Attachment 2: Trash Assessment Digital Data Collection Protocols.

Instructions for Using Collector in iOS

Each device displays the Collector App differently. This protocol includes instructions based on an iOS mobile device (iPhone) and Android device (Trimble). The general concepts will be the same for each device, however if you are using a different device visit the collector app quick start guide for more information. https://doc.arcgis.com/en/collector/ios/collect-data/quick-reference.htm Select your device operating system under the "Quick Reference" title.
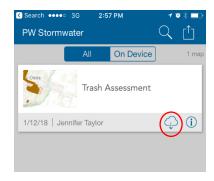
Sign in

Click on ArcGIS Online. Your ArcGIS online account is assigned separate from you regular County log in.
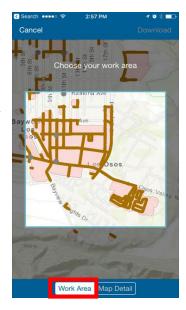

Working in Offline mode

Begin by downloading the map, click the download button.

Select Work Area

Next, choose the work area. Do not worry if the map detail is not easy to see at this scale. The next step will show you the work areas in greater detail.
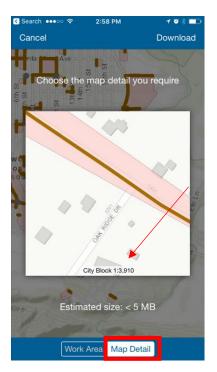
Choose an area large enough that it will take your whole work day. If you choose too small an area, you will need to connect to Wi-Fi and download an additional area later in the day.
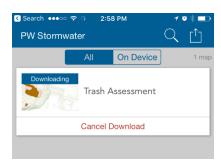
Choose map detail

This will show the maximum amount you will be able to zoom in to the details of the map. Make sure you can see street names clearly and that there is enough detail to complete your work.

Zooming in to the city block level is recommended.
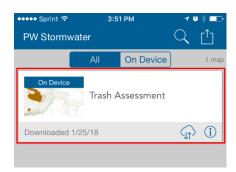
Download all Data

Once the map detail is set, the data for that area will download to the device so you can work offline. Once downloaded you will have a map on the device that is ready to edit and enter data.
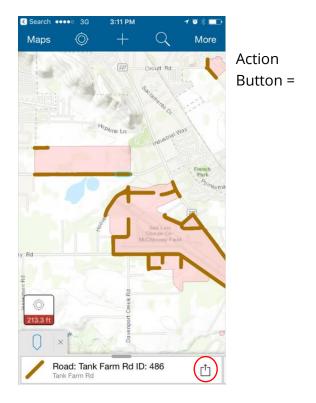

Start Data Collection and Map Editing
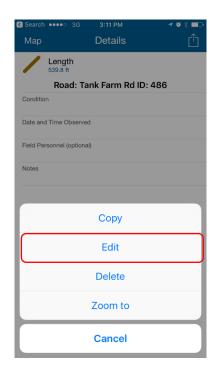
Select your map to open it.

Next, select an of interest. Select either a line or point on the map, then select the action button.

Action
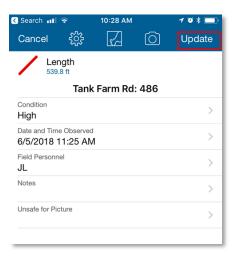Button =

Start Editing

Select Edit.

Update All Data Fields

Click each individual field to select the correct data you wish to enter for that location.

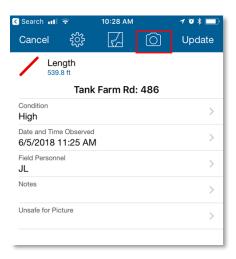Then Click update in the top right, this will update the map.

If the you are working with internet access this, your update will automatically viewable to anyone with access to your map. If you are working offline, you must sync once you have internet.

Taking Photographs of Assessment Area

Take a minimum of one photo per segment. It is recommended that one photo be taken per 300 feet of assessment length.

To take a picture, click the camera icon while editing. Use indicated length to determine if more pictures are required
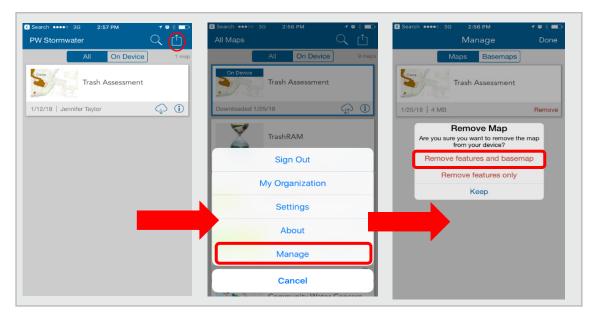

Download Assessment Data- Sync Edits

When you are finished the work day, come back to the office connect to WIFI and then click sync on your device.

Remove Map

You will need to remove the map from the previous use in order select a new area to download. Click the Action button, then select "Manage", finally select "Remove features and basemap."
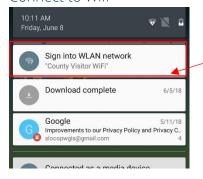
Notify Quality Assurance Staffer of assessment completion

10% of the road segment data will be evaluated for quality assurance. The 10 % road segments are chosen with a random number generator. The collected data will be reviewed by a staff member other than the original assessor who has prior experience conducting Trash Assessments.

Starting Collector in Android

Connect to Wifi

First you will need to connect to Wi-Fi. Swipe down on the device and select "Sign into WLAN Network." Agree to term and service or enter user name and password.

Tap on the Collector app, as shown to the right. For the Trimble devices the icon should be on the main page.
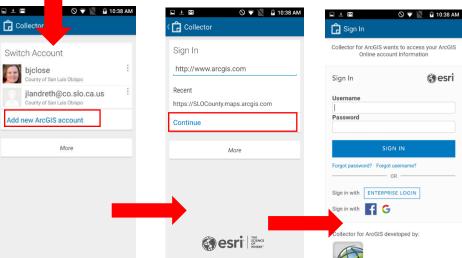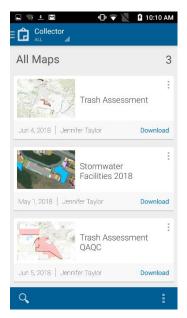
Connect to your Account

To sign into your account, click the 3 dots on the bottom right; then select "Switch Accounts."

Select "Add new ArcGIS account."

Select "Continue."

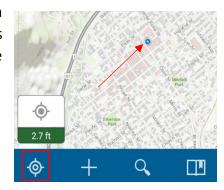Finally, use your ArcGIS online credentials you were provided.

Select the Map

Select the map you will be working in.

If you are using a device with service or one of the Trimble devices, the map can show you where you are.

Select the bulls-eye in the bottom right corner. Once the device has located you, you will see a blue dot of where you are.
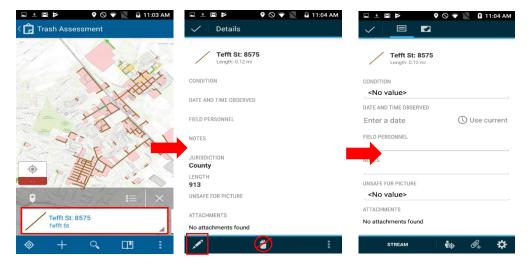

Entering Data (By editing)

To edit, select the point, line or polygon you will be editing. Tap the popup on the bottom of the screen. You can view the attributes of the feature in the next window.
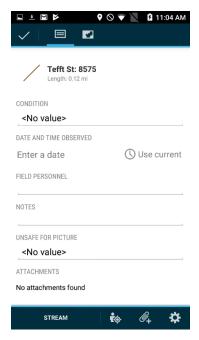
Click on the pencil in the bottom left to start editing.

Do not click the trash can unless you want to delete the entire feature. Select each field to enter your data in. Click the check mark in the top left to save edits.

Taking Photographs

To attach an image, click the paperclip at the bottom of the editing window. Then select camera to take a picture. **Take a minimum of one photo per segment.**
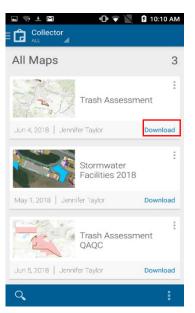

If you happen to select more than one item at a time, you can swipe right and left on the bottom popup window. Alternatively, you can select the 3 horizontal bars to see a list view of the items.

Working in Offline Mode
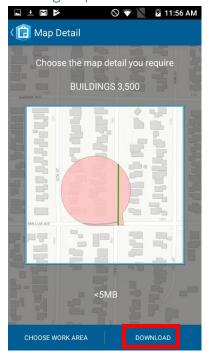
Begin by downloading the map. Click Download.

Choose the work area.

You want to choose a large enough area that will take you the whole work day. If you choose too small of an area, you will need to connect to Wi-Fi to download data and choose another work area.

If internet service is available, you can work online. Once you are satisfied click Choose Map Detail.
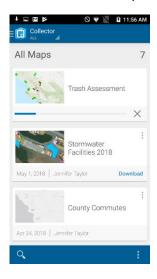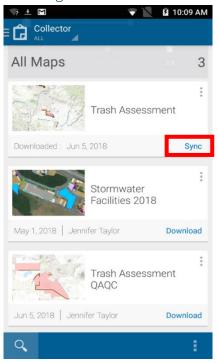
Choosing Map Detail

This is the maximum amount you will be able to zoom in on the map you'll be using for field assessments. Make sure you can see street names and enough detail for you work. City block level is recommended. When you are done select download.

Allow the data to completely download. Once downloaded, you will have a have a map on your device you can edit
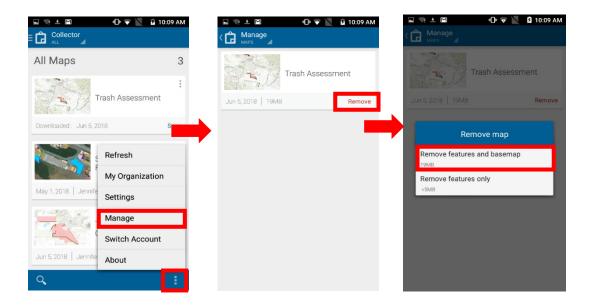
Downloading Data

When you are finished the work day, come back to the office connect to WIFI and then click sync on your device. This will download the data from your assessment.

Removing the Map- Changing Work Areas

Before moving to a new work area. You will need to remove the map from the previous use. Remember to sync before this step. From the main window click the 3-dot button on the bottom left of the screen. Then click manage. On the next screen select remove. Remove features and basemap. Now that the features have been removed you can add a new section. Go back to the first offline mode step.

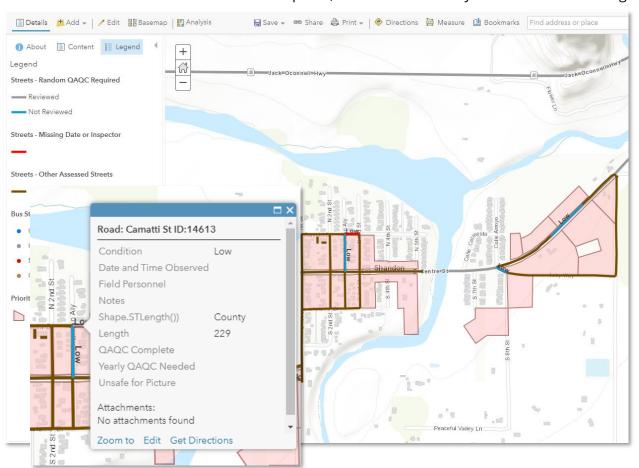## Notify Quality Assurance Staffer of assessment completion

10% of the road segment data will be evaluated for quality assurance. The photographs will be reviewed by a staff member other than the original assessor who has prior experience conducting Trash Assessments. The Quality Assurance Staffer will also verify that data fields are complete and accurate.

Data Quality Assurance

The Quality Assessor map automatically notifies the assessor if the inspector name or date field is not filled out. Additionally, 10% of assessed road segments will be further analyzed for attached images and to verify that data fields are complete and accurate. The QAQC Assessor map uses the ArcGIS online credentials and can be logged into on any PC.

Below is an example of the Quality Assurance map. When a segment has been evaluated (Low to Very High) the map will show any street or bus stop as red if the date or inspector field are not populated. Alternatively, If the segment or bus stop was randomly chosen for QAQC it will appear blue.

These blue items indicate that review is required, but don't necessarily indicate data is missing.
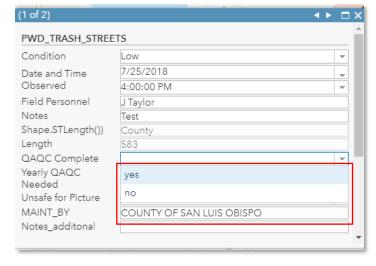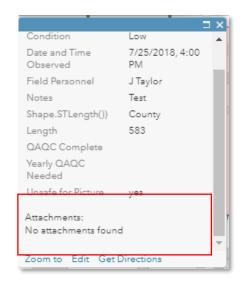
Inspecting Segment Data

To inspect the segment, click on the item. A pop up will appear. If the date, field personnel, or image is missing notify the inspector of the error. They can enter in the missing information through the app. Once the date/time or field inspector is entered it will go back to brown unless its marked for review.

To edit the fields, click "Edit". If the inspector is unable to get to the app, they can provide the information to you and you can enter it here.

For the randomly selected items you will need to verify all items and change QAQC Complete to "yes" to complete the item. The segment will turn gray after completion.

In rare instances it will be unsafe for personnel take pictures. In these instances, you will see Unsafe for picture marked "yes". This is the only time it is okay for the No attachments found error to show.

Once all randomly selected items are marked complete (appearing gray) and all other segments are no longer flagged (appearing brown) the QAQC process is complete.