5.6 | Surveying & Field Data Collection

The Survey tool records terrain data for design creation, project verification and archival purposes. Surveys may be collected before grading to capture the existing ground surface, or after grading to verify completed work. The recorded data can then be exported for use in third-party design software.

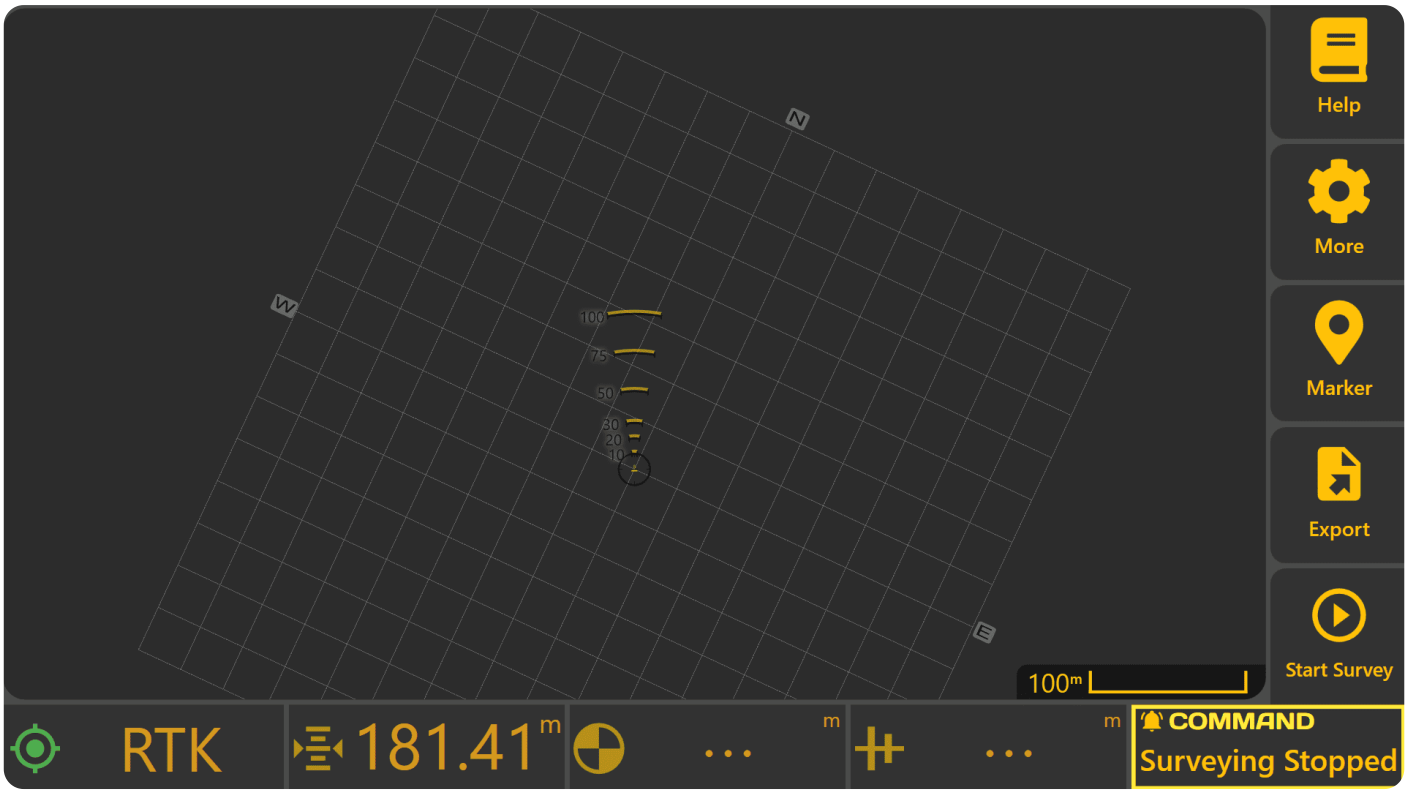
Starting a Survey

To begin a new survey:

1. Press **More → Start Survey**.
2. Select the location where the survey project will be saved.
3. Press **Save**.

A new blank survey project will be created and displayed in the Work Area.

> Before recording, verify that the GNSS receivers have achieved an RTK fix. Survey accuracy is directly dependent on GNSS positioning quality.



Survey Types

Before recording begins, choose the type of survey to perform.

Boundary

Records the perimeter of a field or work area to define the project boundary. Boundary surveys are commonly used to define the project extents before creating a design.

Drains / Paths

Records linear features such as drains, channels, roads or access tracks.

Full Field

Records terrain data across the entire work area to produce a complete surface model.

Recording Survey Data

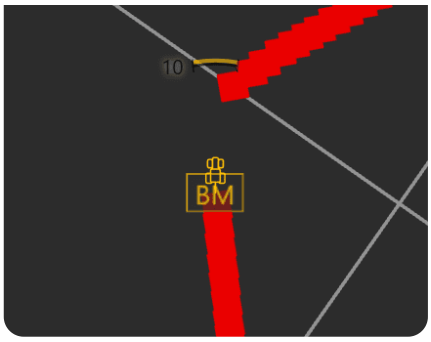
Once the survey type has been selected:

1. Press **Start Survey**.
2. Drive the machine through the area to be surveyed while maintaining RTK positioning.
3. Follow the appropriate path for the selected survey type.
4. Press **Pause** if recording needs to be temporarily suspended.
5. Press **Start Survey** again to continue recording.
6. Press **Stop** once the survey is complete.

If a mistake is made before completing the survey, press **Cancel** to discard the current survey and begin again.

Additional Boundary, Drain/Path or Full Field surveys can be recorded by pressing **Start Survey** again after completing the previous survey.

Recording Markers



Before exporting the survey, it is often useful to create any important project markers, such as:

- Benchmark locations.
- Obstacles or hazards.
- Fence lines or gateways.
- Trees, poles or irrigation equipment.
- Other significant field features.

> These markers become part of the exported project and provide useful reference points during design creation, construction and future verification.

Exporting Survey Data

Once all required survey data has been collected:

1. Press **Export**.
2. Select the desired export format.
3. Choose the destination folder.
4. Press **Export**.

Currently supported export formats include:

Format	Purpose
.tci	Native T3RRA project format.
FieldLevel XML	Export for compatible third-party design software.

The exported survey file can then be supplied to a designer or imported into another compatible application for further processing.

> **Operator Tip:** Survey quality directly affects design quality. Maintain a consistent machine speed, achieve RTK positioning before recording, and collect sufficient coverage of the entire area with adequate overlap between passes. Missing sections or poor-quality survey data can lead to inaccurate designs and additional work later.