GRIT Sign Image Capture Instructions

The GRIT Sign Image Capture web app was developed as a simple method to capture basic sign information automatically using any smartphone camera. It also allows for a condition rating to be selected which eventually will also be automatically rated using AI training with existing data. The GRIT Main web app can also be used in the field but works best with a tablet/laptop and requires a constant data connection along with more manual data entry.

After starting the Sign Image Capture (SIC) App, the user will login using their GRIT username and password. If the Agency does not have a GRIT account for the Signs Layer the user will not be able to login. Contact GRIT support to enable signs. User will stay logged in on device until selecting the Log Out button even after closing the app or turning the phone off.

The SIC home screen shown in *Figure 1* will display:

- Camera pointing direction in upper left
- Any images captured but not uploaded yet will be listed in the middle.
- Remove and Upload buttons at bottom to manage captured images.
- Capture button on bottom. Select Capture when camera is positioned as close to front of sign while keeping sign and post in field of view and pointed in approximately the same direction as sign face.

The capture button will bring up a camera mode which will take picture and bring up a confirmation page. Select green check mark which will then bring up the data page shown in *Figure 2* on right.

- Use image handles to adjust outline around sign and posts. Can also move whole box by holding finger in middle and dragging to position.
- After releasing box AI will automatically fill in the Sign Type as shown in Figure 2. This is a best guess and the dropdown can be selected to see next best guess etc.. which you can use to override. Then verify sign facing direction(automatic but sometimes interference from vehicle), select high priority if maintenance or replacement should be done asap, select condition, and hit the UPLOAD button.
- If you are in a remote area without a good data connection a red warning box will pop up and the Sign Type **will not automatically** be selected. You can leave it unselected and verify the sign facing direction, select a sign condition, and hit **SAVE.** This allows you to select the saved signs later when data or wifi is available and upload to the GRIT Server. When uploaded the Image will be used to automatically fill in the Sign Type using Al.

If there is an existing sign in GRIT at this location, the image will be appended to that record and the condition and rating date will be updated. Also an Activity will be entered with sign image capture listed as the reason. User can then use GRIT to update any other data items if necessary.

If there is no existing sign in GRIT a new record will be inserted at the location where photo was taken and these data items will be inserted. In this case the User is advised to go into GRIT later and update location if necessary and add any other missing data. Image Capture only inserts the Primary panel so if there are multiple panels, they would need to be added.





Figure 2 Data Entry