

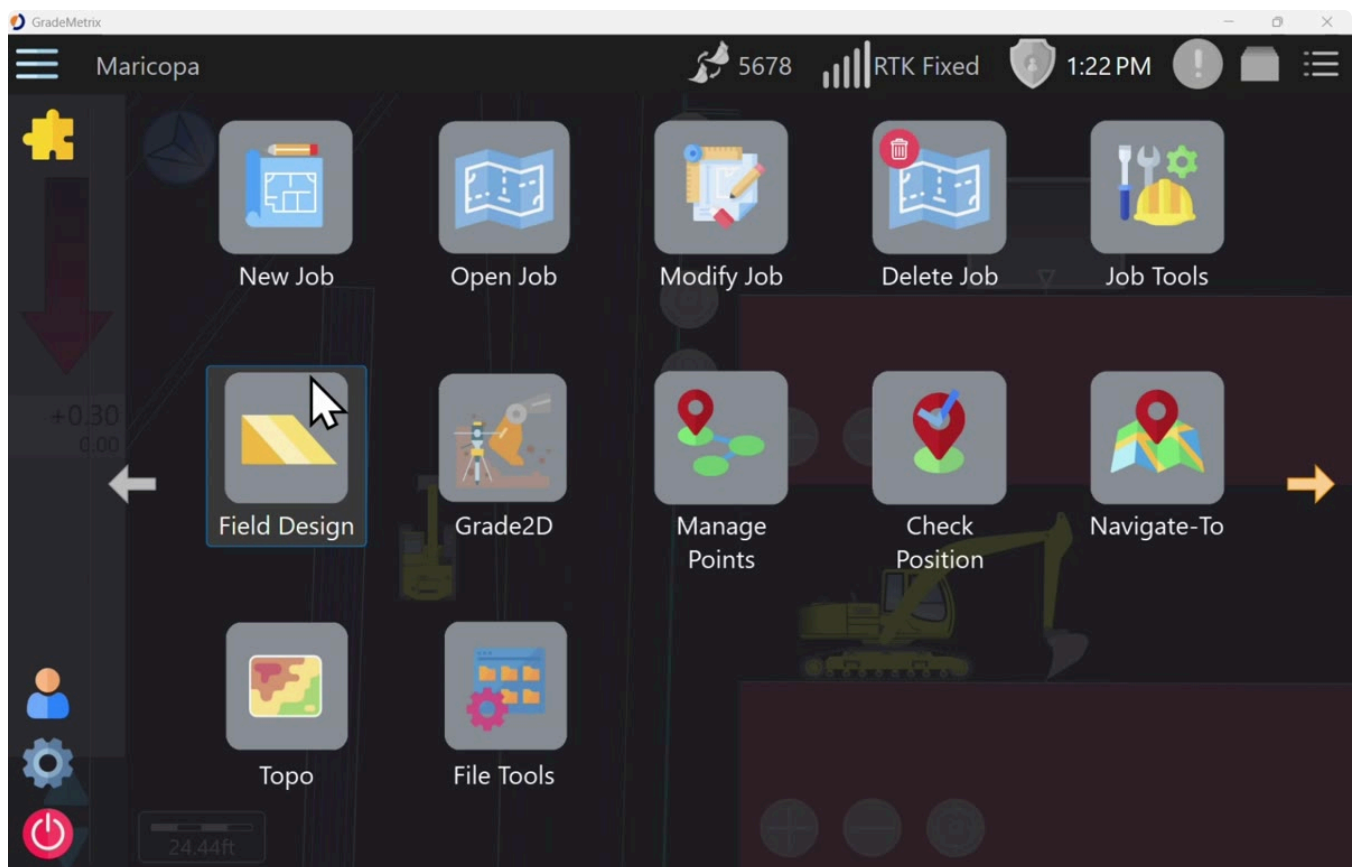
# SiteMetrix & GradeMetrix: Topo

Oct 19, 2026 · @Johan

Topo records survey points and lines at the machine's cutting edge. Points can be taken one at a time or saved automatically by distance or time. This guide follows the 13.5-minute training video "SMG + GM 9: Topo", which applies to both SiteMetrix Grade and GradeMetrix.

## Open Topo

Open the Main Menu and tap **Topo**. The setup screen opens first, with four tabs on the left: **General**, **Point Info**, **Lines** and **Codes**.



## Step 1: General settings

GradeMetrix

Maricopa

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**General Settings**

Survey Topo: Maricopa.topo

Point of Interest: Left Save Method: Manual

Starting Point Id: 16 Save Every: 10sec

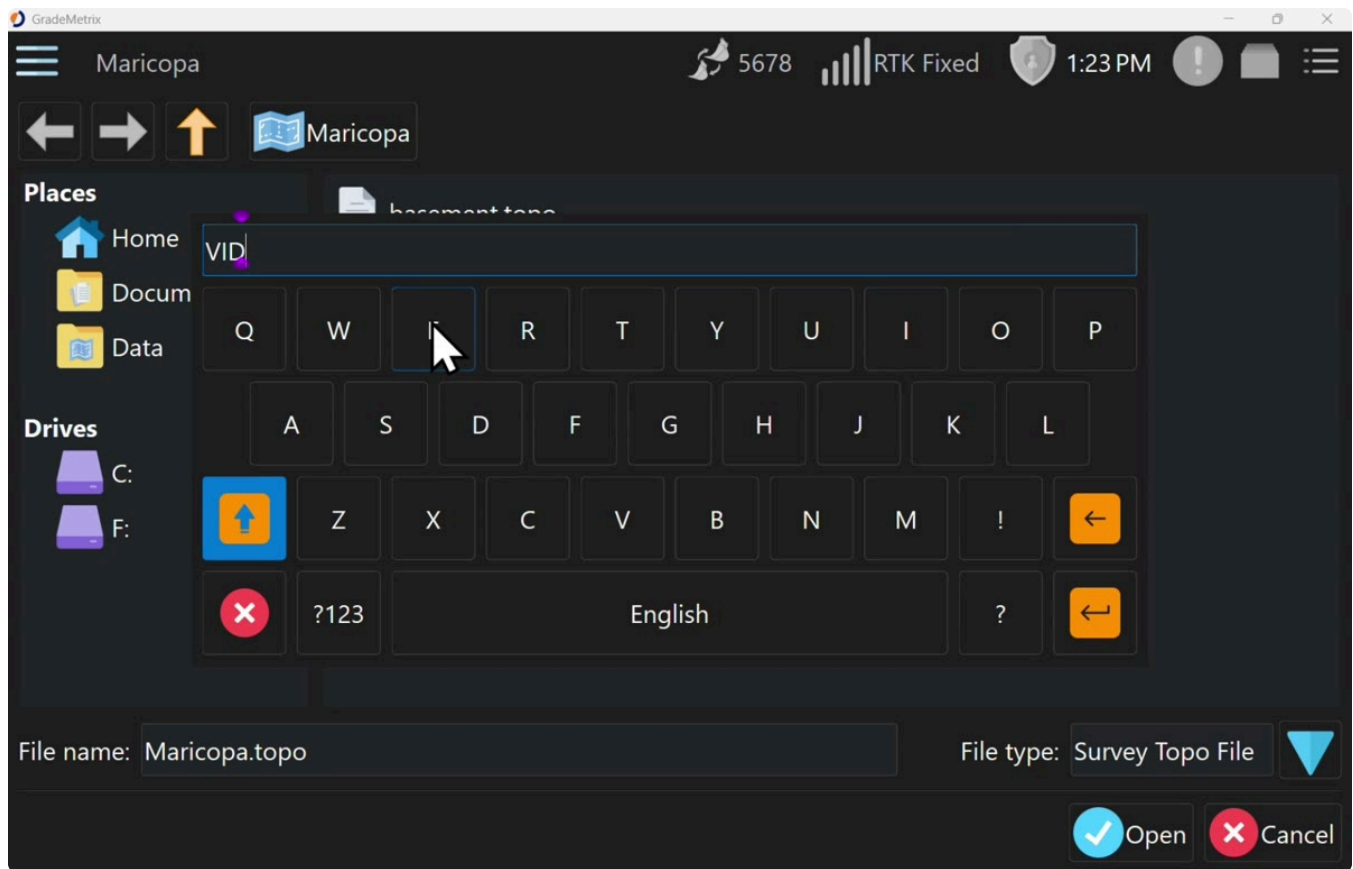
Collect Samples For: 1sec Elevation Change: 0.29ft

- ☒ Save first point on start when auto-saving
- ☒ Prompt for feature code
- ☐ Allow time profile while stationary
- ☐ Allow vertical offset

OK Cancel

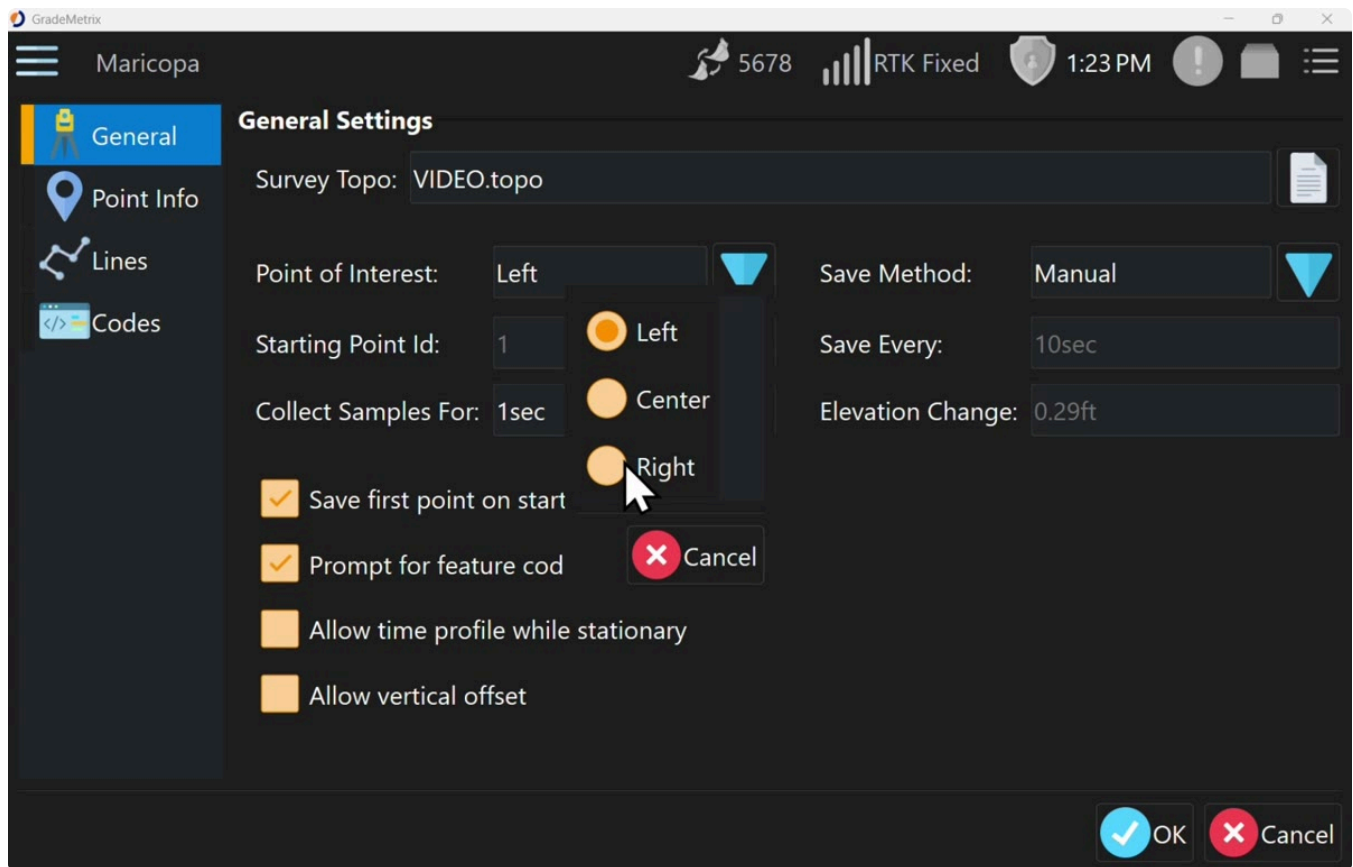
### Choose or create a topo file

The **Survey Topo** box shows the file points are saved to. Tap the document icon to change it. Pick an existing file, or type a new **File name** and tap **Open** to create one. The video creates VIDEO.topo.



## Set the options

| Setting             | What it does                                                     | In the video    |
|---------------------|------------------------------------------------------------------|-----------------|
| Point of Interest   | Part of the cutting edge that is recorded: Left, Center or Right | Left            |
| Starting Point Id   | Number given to the next point                                   | 1               |
| Collect Samples For | How long each point is averaged                                  | 1 sec           |
| Save Method         | Manual, Distance or Time (see below)                             | Manual          |
| Save Every          | Interval for automatic saving                                    | 10 ft or 10 sec |
| Elevation Change    | Saves an extra point when the ground changes by this much        | 0.29 ft         |



**Save Method** sets how points are stored:

- **Manual:** a point is saved only when you tap Single Shot.
- **Distance:** points are saved every set distance once auto-saving starts.
- **Time:** points are saved every set number of seconds once auto-saving starts.

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**General Settings**

Survey Topo: VIDEO.topo

Point of Interest: Left

Starting Point Id: 1

Collect Samples For: 1sec

Save Method: Manual

Save Every: 10sec

Elevation Change: 0.29ft

☒ Save first point on start

☒ Prompt for feature cod

☐ Allow time profile while stationary

☐ Allow vertical offset

Time

Distance

Manual

Cancel

OK Cancel

GradeMetrix

Maricopa

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**General Settings**

Survey Topo: VIDEO.topo

Point of Interest: Left

Starting Point Id: 1

Collect Samples For: 1sec

Save Method: Distance

Save Every: 10.00ft

Elevation Change: 0.29ft

☒ Save first point on start when auto-saving

☒ Prompt for feature code

☐ Allow time profile while stationary

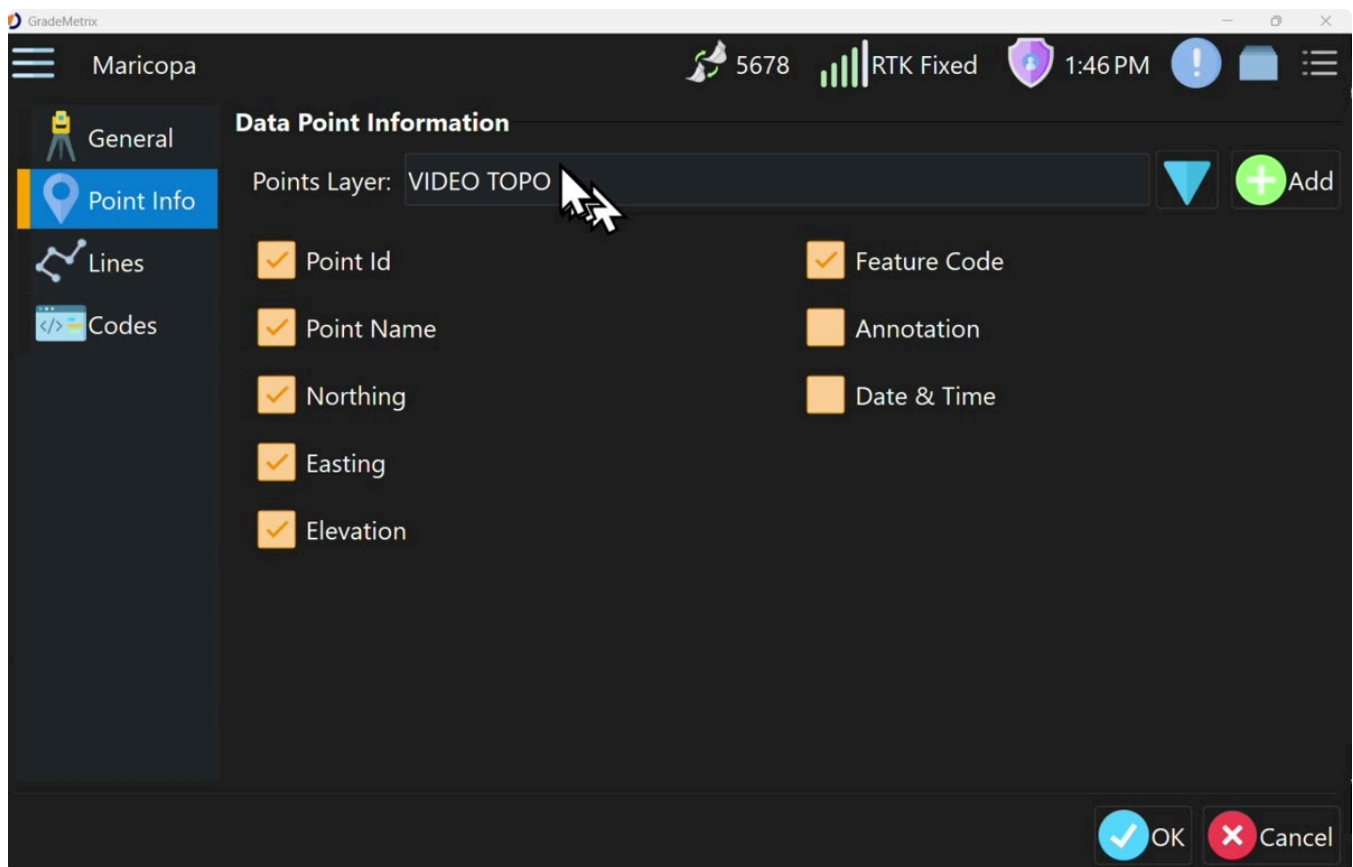
OK Cancel

The tick boxes:

- **Save first point on start when auto-saving** stores a point the moment Start Auto is tapped.
- **Prompt for feature code** asks for a code each time a point is stored.
- **Allow time profile while stationary** keeps saving by time even when the machine is not moving.
- **Allow vertical offset** adds an offset prompt to manual shots (see Step 6). It only appears with Save Method set to Manual.

## Step 2: Point Info

The **Point Info** tab sets which details are stored with each point: Point Id, Point Name, Northing, Easting, Elevation, Feature Code, Annotation, and Date & Time.



**Points Layer** is the layer new points go on. To make a new one, tap **Add**, type a **Name**, and choose its Color, Point Style and Line Style. Tick Show Name, Show Description or Show Elevation to label the points on the map. Tap **OK**.

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**Data Point Information**

Points Layer: VIDI Name: Video

☒ Point Id Color: white

☒ Point Name Point Style: BoxWithDot

☒ Northing Line Style: Continuous

☒ Easting

☒ Elevation

☒ Show Name

☐ Show Description

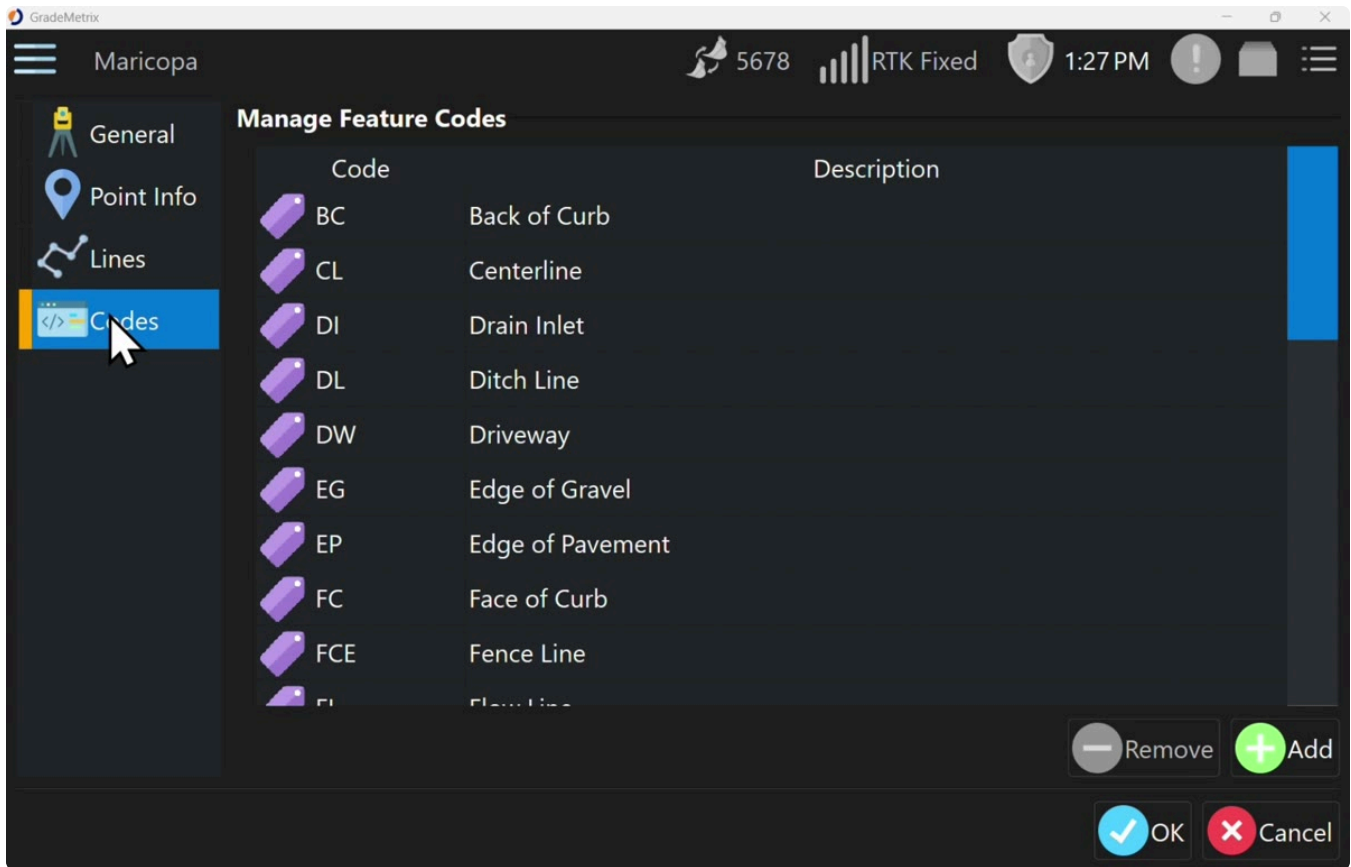
☐ Show Elevation

OK Cancel

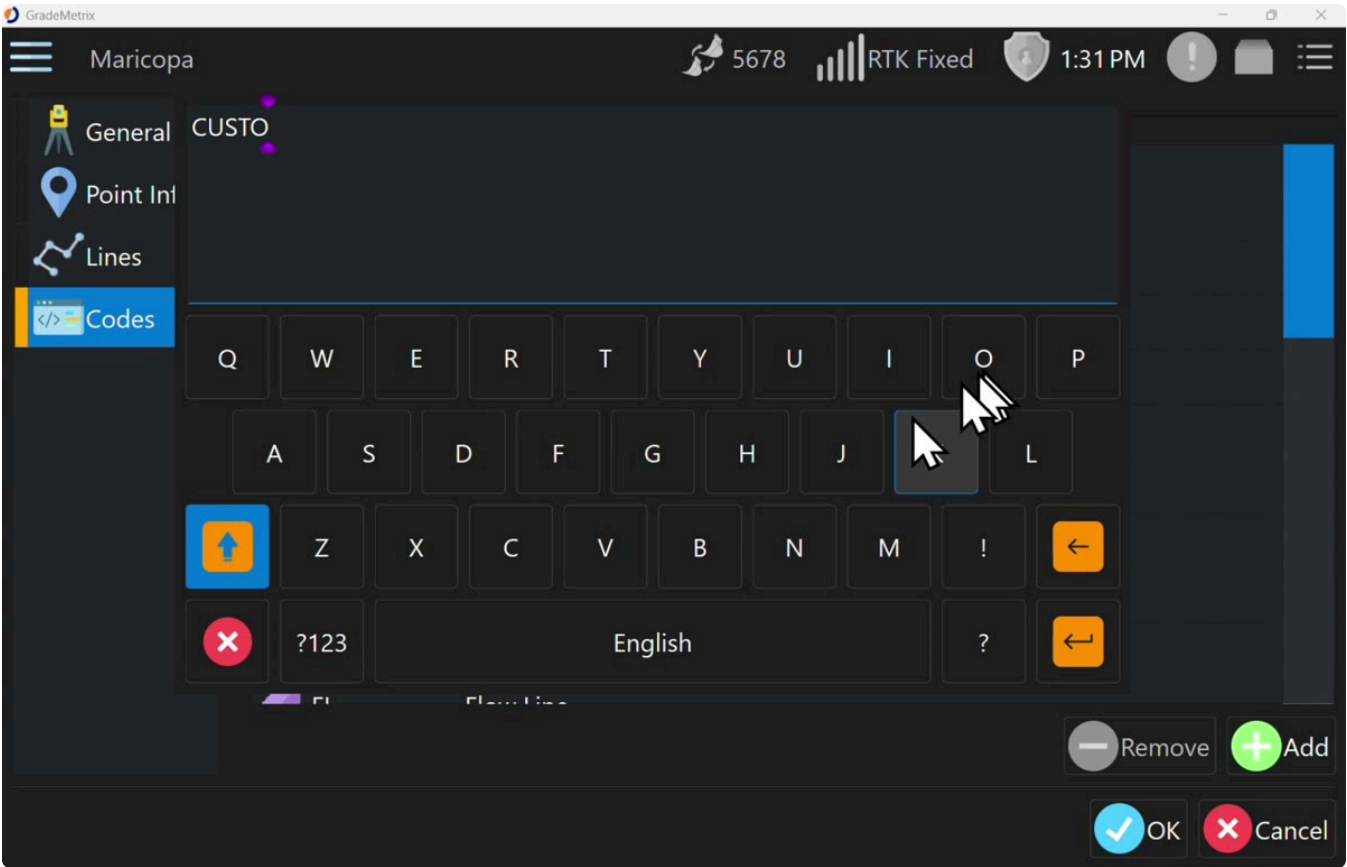
OK Cancel

### Step 3: Feature codes

The **Codes** tab lists the feature codes, such as BC Back of Curb, CL Centerline, DI Drain Inlet and EP Edge of Pavement.



To add a code, tap **Add**, type the code and its description, and confirm. The video adds CU, CUSTOM. Select a code and tap **Remove** to delete it.



Tap **OK** to save the setup and open the Topo screen.

## The Topo screen

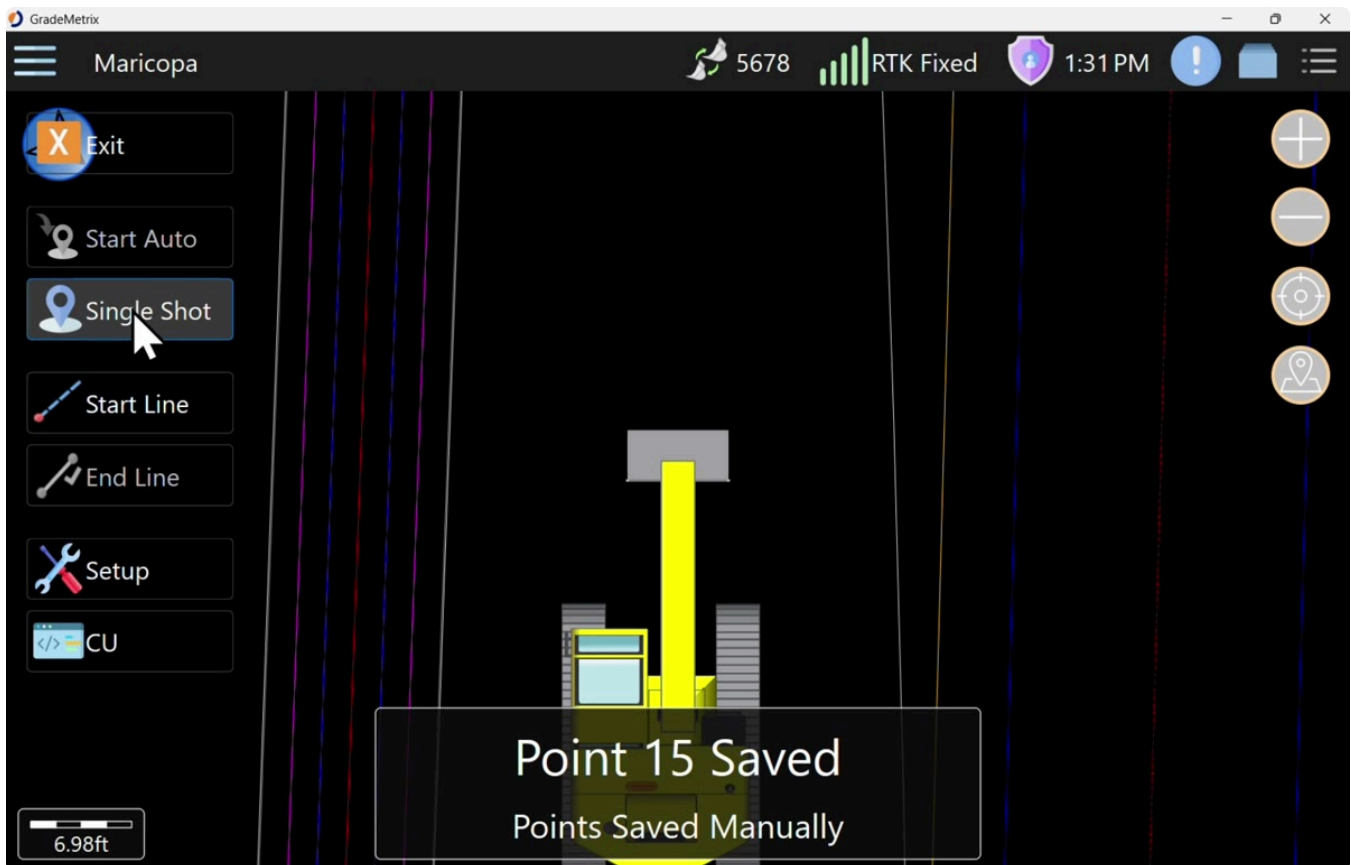
The buttons down the left side:

| Button                       | What it does                                         |
|------------------------------|------------------------------------------------------|
| Exit                         | Returns to grading                                   |
| Start Auto / Stop Auto       | Starts or stops automatic saving by distance or time |
| Single Shot                  | Takes one point and stores it                        |
| Start Line / Next / End Line | Records a line point by point                        |
| Setup                        | Reopens the setup tabs                               |
| Code box (CU in the video)   | Shows the active feature code; tap it to change      |

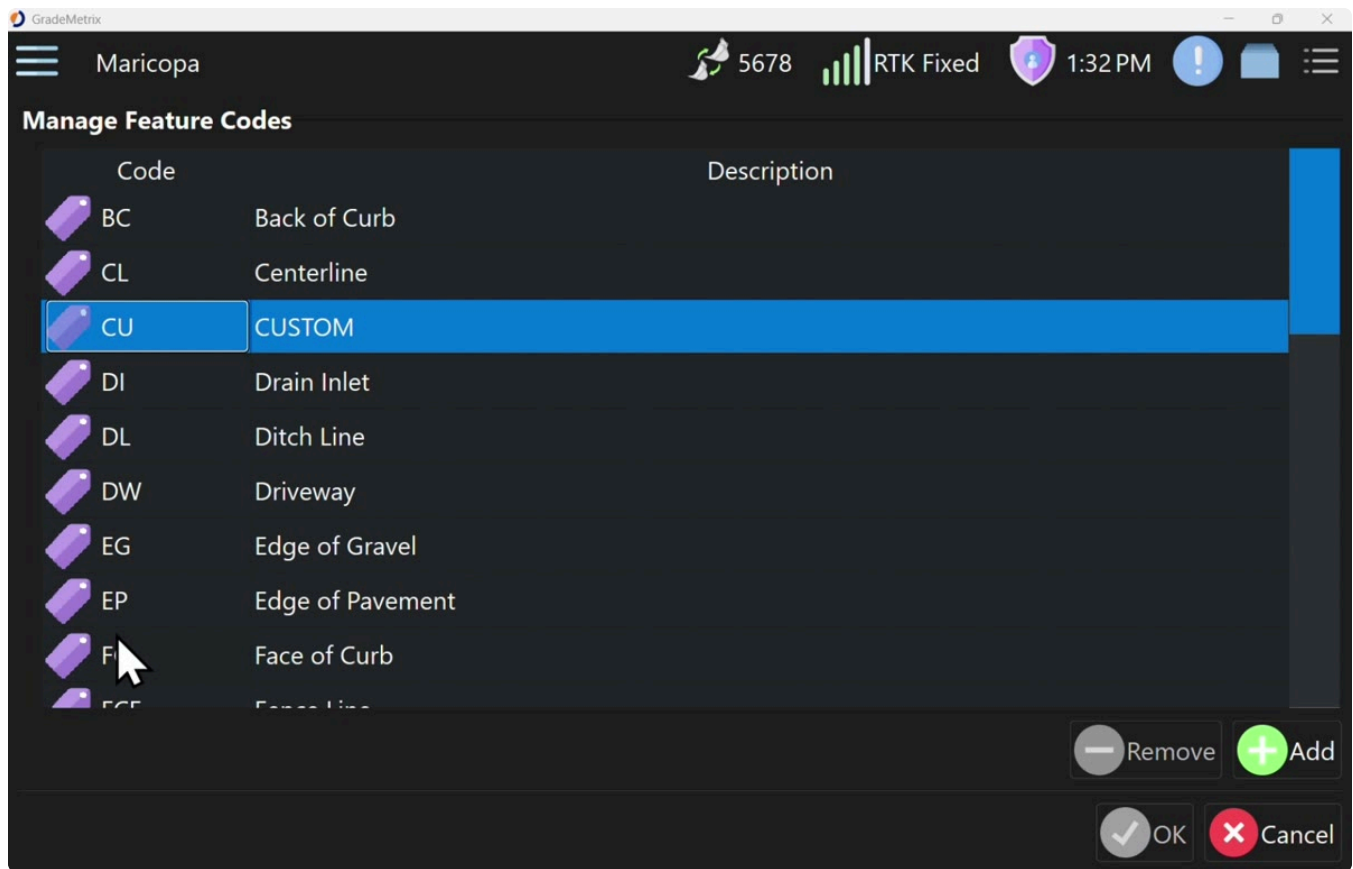
The box at the bottom confirms each save, for example "Point 15 Saved", and shows the distance or time to the next automatic save.

## Step 4: Take single shots

1. Place the cutting edge (at the Point of Interest you chose) on the spot to record.
2. Tap **Single Shot**. The box shows the sampling progress, then "Point *n* Saved".

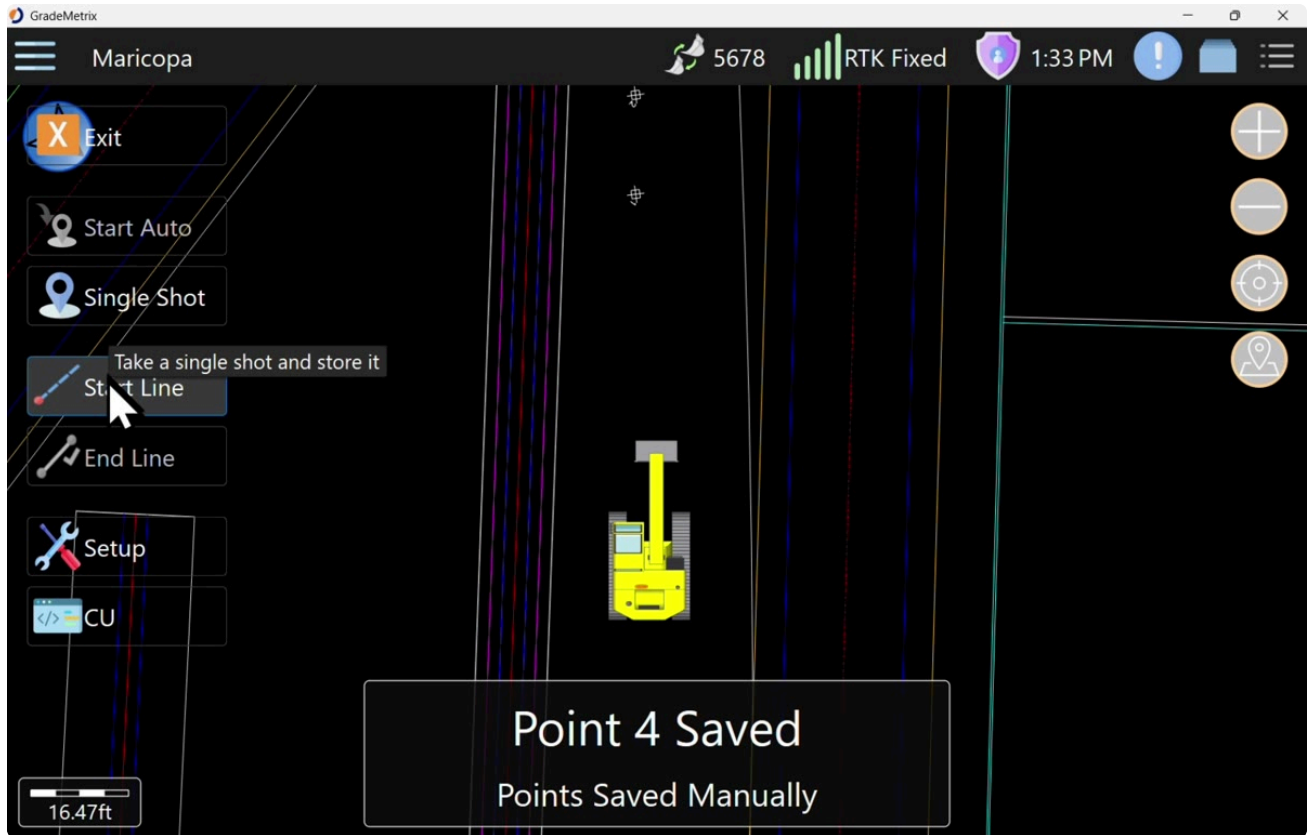


To give the next point a different code, tap the code box and pick from the list.

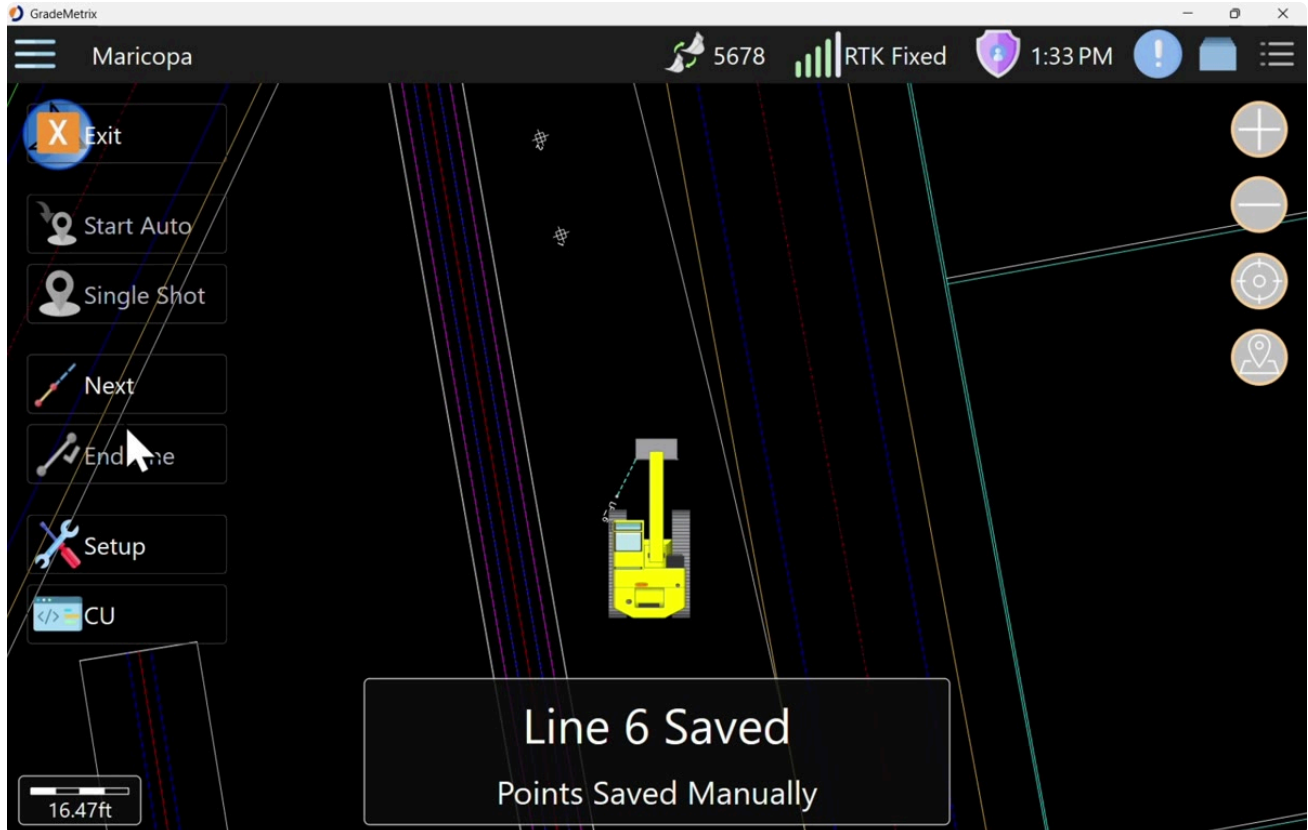


## Step 5: Record a line

1. Tap **Start Line**. The first point is stored and the button changes to **Next**.

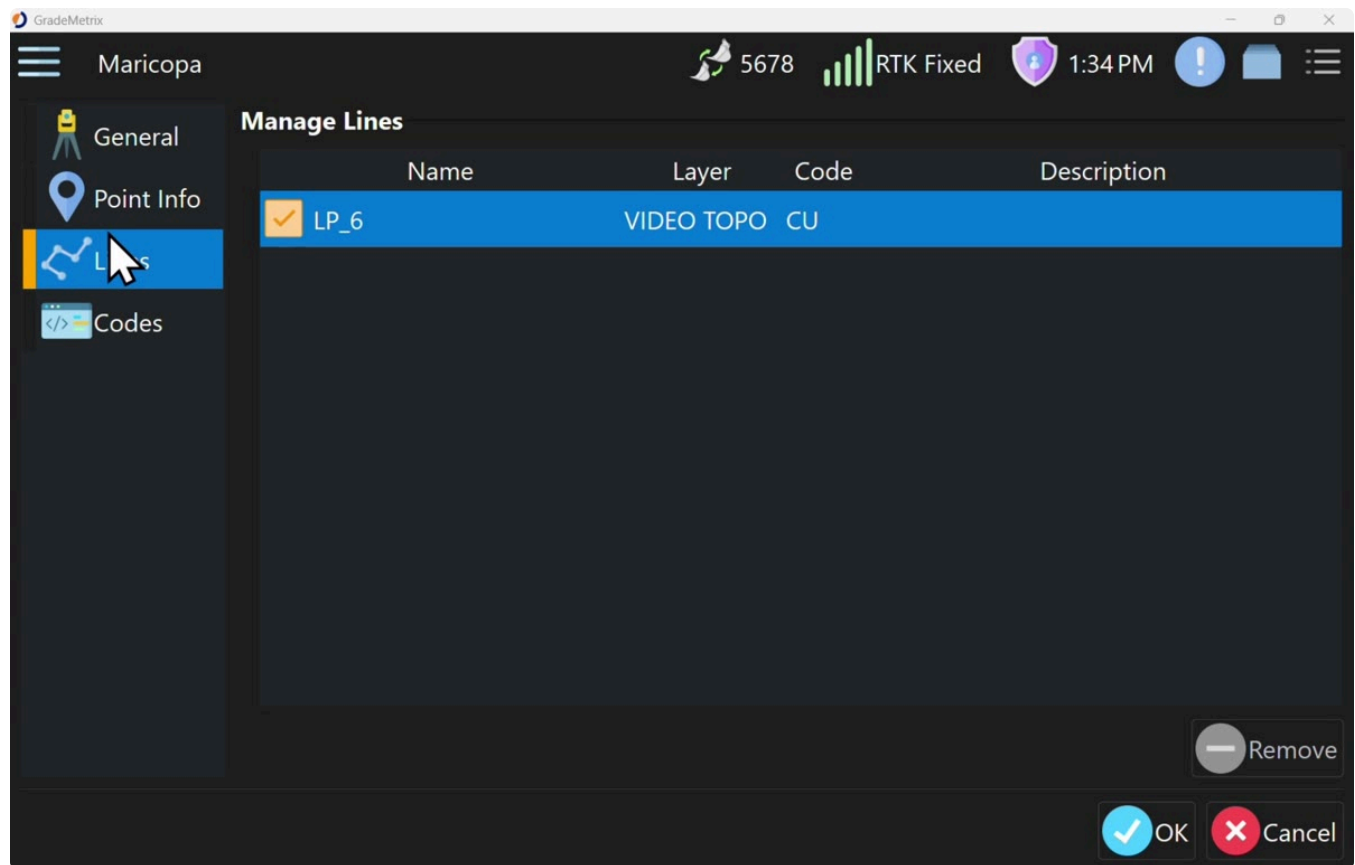


2. Move to the next point on the line and tap **Next**. Repeat for each point.



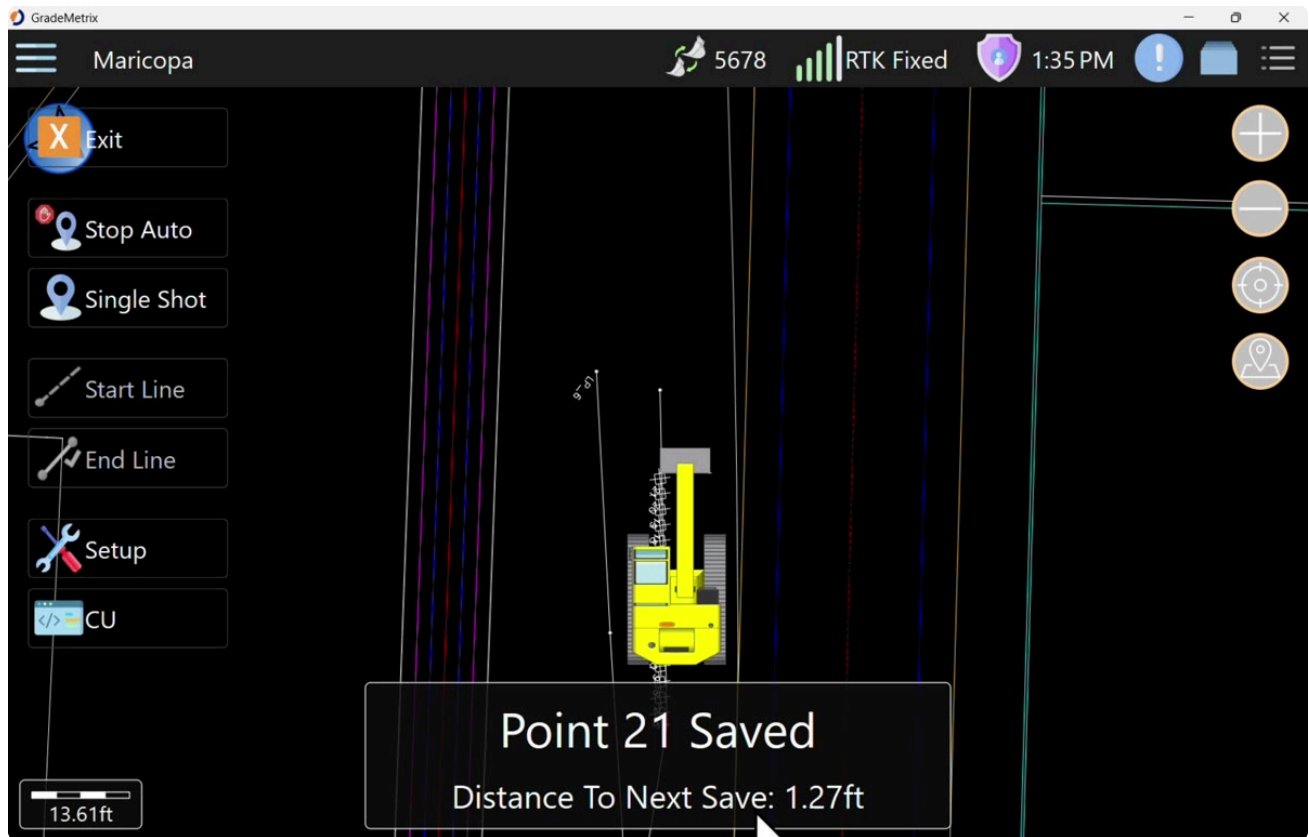
3. Tap **End Line** to finish.

Saved lines appear on the **Lines** tab of Setup with their name, layer and code. Select one and tap **Remove** to delete it.



## Step 6: Save points automatically

1. Tap **Setup**, set **Save Method** to Distance (or Time) and the **Save Every** interval. The video uses 2 ft and then 10 ft. Tap **OK**.
2. Tap **Start Auto**. The button changes to **Stop Auto**, and the box shows "Distance To Next Save".



3. Drive or work along the area. Points are stored at each interval and drawn on the map.

Image — Points stored along a path while auto-saving

4. Tap **Stop Auto** when done.

You can still tap **Single Shot** or record a line while auto-saving is on.

To save by time instead, set **Save Method** to Time and **Save Every** to the number of seconds. The box then shows "Time To Next Save".

Image — Save Method set to Time, every 10 seconds

## Step 7: Vertical offset on a shot

With **Save Method** set to Manual, tick **Allow vertical offset** in Setup.

Image — Allow vertical offset ticked

Now each **Single Shot** opens an **Add Vertical Offset** box. Enter a negative number for cut or a positive number for fill, and tap **OK** to store the point.

Image — Add Vertical Offset box

Tap **Exit** to return to grading. The recorded points and lines stay visible on the plan view.