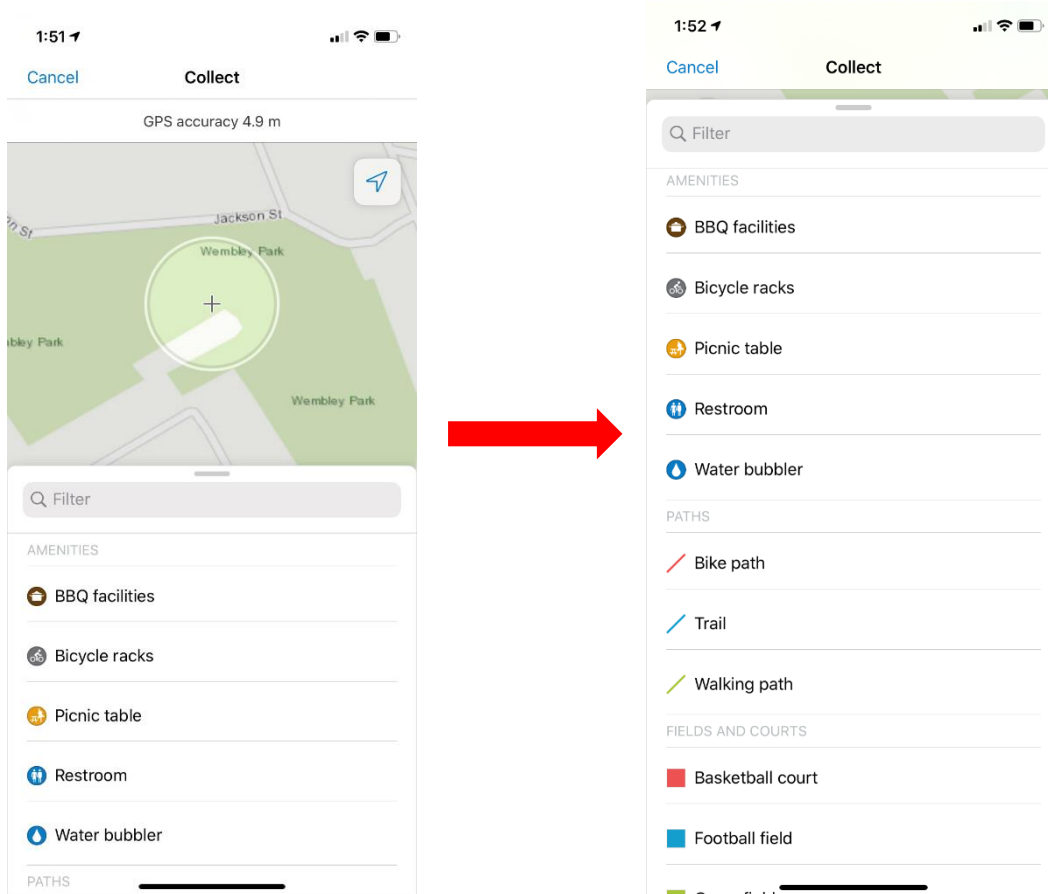
Depending on your location your GPS accuracy may be less accurate. For example, built up areas tend to interfere with a device's GPS accuracy.



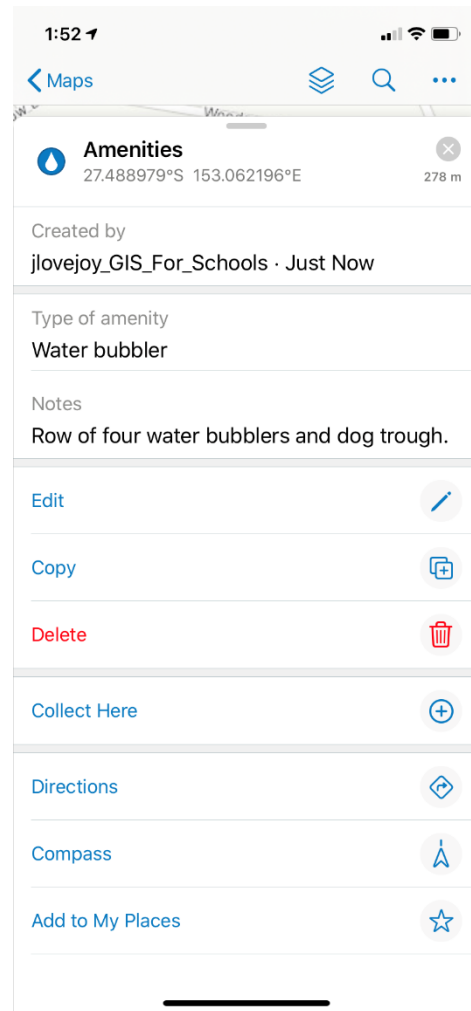
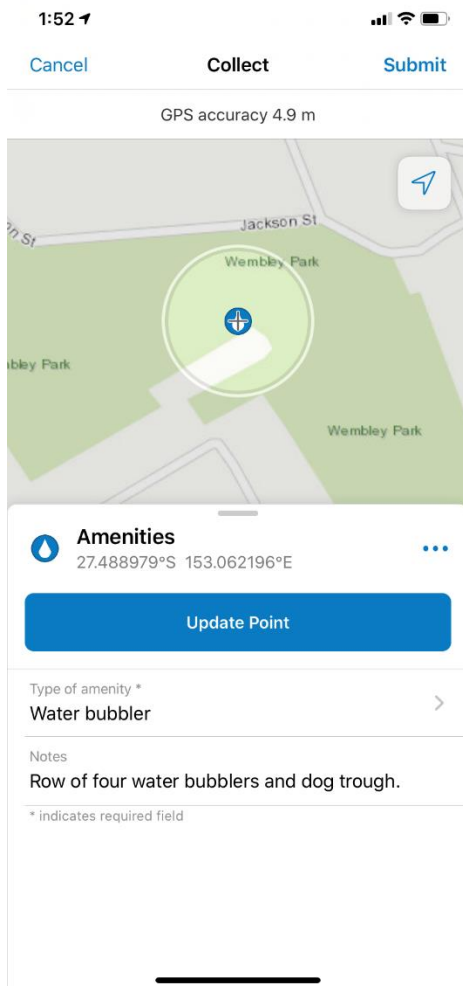
Click the Pointer to centre the map onto your current location.

Press the Add icon to begin adding features.

5. Press the **Add** icon. Refine the location by panning and zooming on the map until you are happy with the accuracy of the cursor. Select the type of amenity you would like to add.






6. Once you have specified the amenity, it will place it on the map. If you would like to adjust the point, click **Update Point**. Otherwise, add notes if required.
7. Press **Submit** to finalise the entry.
8. If you make an error, simply press on the entry. It will allow you to **Edit** or **Delete** the entry.



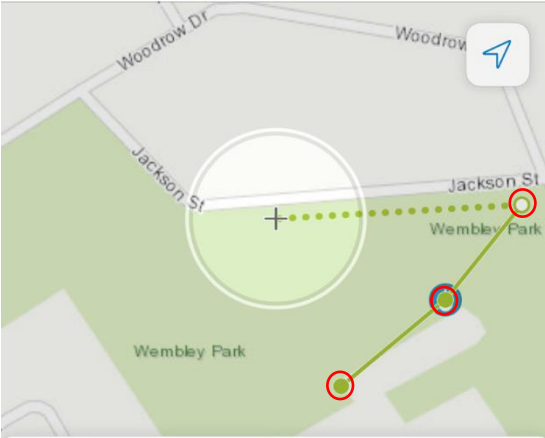
9. Repeat this process for your paths and fields / courts.

As these features can cover larger areas, you will need to add points where the paths may change direction. Similarly, you will need to add points to your 'Fields and courts' layer to define the area of these features.

1:53   

[Cancel](#) **Collect** [Submit](#)

GPS accuracy 4.8 m






Paths
Length 169 m

Add Point

Type of path *
Walking path

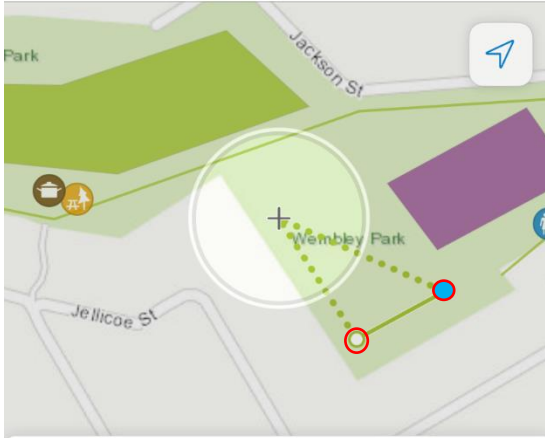
Notes

* indicates required field

1:58   

[Cancel](#) **Collect** [Submit](#)

GPS accuracy 4.9 m



Fields and Courts

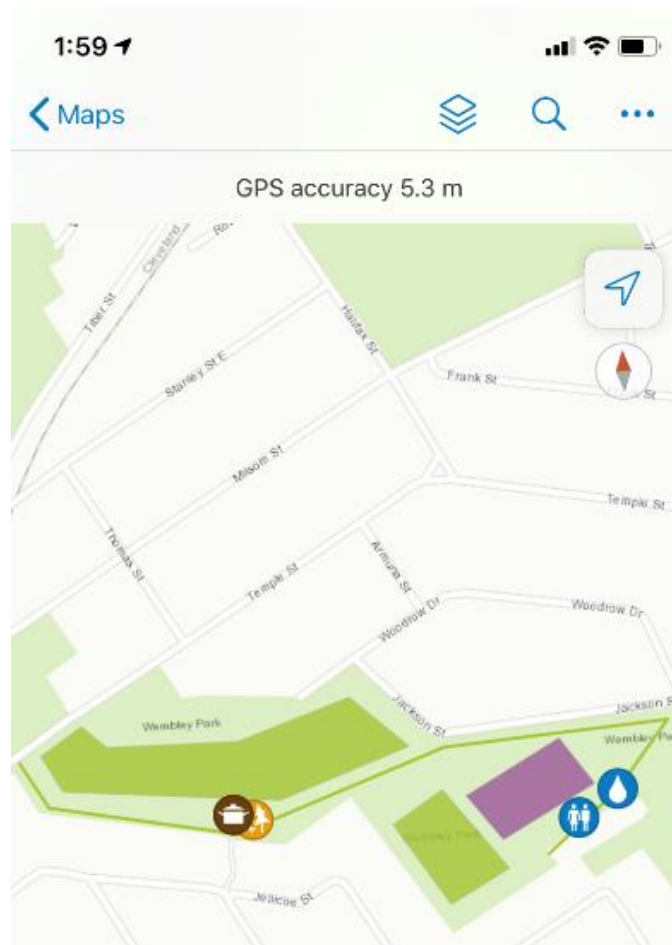
Add Point

Type of field or court *
Grass field

Notes

* indicates required field

Once you have finished collecting data on the Collector for ArcGIS application, you should have something like the image below. If you reopen your ArcGIS Online map and zoom into the park you just collected data at, you will now see your data.



Next Steps:

Request a free ArcGIS Online Account for your school:

Australian schools can request a free ArcGIS Online account as part of Esri Australia's Classroom GIS Initiative. A school subscription provides additional map layers, content, features and privacy. Learn more about ArcGIS Online, and apply for your ArcGIS Online School subscription at <http://esriaustralia.com.au/education>

Speak to Esri Australia's Education Program Manager:

Australian schools can seek additional support or speak to our Education Program Manager by emailing education@esriaustralia.com.au.