Fieldwork on Urban Expansion and Sustainable Development of Kwu Tung:

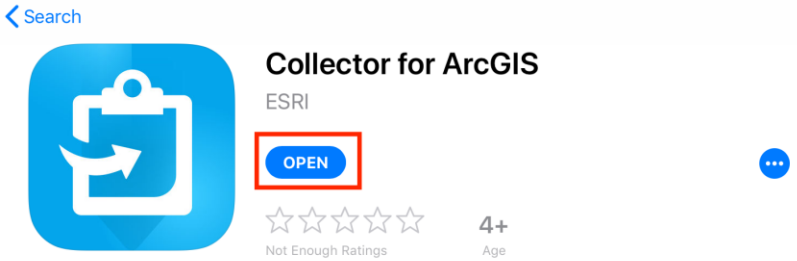
(2) Manual for Data Collection with Collector for ArcGIS

The Chinese University of Hong Kong
Centre for Learning Sciences and Technologies

e-Learning in Geography Series (17): Using mobile GIS, GPS and external data collection sensors for data collection and on-site mapping in geography fieldwork (Case Study 2- Urban expansion and sustainable development of Kwu Tung) (Refreshed)

A. Open "Esri Collector for ArcGIS" app in the mobile device to record the information collected in the fieldwork

1. Open ***Esri Collector for ArcGIS*** app.



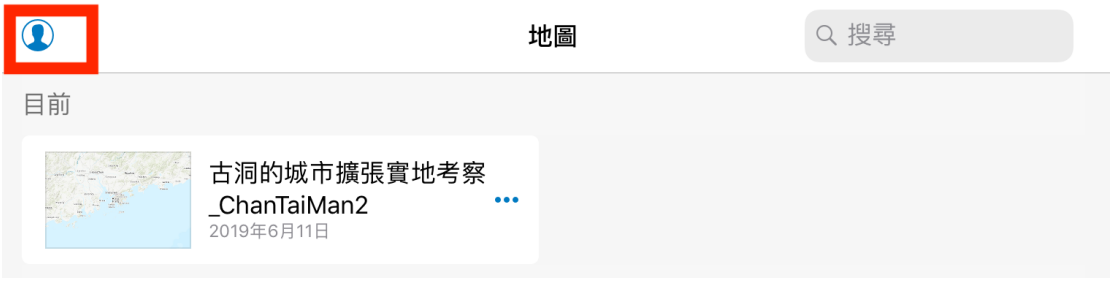
2. Log in to the app.

3. Two ways to record polygons：

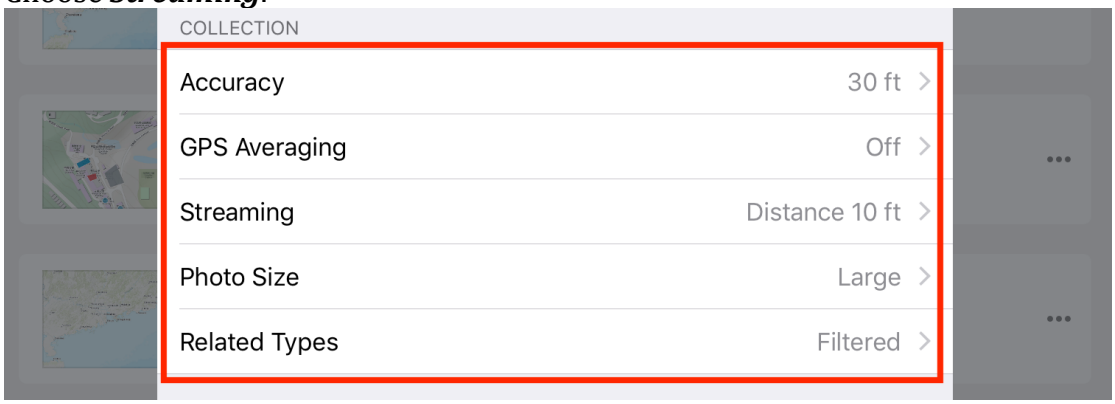
A) Drawn by users

B) Drawn automatically by the app according to the distance the user moves

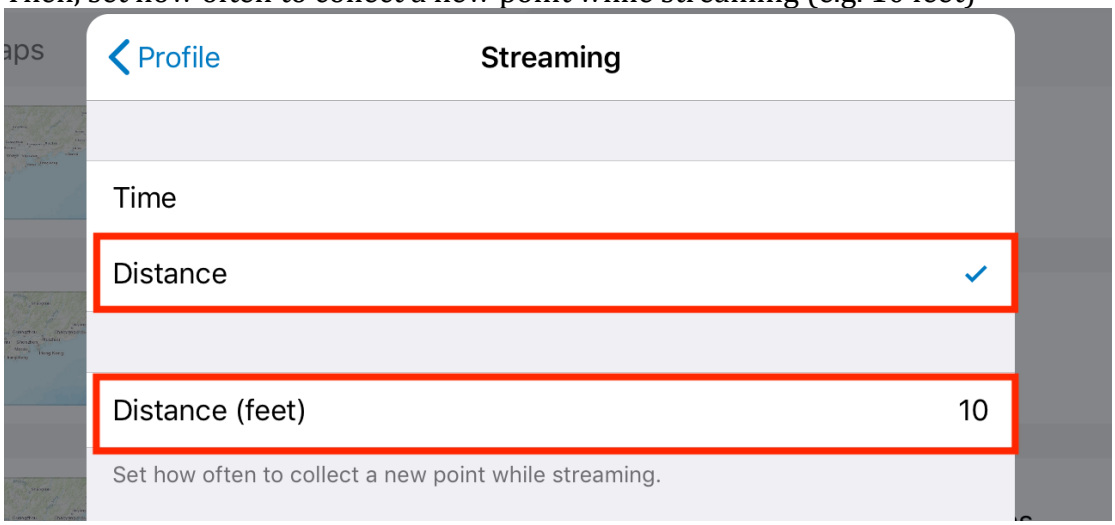
Press the icon ( ) on the top left-hand corner to change settings.



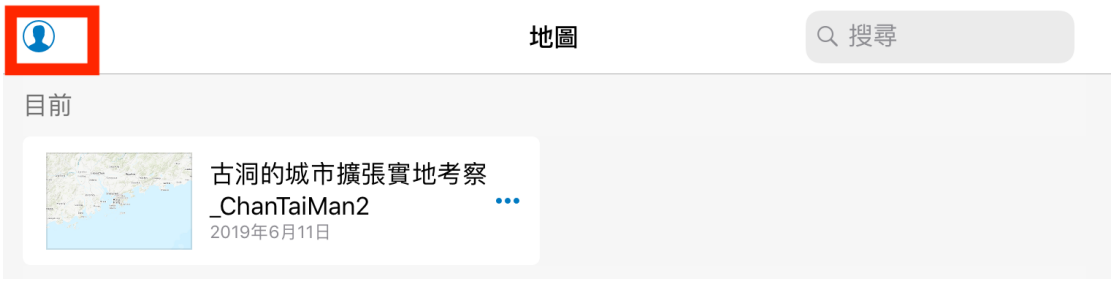
Choose ***Streaming***.



Choose ***Distance***. (While streaming, the app will automatically draw a polygon according to the walking distance.)
Then, set how often to collect a new point while streaming (e.g. 10 feet)



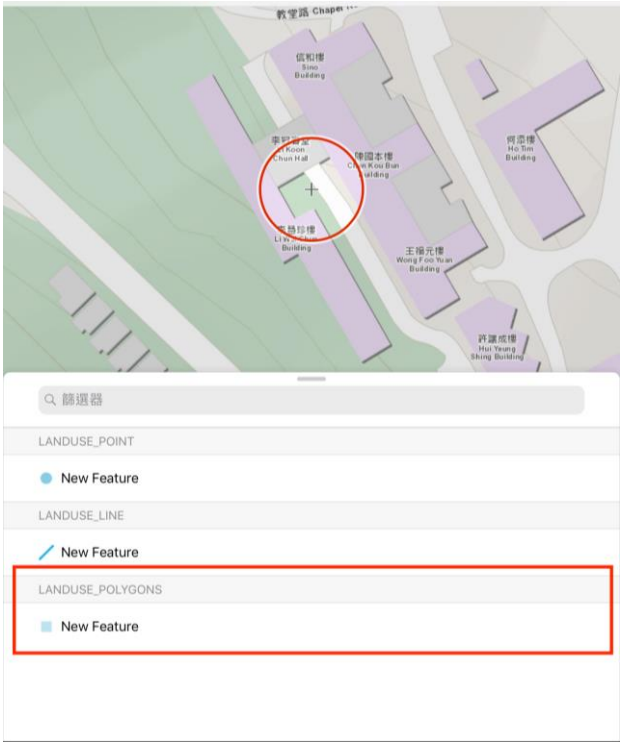
4. Choose "古洞城市擴張實地考察圖層_ChanTaiMan2"



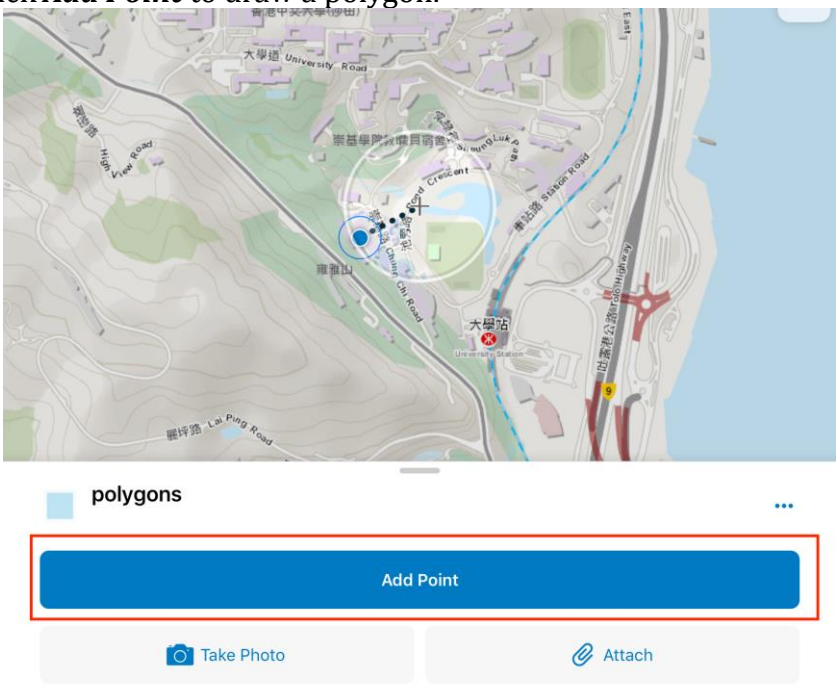
5. Click the ***Add (+)*** button to add a point on the map.

6. Click "LANDUSE_POLYGONS", and then select ***New Feature***, and drag it to the selected location.

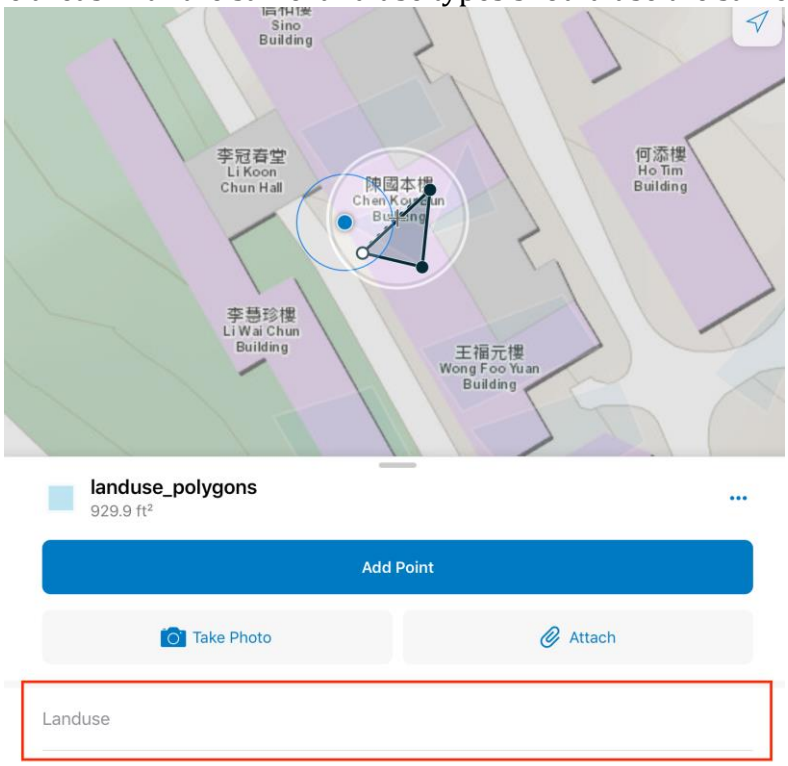
6.1.1. **Method 1：Polygons drawn by users**

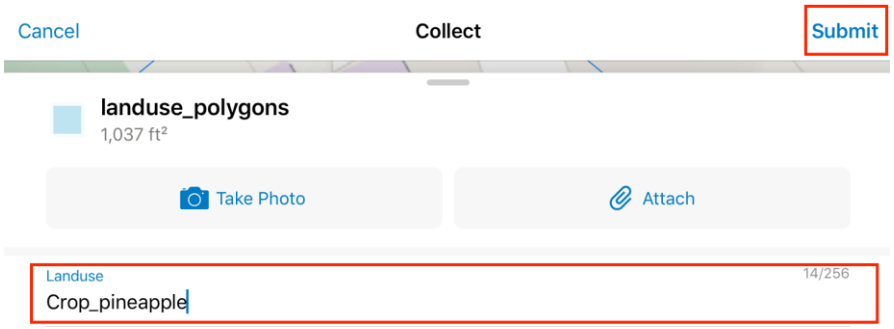


6.1.2. Click ***Add Point*** to draw a polygon.

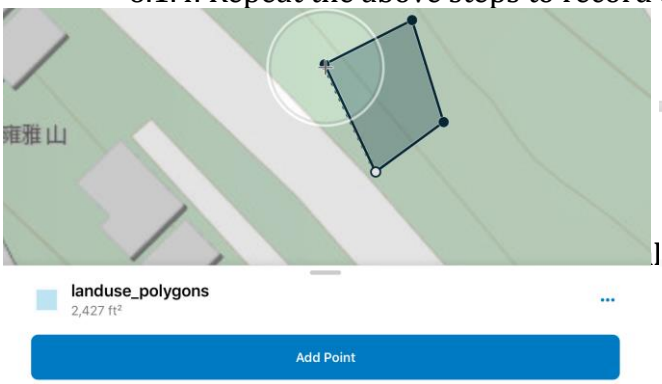


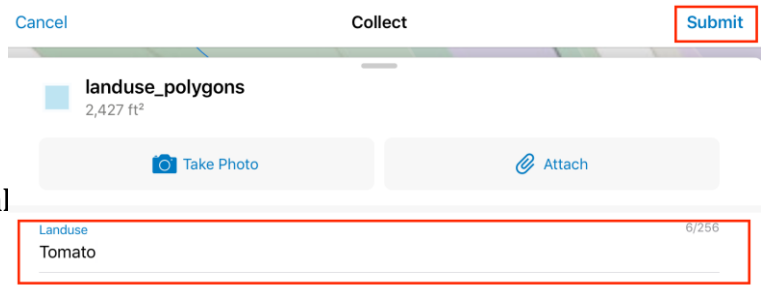
6.1.3. After drawing a polygon, click ***Landuse*** and input the land use of the selected area. For examples, “Crop_pineapple”, “Crop_apple”, or others. (Notes: The areas with the same land use types should use the same name.)





6.1.4. Repeat the above steps to record different land uses.

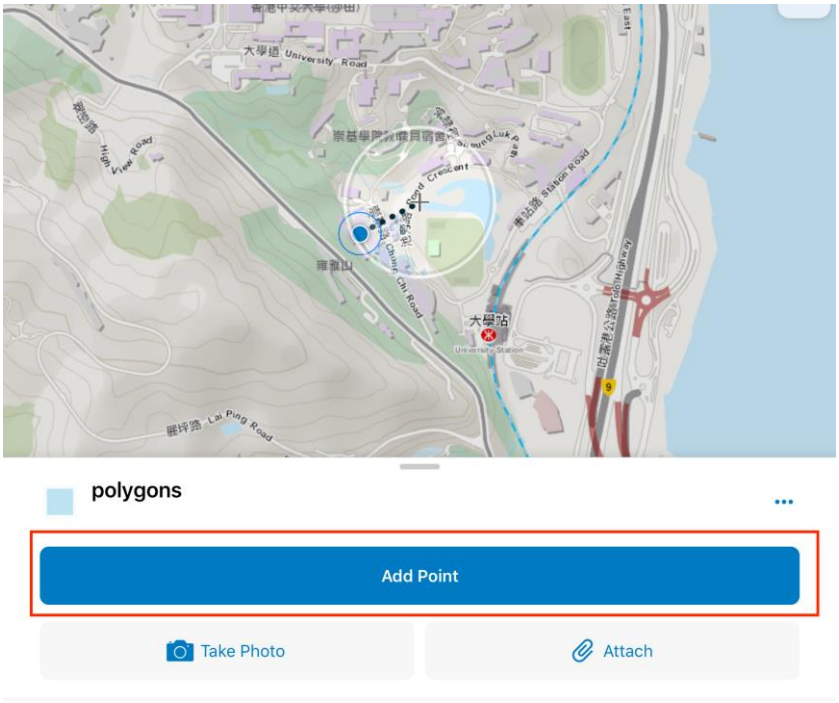




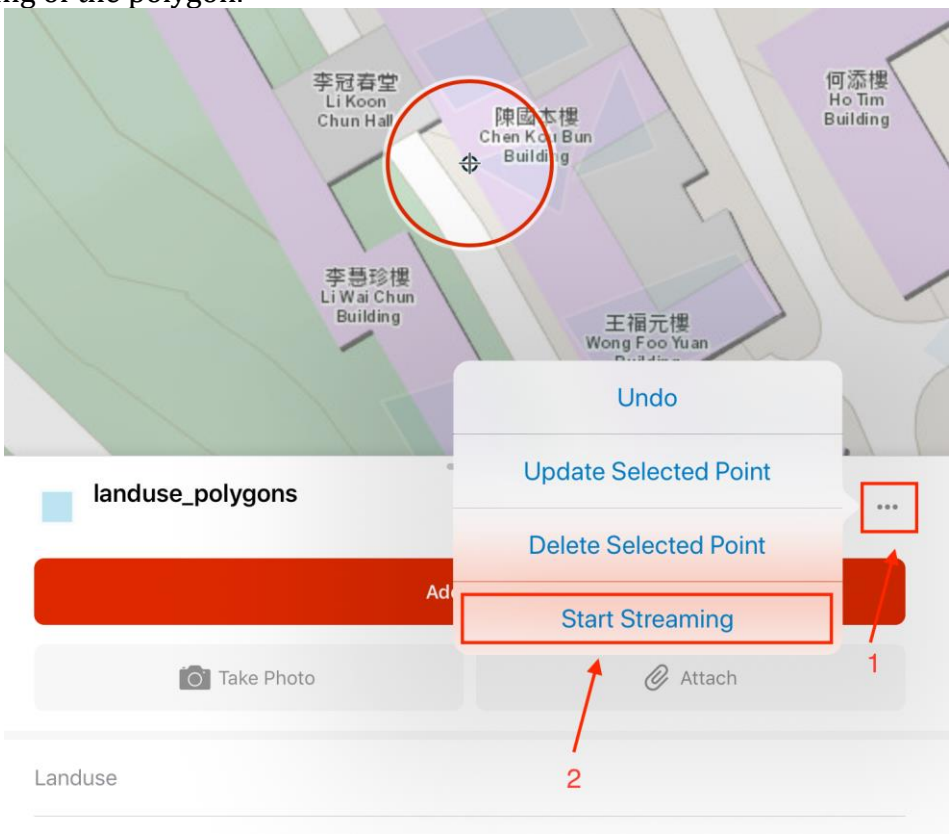
6.2.1 **Method 2: Drawn automatically by the app according to the distance the user moves**

6.2.2 Choose polygons.

6.2.3. Click ***Add Points*** to record the current location.

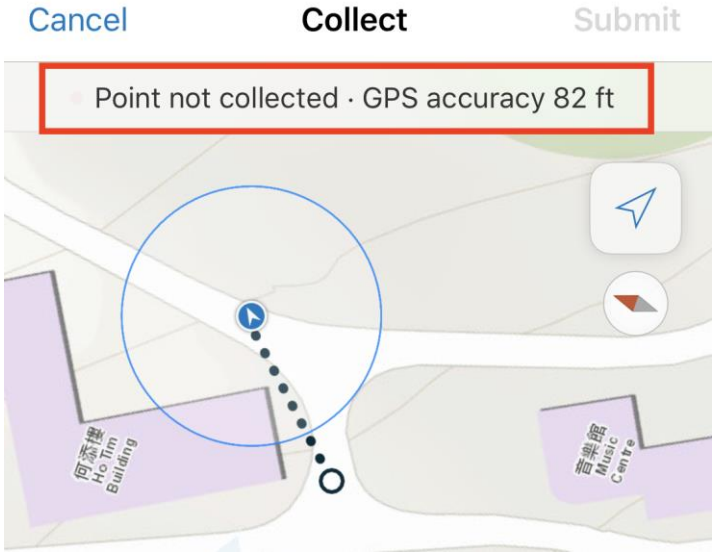


6.2.4. Click this icon (···), and choose ***Start Streaming*** to begin the automatic drawing of the polygon.

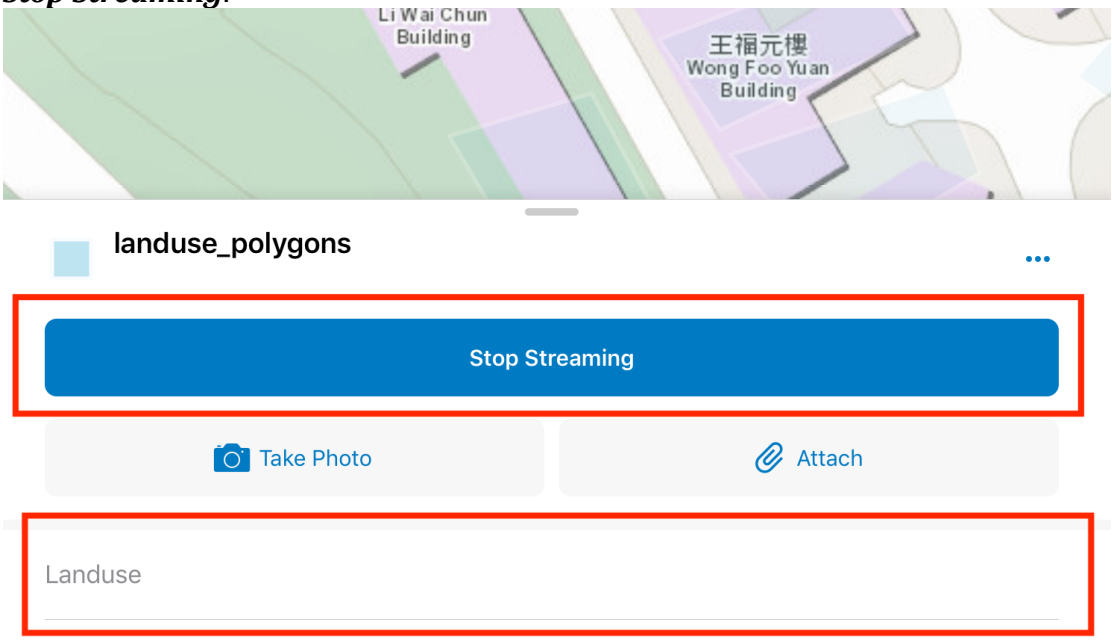


If ***Streaming*** is shown on the interface, it means the app is collecting the current GPS location.

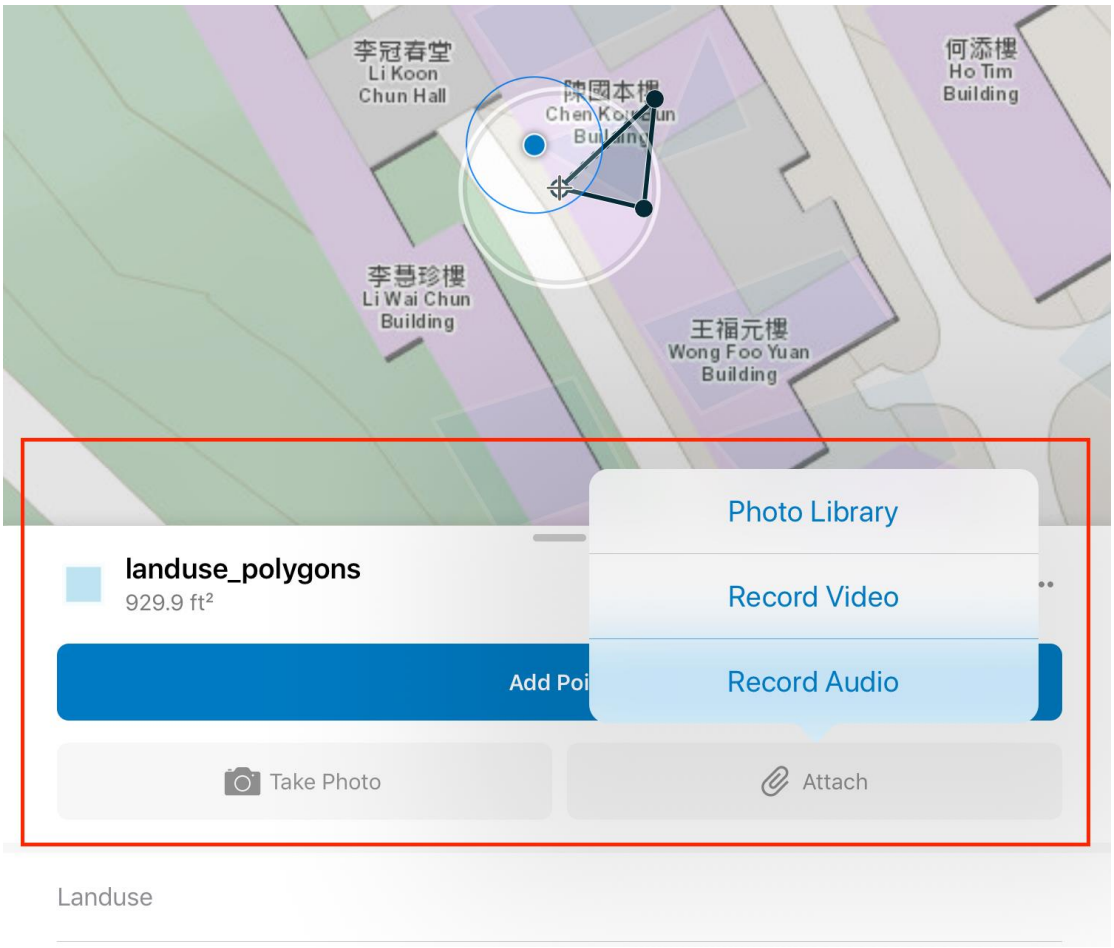
If ***Point Not Collected*** is shown on the interface, it means that the app cannot detect the current GPS location. Under this condition, users are recommended to draw the polygons manually, or check if the GPS is on.



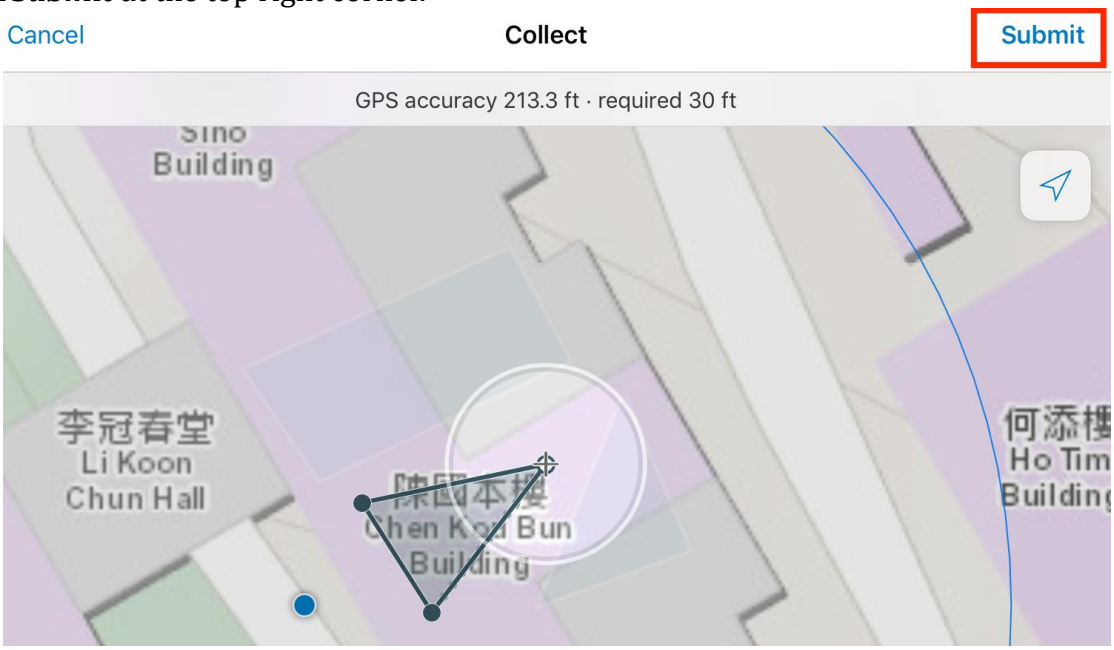
6.2.5. After drawing the polygons, click ***Landuse*** to record the land uses of the selected areas, such as, "Crop_pineapple", "Crop_apple", or others. Then, click ***Stop Streaming***.



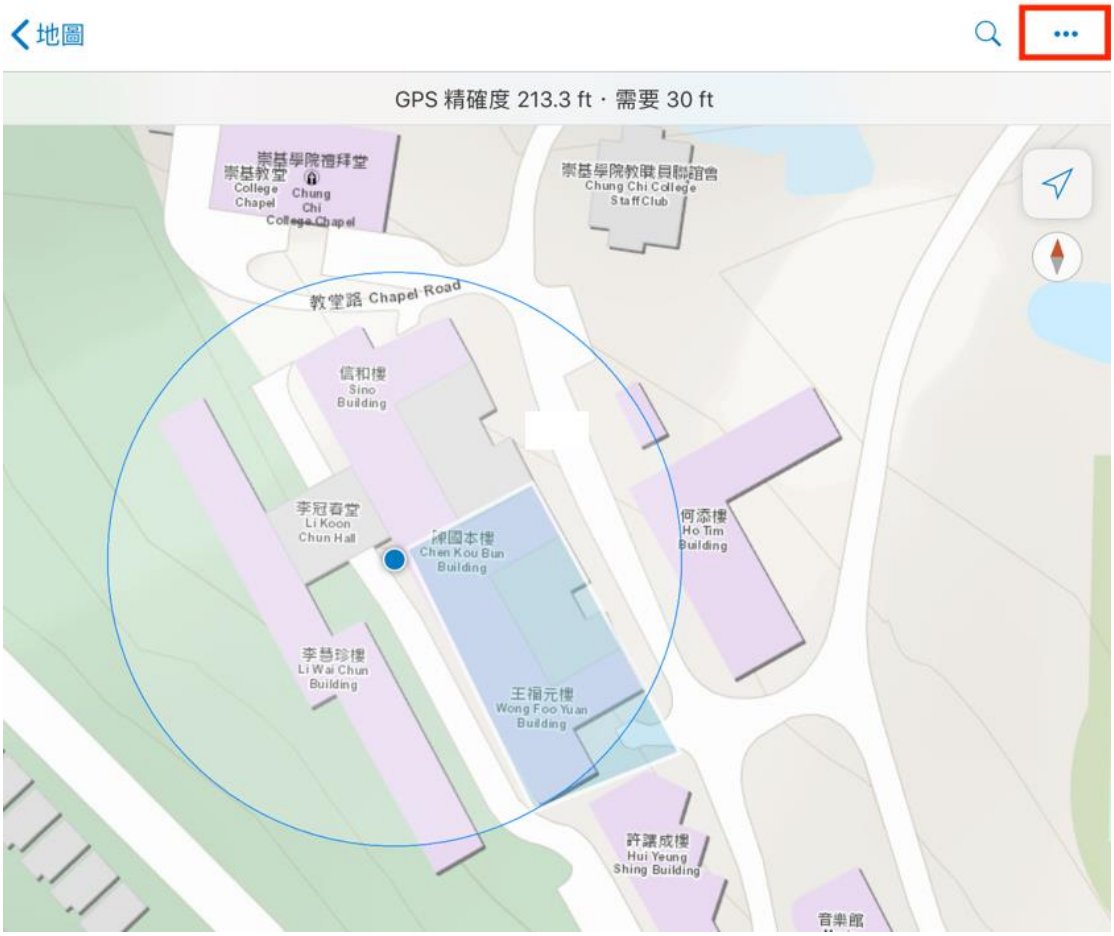
7. Click ***Take Photo*** or ***Attach*** to insert additional information.



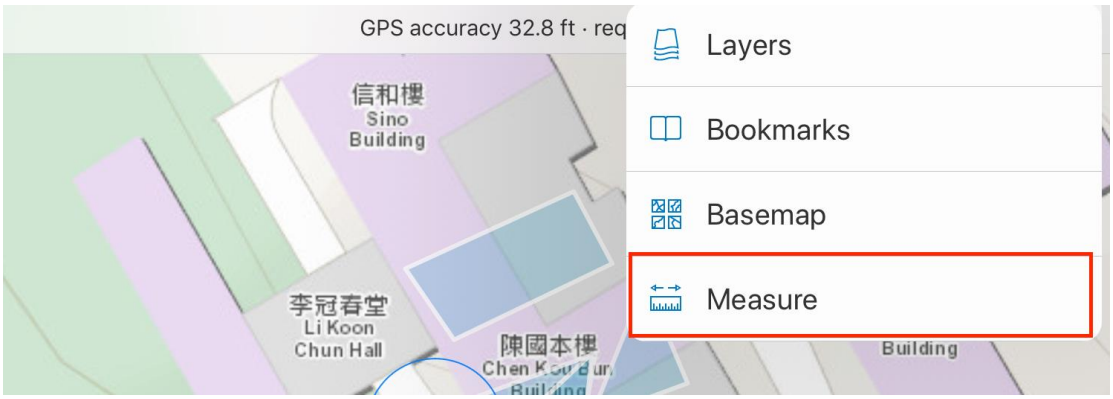
8. Click ***Submit*** at the top right corner.



9. Click this icon (•••) on the top right corner to measure the distance.

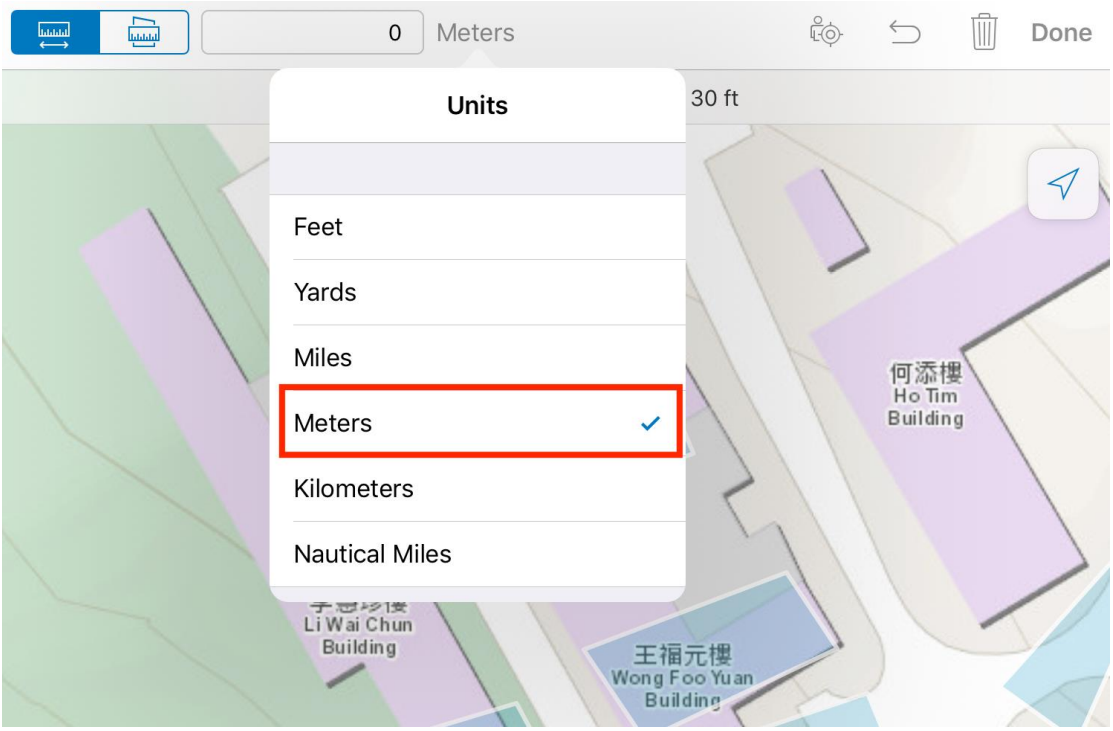


10. Choose ***Measure***.

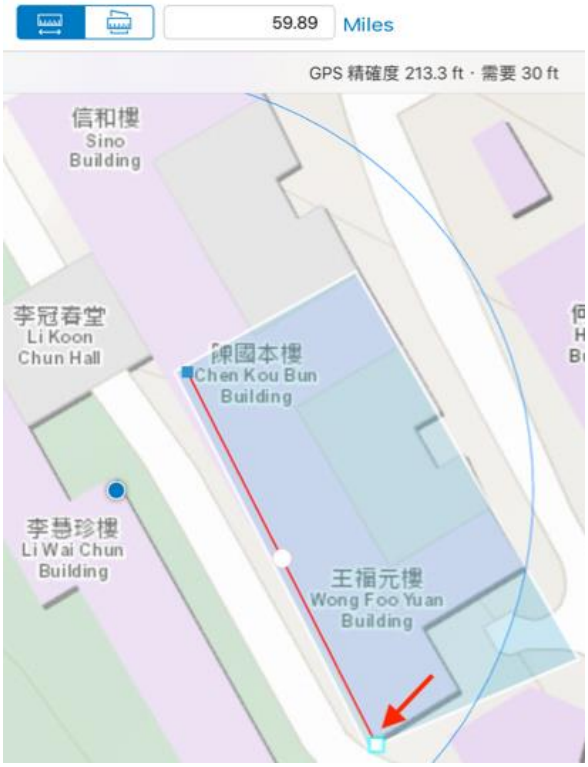


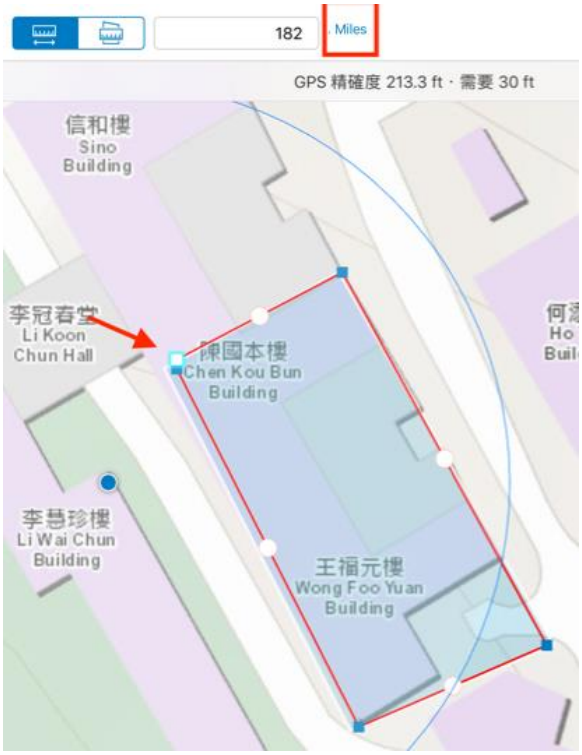
11.  Click this icon to measure distance.

 Click this icon to measure area.



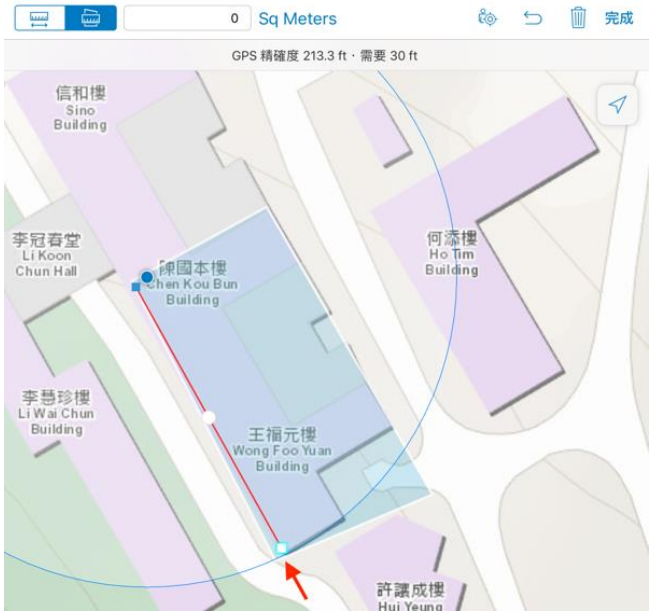
12. Choose the location for distance measurement.

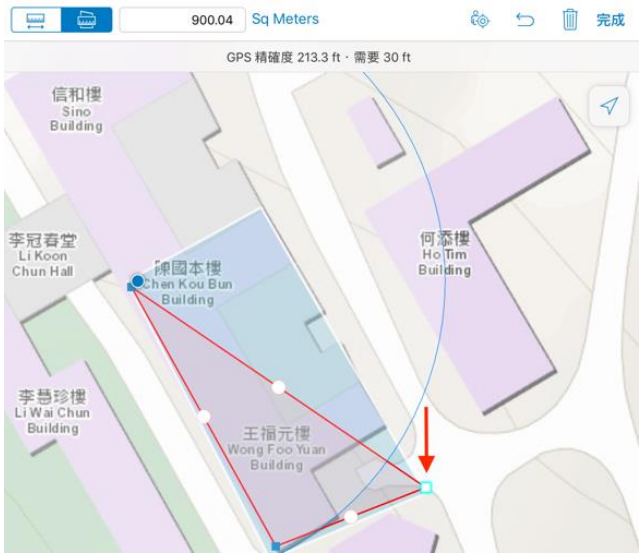


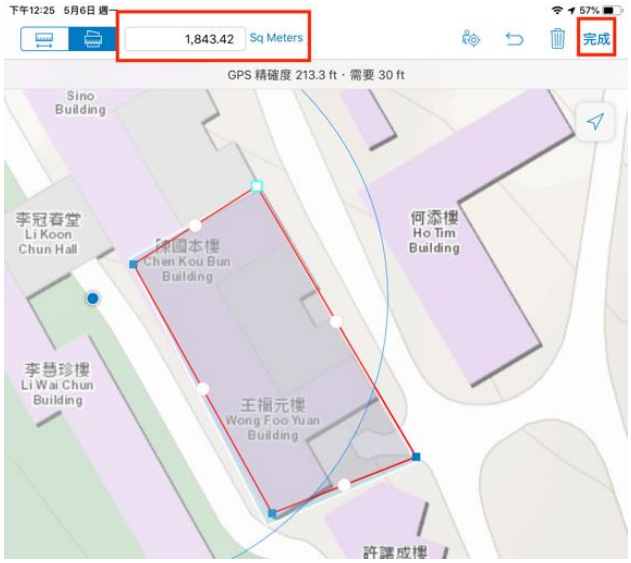


13. Area Measurement

 Click this icon for area measurement.







14. Recorded land use in Collector is shown below.