YOUR CONSTRUCTION TECHNOLOGY PROVIDER

SITECH

Field Reference Guides

EARTHWORKS Compact Grading Attachment
Version 2.9

SITECH XXX

SITECH-XXX.COM

Trimble
Authorized Dealer

System: Earthworks Compact Machine Version: 2.9

Training Guides	Page #
Starting Earthworks	3
Dashboard	4
Select Project, Design and Measured Data	5
Select Project, Design and Measured Data: VCL	6
Create New Project	7
Work Screen	8
Work Screen interface	9
Work Screen Setup	10
Text Ribbon Setup	12
Focus Point	13
Import Data with USB	14
Export Data with USB	15
Cutting Edge Wear / Overcut Protection	16
Verify System Accuracy	17
Vertical Offset / Memories	18
Horizontal Offset / Memories	20
Working Surface	21
Cut and Fill Mapping	22
Record Point	23
Delete / Edit Point	24
Navigate to Point	25
3D Line Guidance	26
Lane Guidance	27
Surface Manager	28
Layers Manager	29
UTS Setup	30
Change Radio Network	32
Level Surface	33
Sloping Surface	34

SITECH TECHNOLOGY DEALER

TRAINING CHECKLIST

System: Earthworks Compact Machine Version: 2.9

Training Checklist		Page #
❑	Starting Earthworks	3
❑	Dashboard	4
❑	Select Project, Design and Measured Data	5
❑	Select Project, Design and Measured Data: VCL	6
❑	Create New Project	7
❑	Work Screen	8
❑	Work Screen interface	9
❑	Work Screen Setup	10
❑	Text Ribbon Setup	12
❑	Focus Point	13
❑	Import Data with USB	14
❑	Export Data with USB	15
❑	Cutting Edge Wear / Overcut Protection	16
❑	Verify System Accuracy	17
❑	Vertical Offset / Memories	18
❑	Horizontal Offset / Memories	20
❑	Cut and Fill Mapping	22
❑	Record Point	23
❑	Delete / Edit Point	24
❑	Navigate to Point	25
❑	3D Line Guidance	26
❑	Lane Guidance	27
❑	Surface Manager	28
❑	Layers Manager	29
❑	UTS Setup	30
❑	Change Radio Network	32
❑	Level Surface	33
❑	Sloping Surface	34

Customer Copy

Training Acknowledgement:

Customer Signature **Date** **SITECH Representative** **Date**

SITECH TECHNOLOGY DEALER

TRAINING CHECKLIST

System: Earthworks Compact Machine Version: 2.9

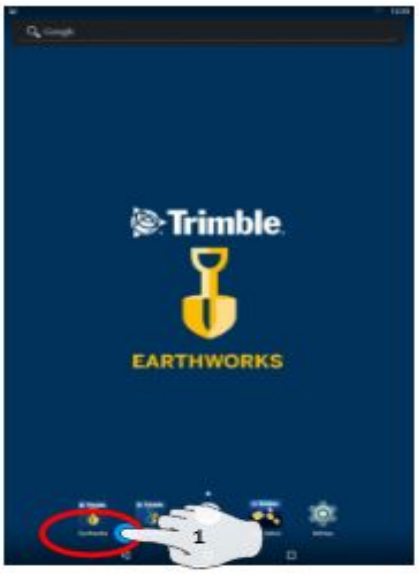
Training Checklist		Page #
❑	Starting Earthworks	3
❑	Dashboard	4
❑	Select Project, Design and Measured Data	5
❑	Select Project, Design and Measured Data: VCL	6
❑	Create New Project	7
❑	Work Screen	8
❑	Work Screen interface	9
❑	Work Screen Setup	10
❑	Text Ribbon Setup	12
❑	Focus Point	13
❑	Import Data with USB	14
❑	Export Data with USB	15
❑	Cutting Edge Wear / Overcut Protection	16
❑	Verify System Accuracy	17
❑	Vertical Offset / Memories	18
❑	Horizontal Offset / Memories	20
❑	Cut and Fill Mapping	22
❑	Record Point	23
❑	Delete / Edit Point	24
❑	Navigate to Point	25
❑	3D Line Guidance	26
❑	Lane Guidance	27
❑	Surface Manager	28
❑	Layers Manager	29
❑	UTS Setup	30
❑	Change Radio Network	32
❑	Level Surface	33
❑	Sloping Surface	34

SITECH Copy

Training Acknowledgement:

Customer Signature **Date** **SITECH Representative** **Date**

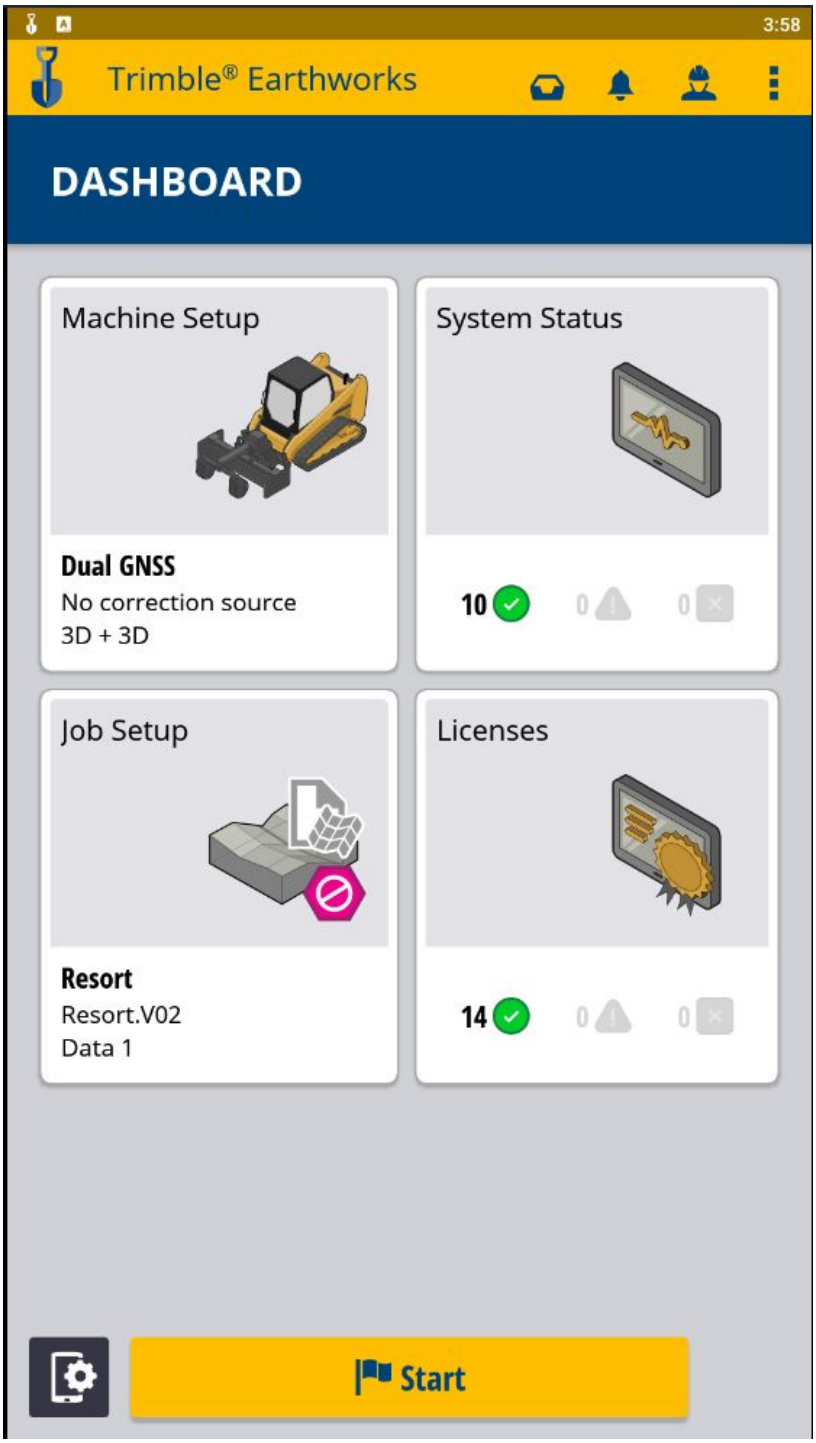
Starting Earthworks



1. Touch EarthWorks

2. Select Operator
3. Enter Password if required and touch Login

Dashboard



Machine Setup

Guidance

- Position Source
- Correction Source

Attachments

- Attachment Name

Job Setup

- Select or Create project
- Select or Create Design
- Select or Create new Measured Data Folder
- Select Mode: Depth and Slope, Design, Infield

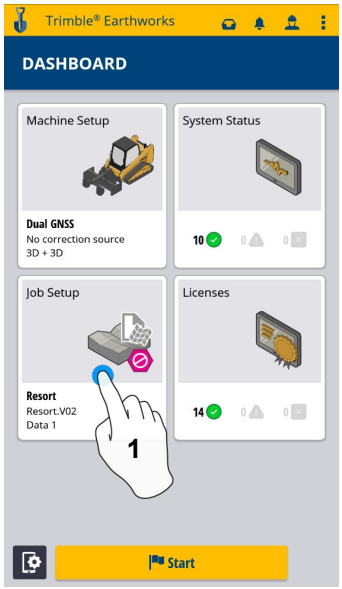
System status

- Status of Devices
- Component warnings

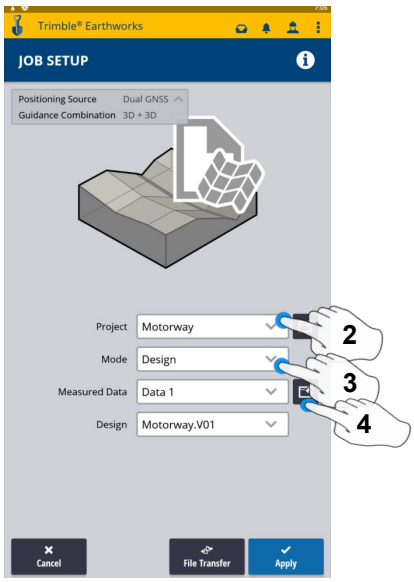
Licenses

- EC520 Licenses
- TD520 Licenses
- GNSS Receiver Licenses

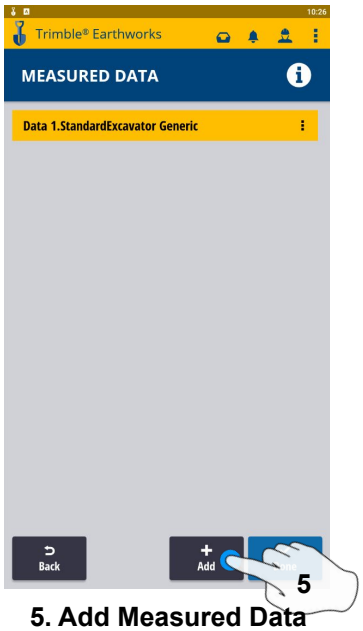
Select Project, Design and Measured Data



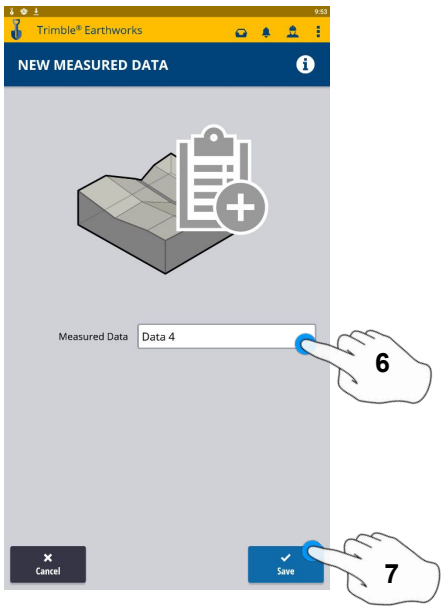
1. Touch Job Setup



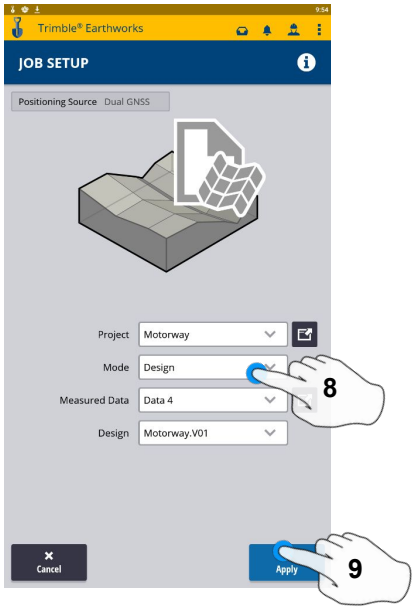
2. Touch project
3. Touch Mode
4. Measured Data (Create New)



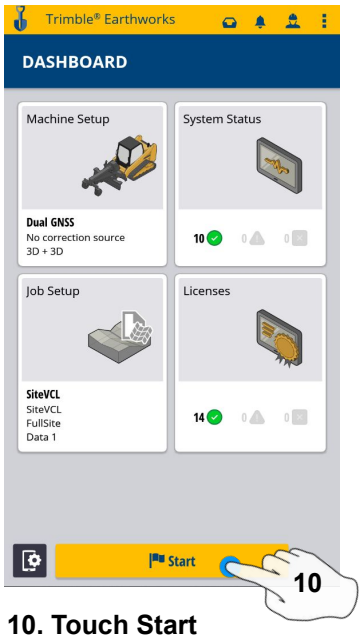
5. Add Measured Data



6. Type New Measured Data Name
7. Touch Save on next screen
   Touch Done

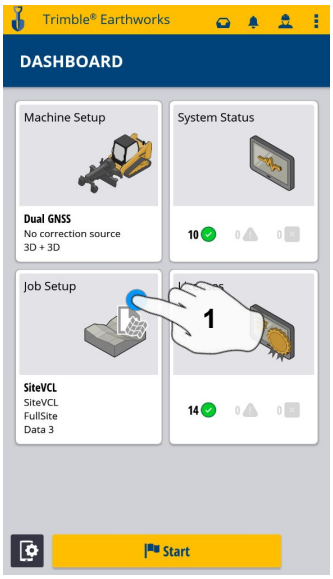


8. Touch Design
9. Touch Apply

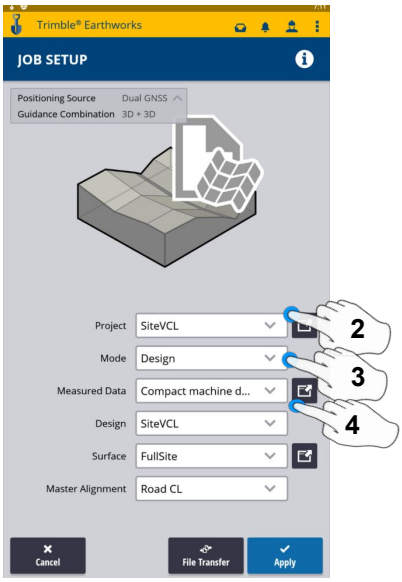


10. Touch Start

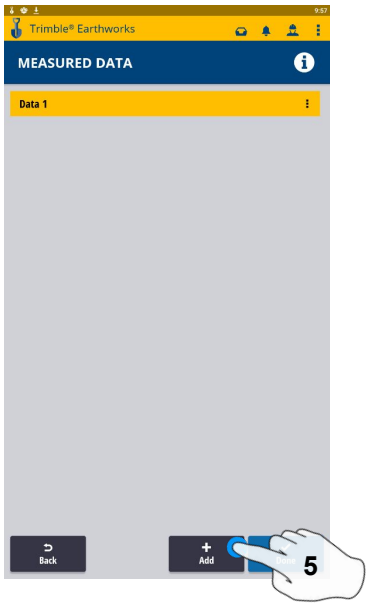
Select Project, Design and Measured Data: VCL



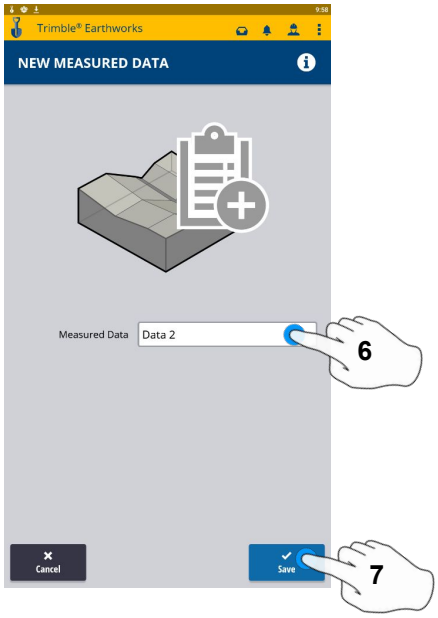
1. Touch Job Setup



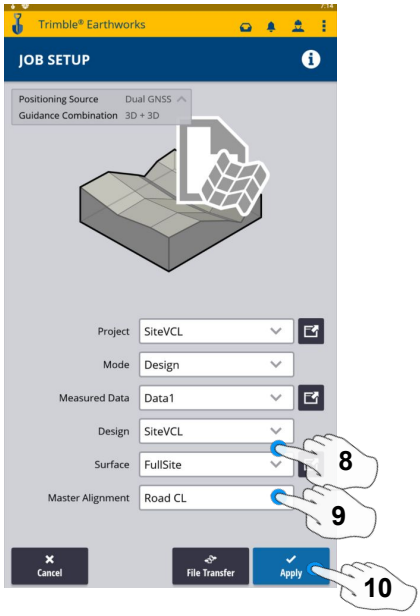
2. Touch Project- Select Project
3. Touch Mode- Select Design
4. Touch Measured Data



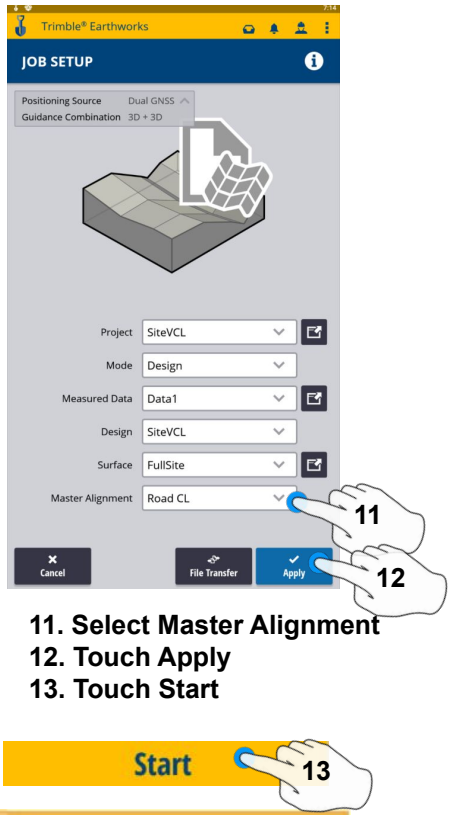
5. Add Measured Data



6. Type New Measured Data Name
7. Touch Save on next screen touch Done

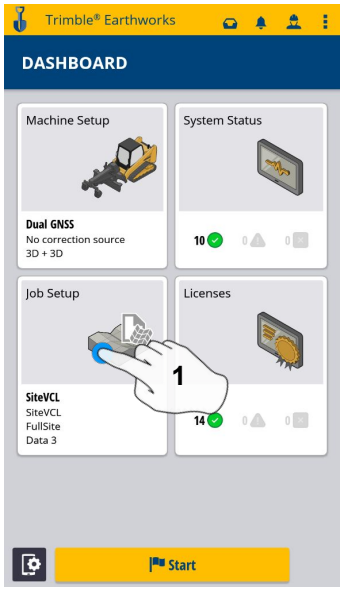


8. Touch Design- Select Design that Contains a VCL
9. Touch Surface- Select Surface
10. Touch Apply

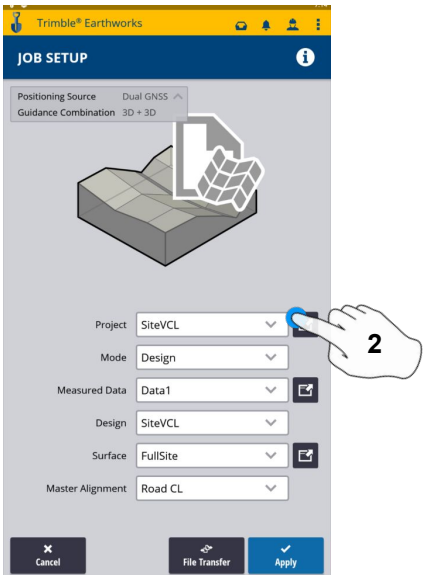


11. Select Master Alignment
12. Touch Apply
13. Touch Start

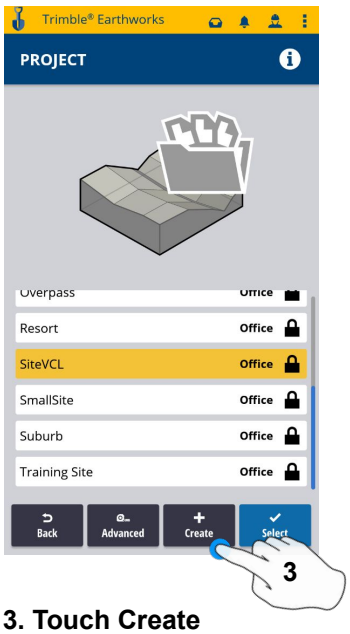
Create New Project



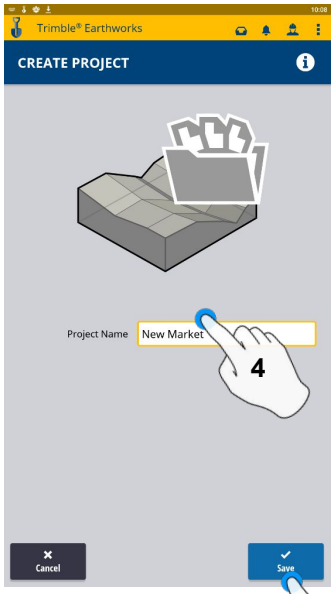
1. Touch Job Setup



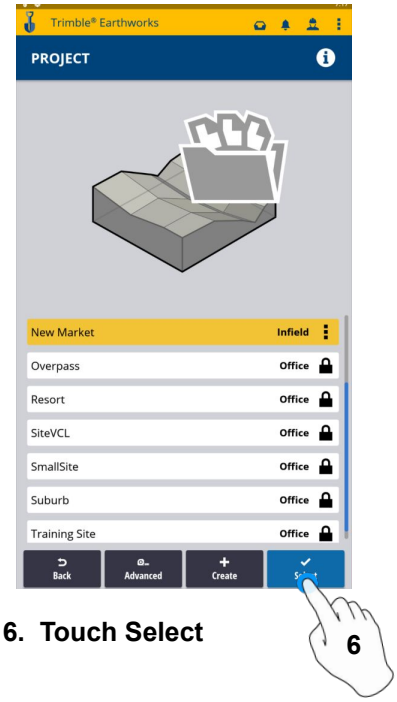
2. Touch Project



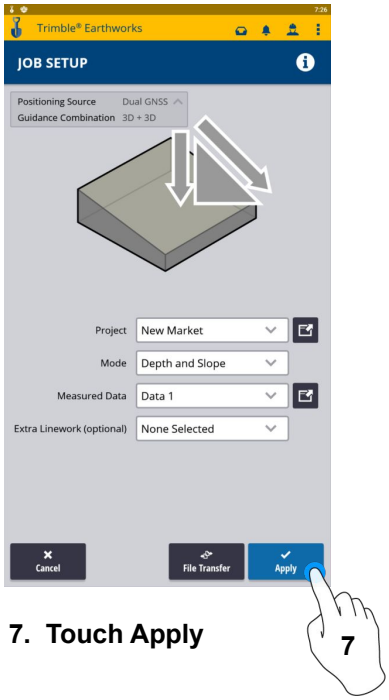
3. Touch Create



4. Enter Project Name
5. Touch Save



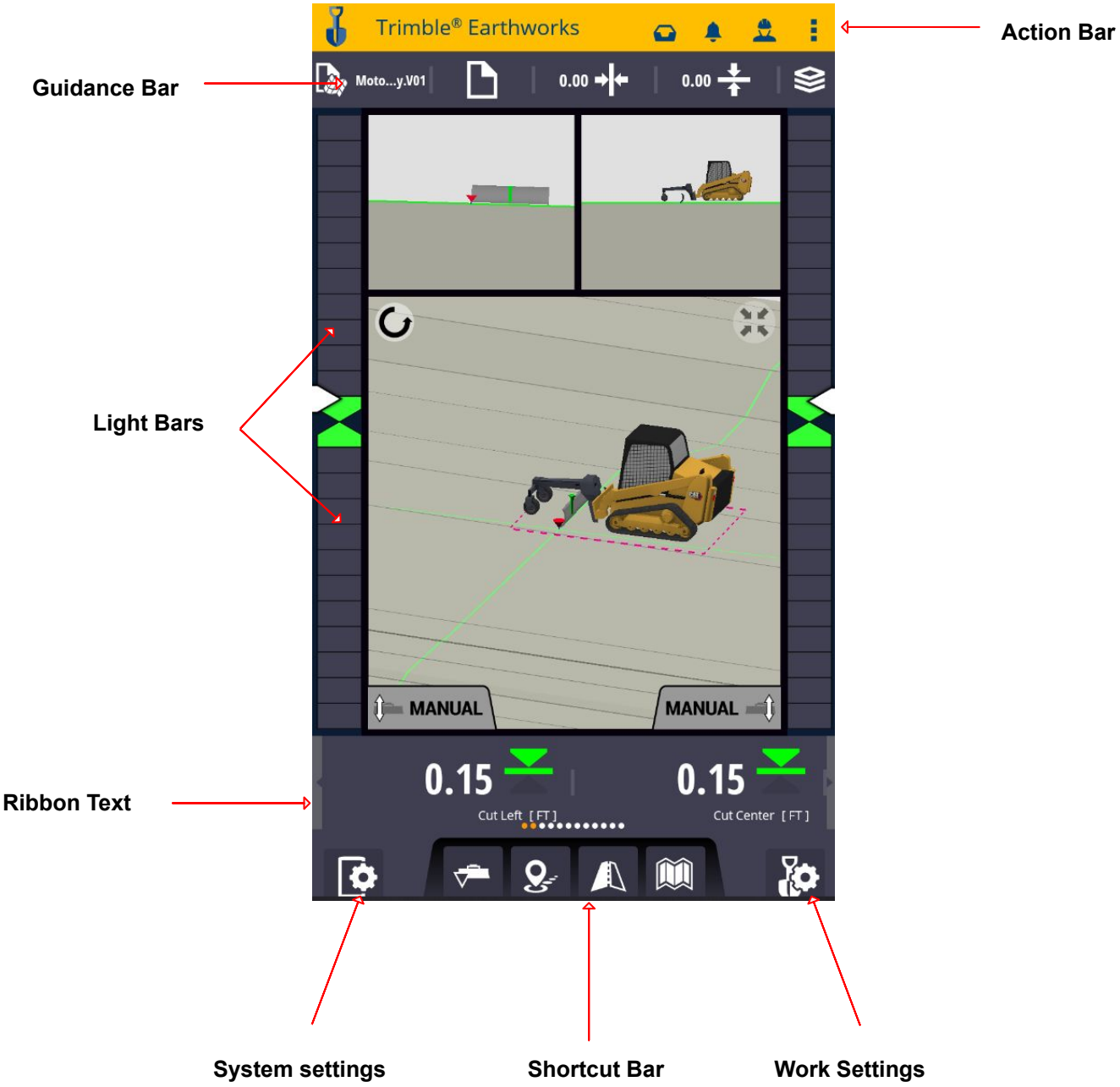
6. Touch Select



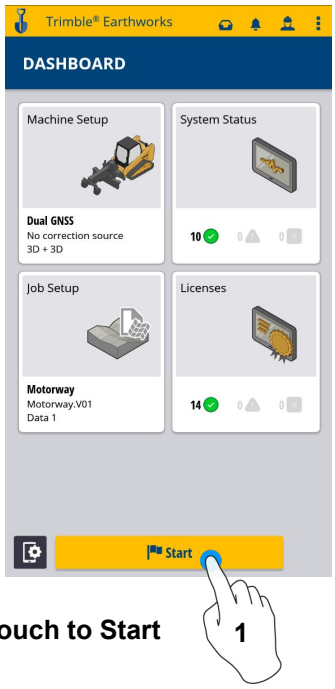
7. Touch Apply

8. Touch Start

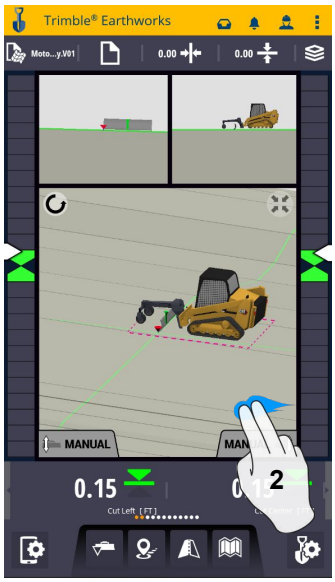
Work Screen


Trimble® Earthworks
Action Bar
Guidance Bar
Moto...y.V01
0.00
0.00
Light Bars
MANUAL
MANUAL
0.15
0.15
Ribbon Text
Cut Left [FT]
Cut Center [FT]
System settings
Shortcut Bar
Work Settings

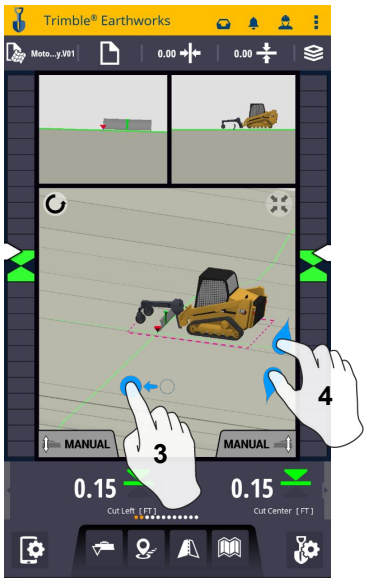
Work Screen Interface



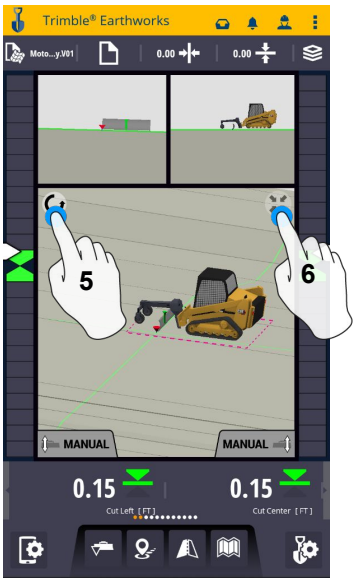
1.Touch to Start



2. 2 Finger Swipe to Change View

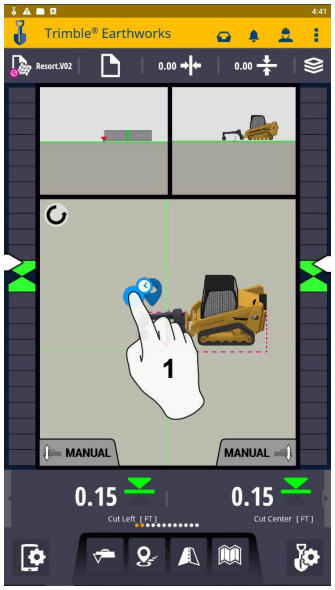


3. Drag to Pan
4. Pinch-Spread to Zoom in-out

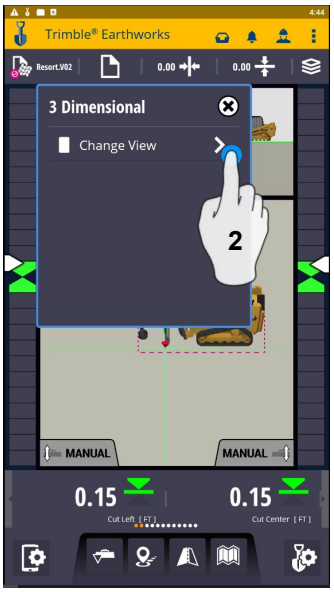


5. Touch to select Pan or Rotate
6. Touch to re-center

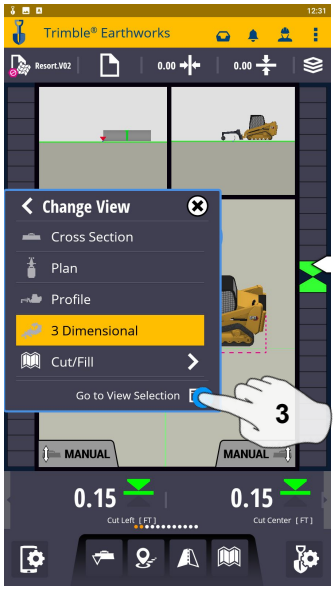
Work Screen Setup



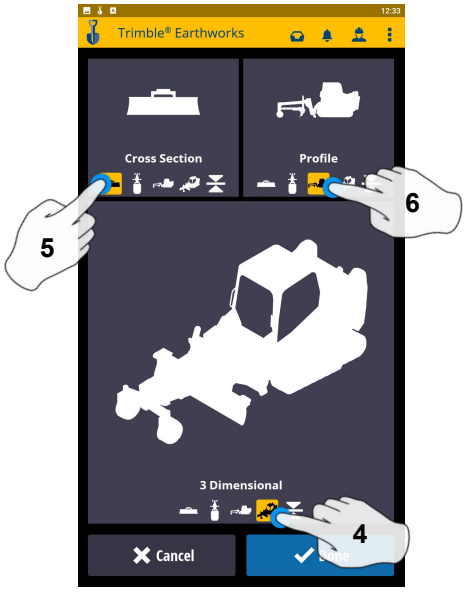
1. Touch and Hold



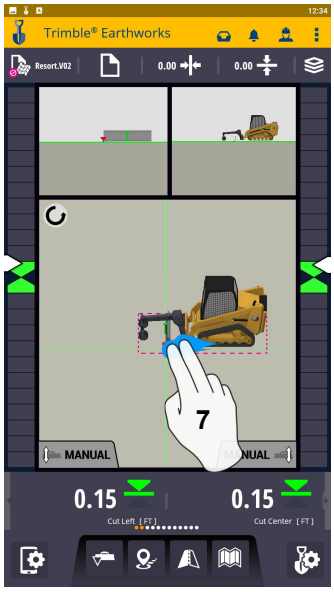
2. Touch Change View



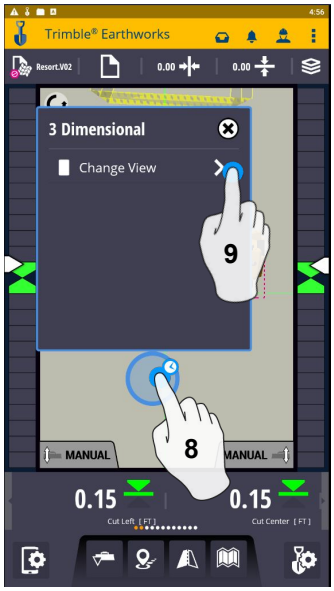
3. Touch View Selection



4. Touch 3 Dimensional
5. Touch Cross Section
6. Touch Plan

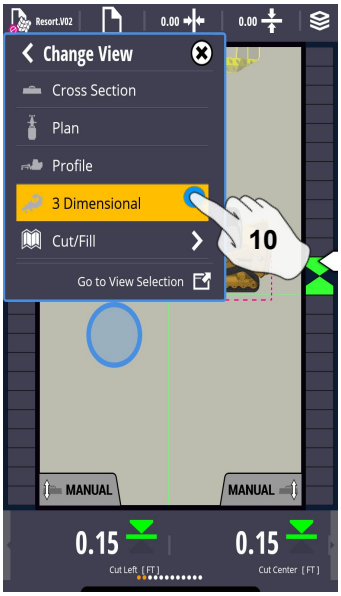


7. 2 Finger swipe to 1 view screen

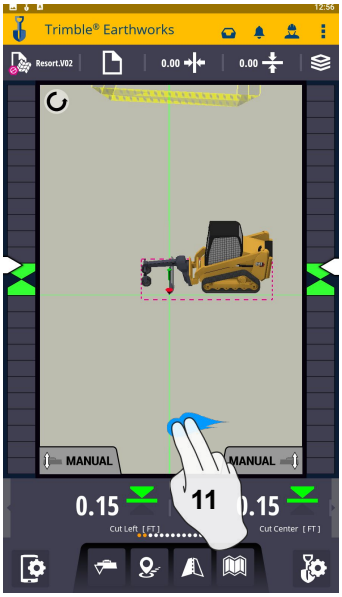


8. Touch and hold
9. Touch Change View

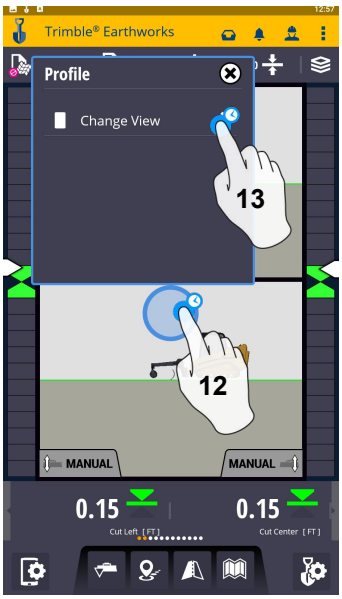
Work Screen Setup: Continued



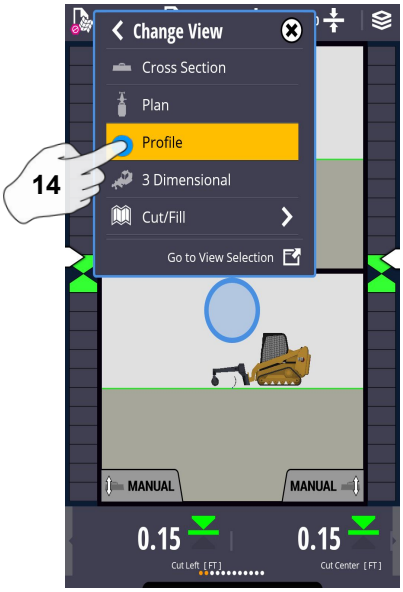
10. Touch 3D



11. 2 Finger swipe to 2 view screen

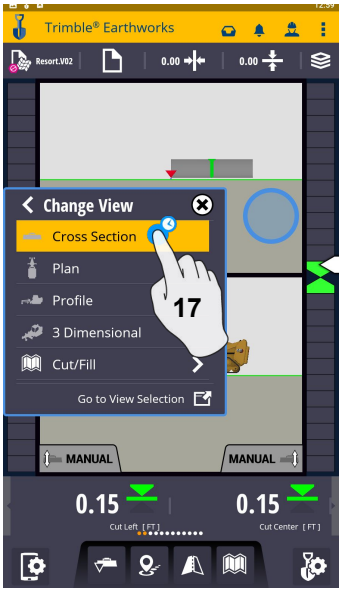


12. Touch and Hold
13. Touch Change View



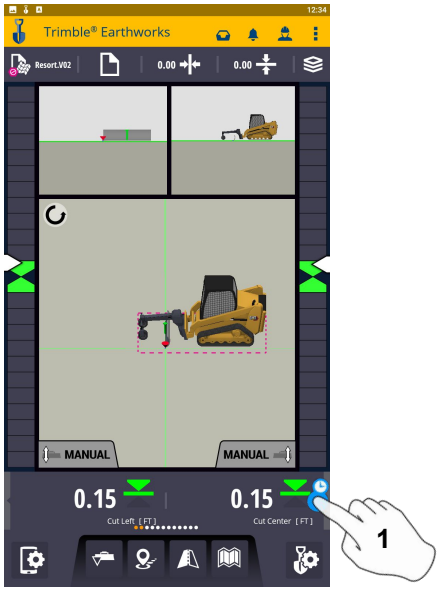
14. Touch Profile

15. Touch and Hold
16. Touch Change View

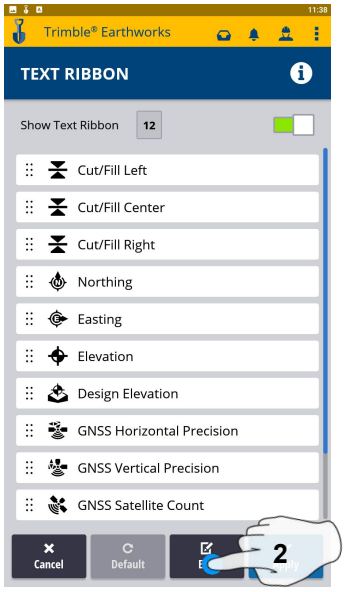


17. Touch Cross Section

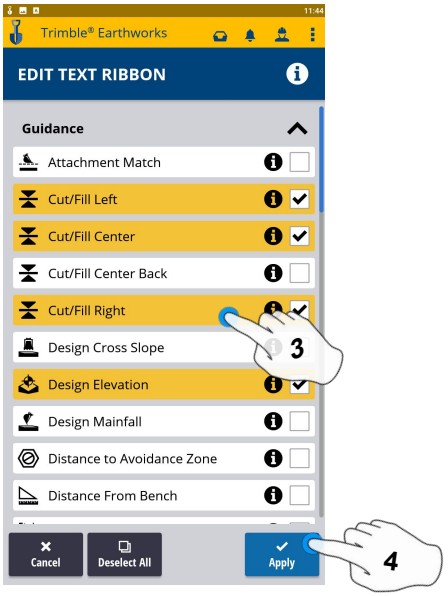
Text Ribbon Setup



1. Touch and Hold Text Ribbon



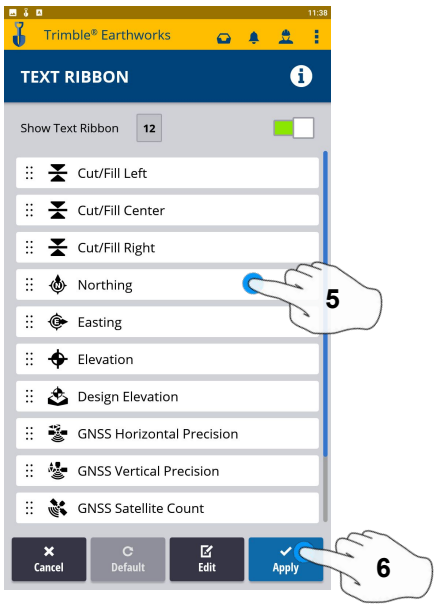
2. Touch Edit



3.. Touch each Text Item

- **Cut/Fill Left**
- **Offline**
- **Station**
- **Cut/Fill right**
- **Northing**
- **Easting**
- **Elevation**
- **Design Elevation**
- **Design Cross Slope**
- **Design Mainfall**
- **Vertical GNSS Precision**
- **Satellite Count**

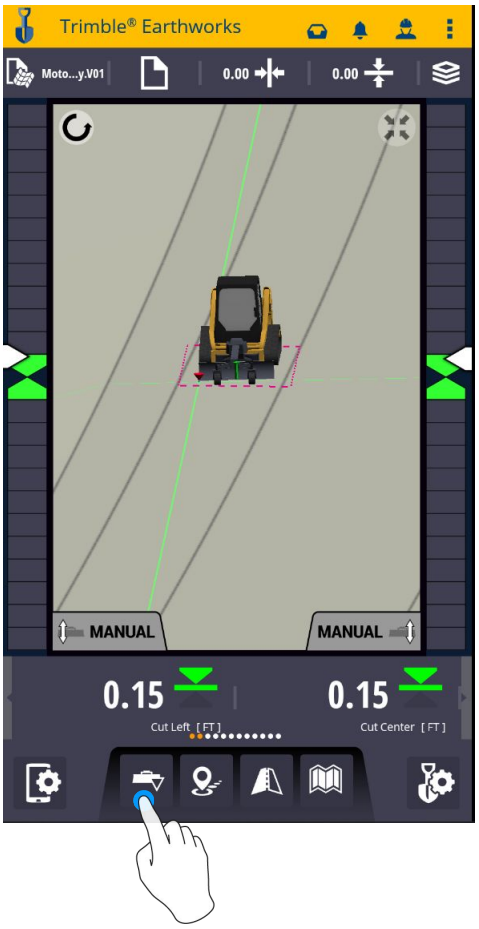
4. Touch Apply

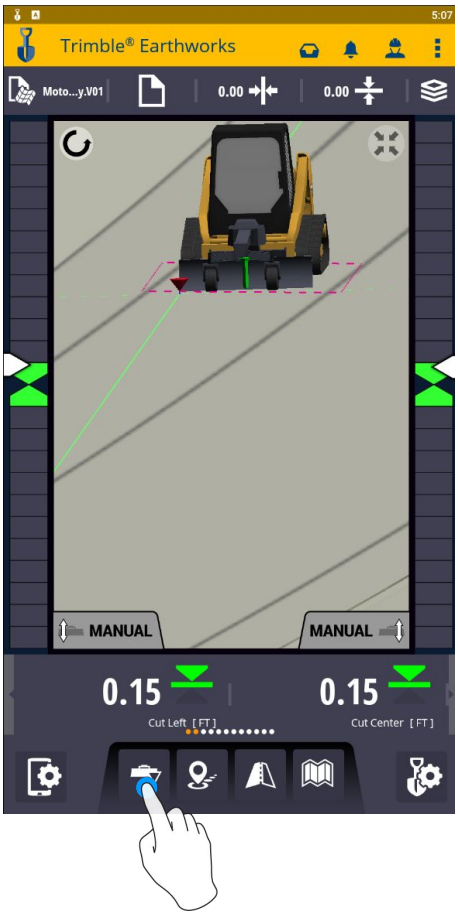


5. Touch-hold-drag to change position

6. Touch Apply

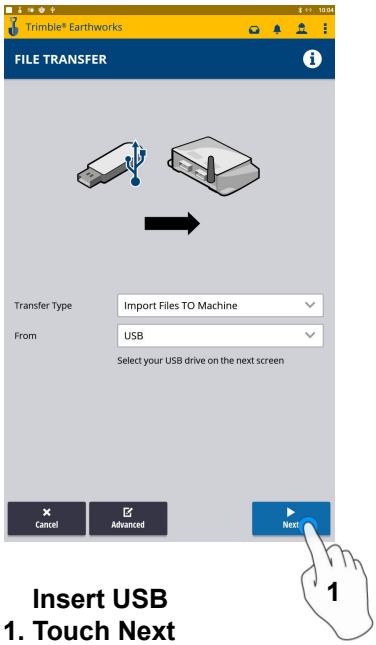
Focus Point





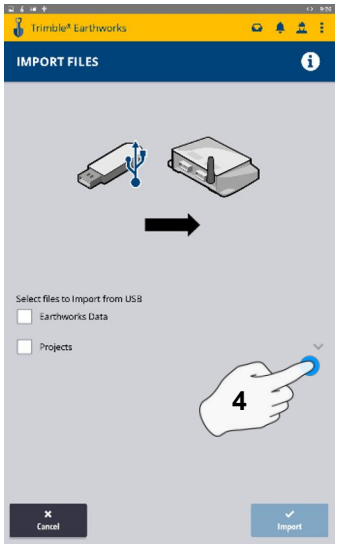
Touch Bucket Focus to Change Focus point

Import Data With USB

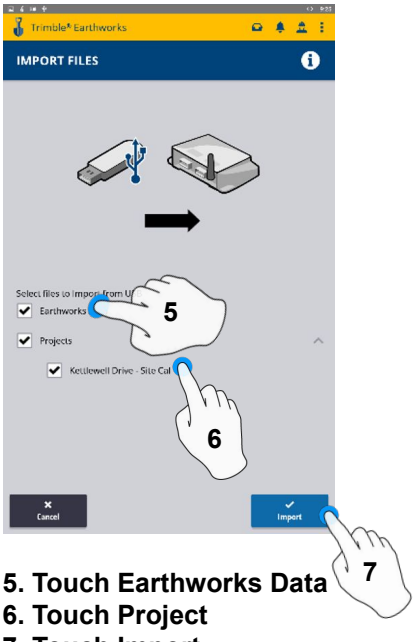


Insert USB
1. Touch Next

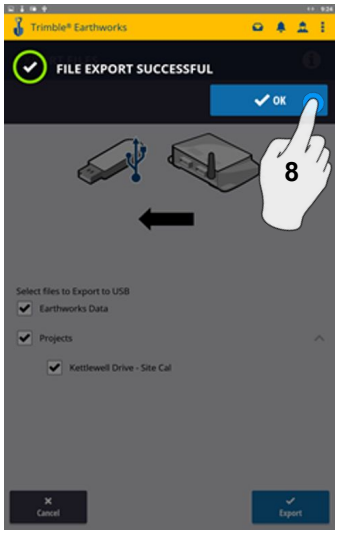
2. Touch USB
3. Touch Select



4. Touch "V"

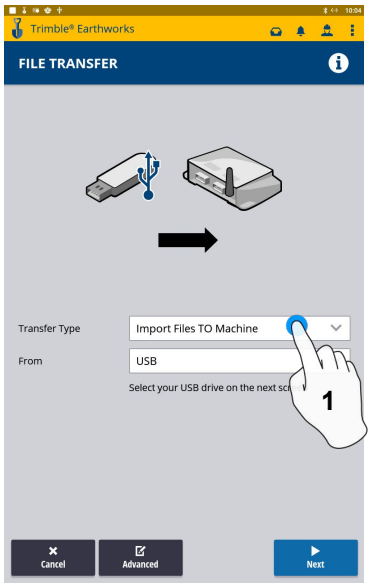


5. Touch Earthworks Data
6. Touch Project
7. Touch Import

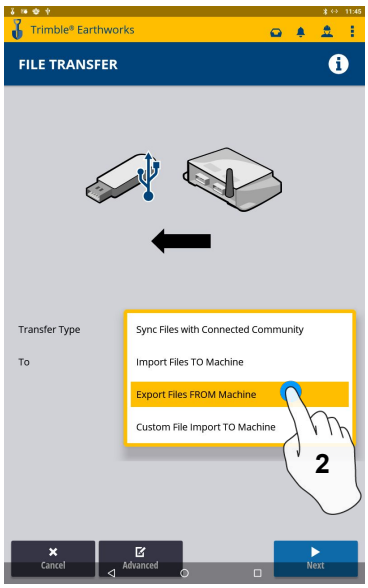


8. Touch OK

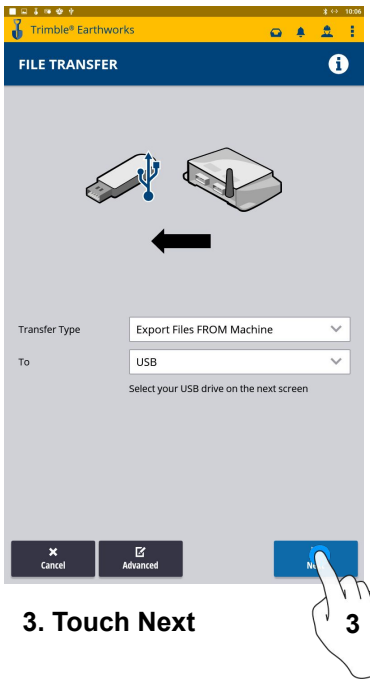
Export Data With USB



Insert USB
1. Touch Transfer Type

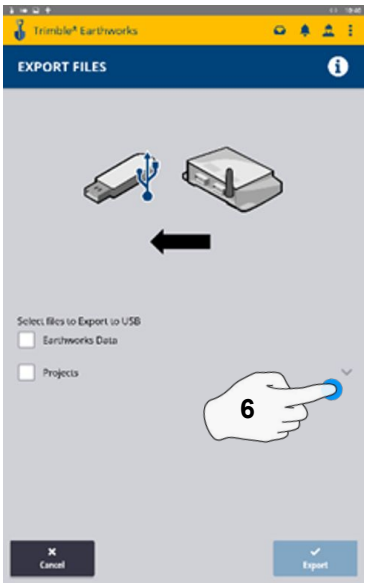


2. Touch Export Files

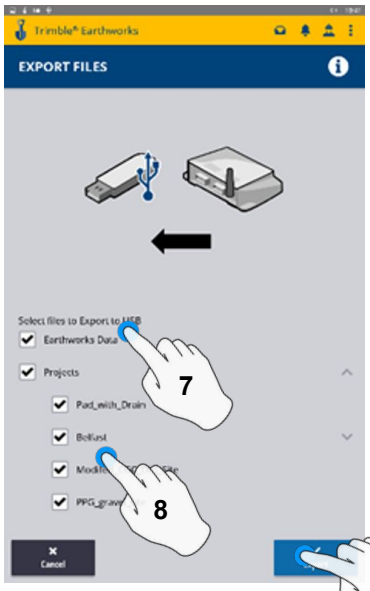


3. Touch Next

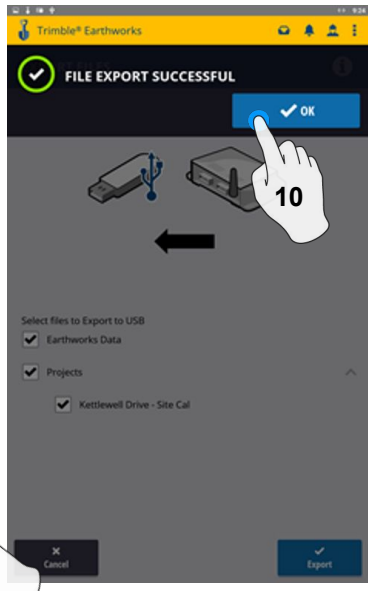
4. Touch USB
5. Touch Select



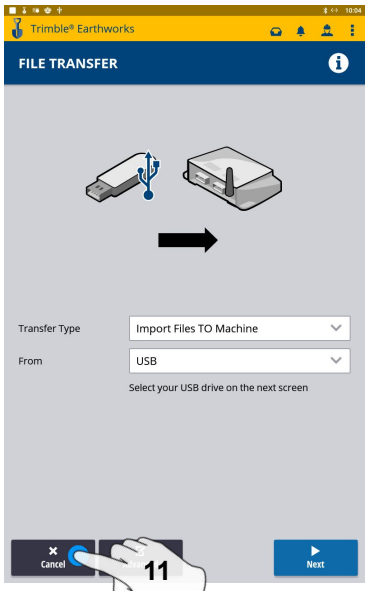
6. Touch "V"



7. Touch Earthworks Data
8. Touch Projects
9. Touch Export

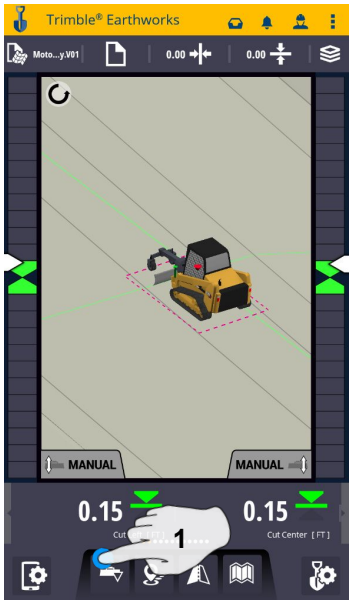


10. Touch OK

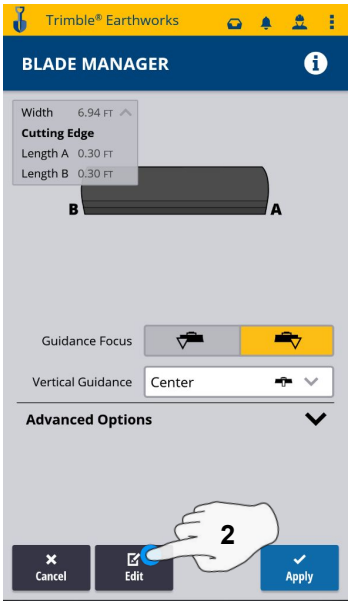


11. Touch Cancel
Remove USB

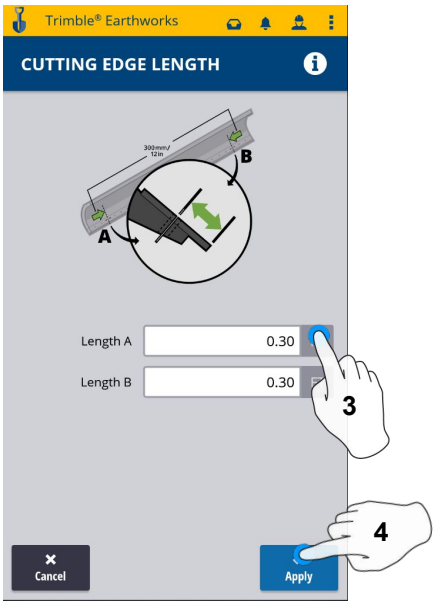
Cutting Edge Wear / Overcut Protection



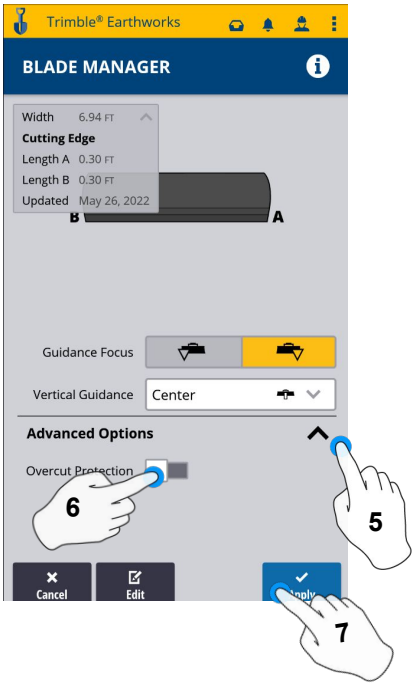
1. Touch and Hold Blade Focus



2. Touch Edit



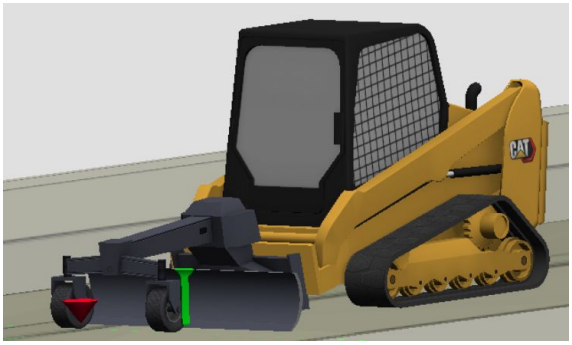
3. Enter Measured Length
4. Touch apply



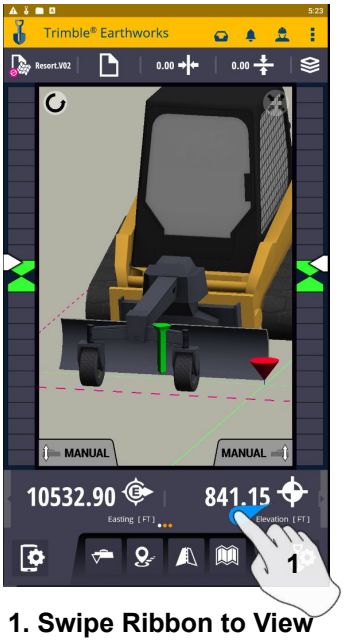
5. Touch Advanced Options
6. Touch Overcut protection to Turn On/Off
7. Touch Save

Verify System Accuracy

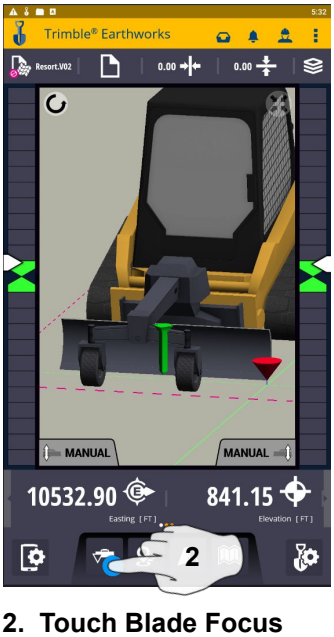
Verify the System accuracy by checking into a Bench Point



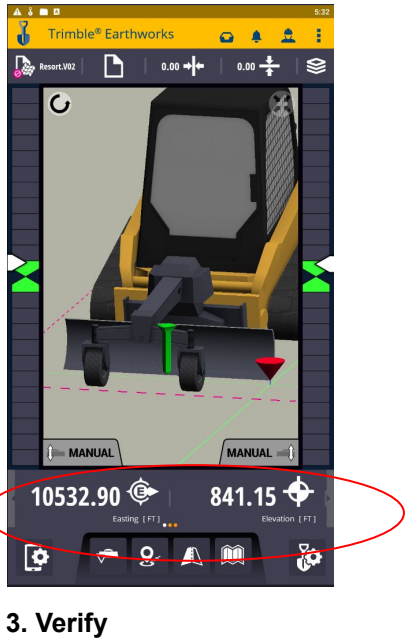
Position the Blade Tip over the Bench point



1. Swipe Ribbon to View Northing, Easting, Elevation



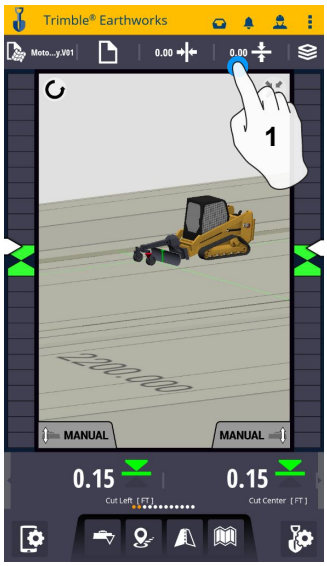
2. Touch Blade Focus Select Point on Blade to Measure



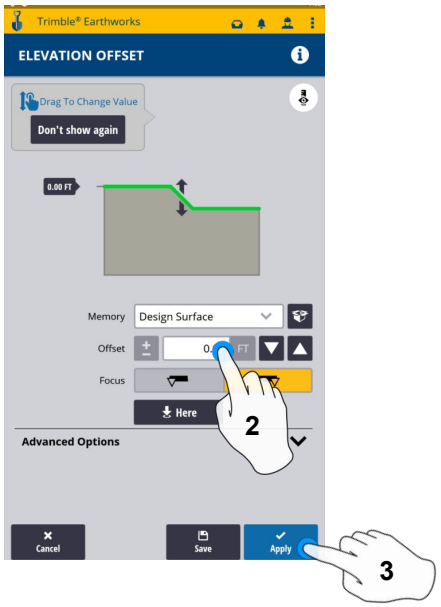
3. Verify Northing, Easting, Elevation

See Supervisor if Northing, Easting,and Elevation do not match Project Tolerances

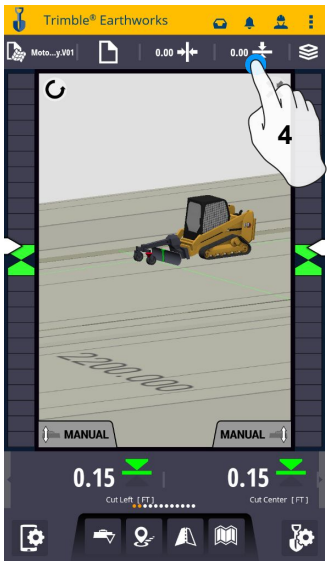
Vertical Offset / Memories



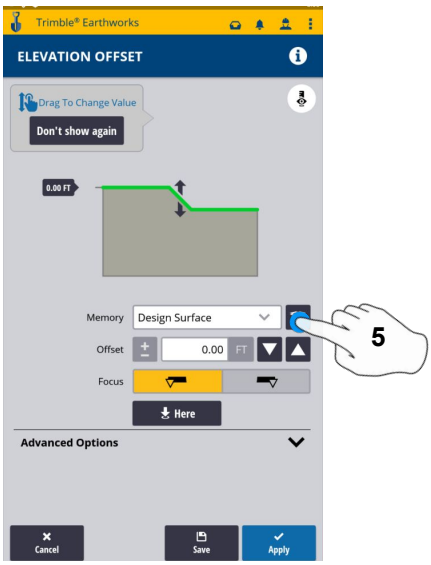
1. Touch and Hold Vertical Offset



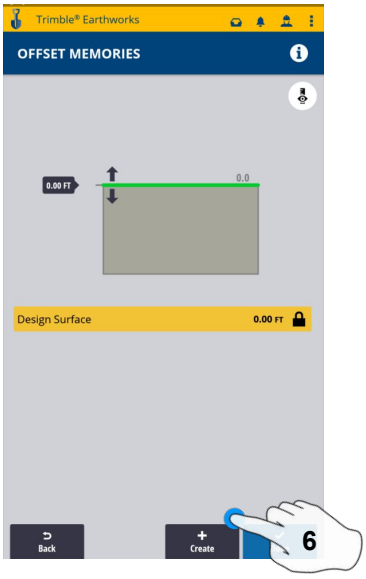
2. Enter Offset
3. Touch Apply to Use Immediately



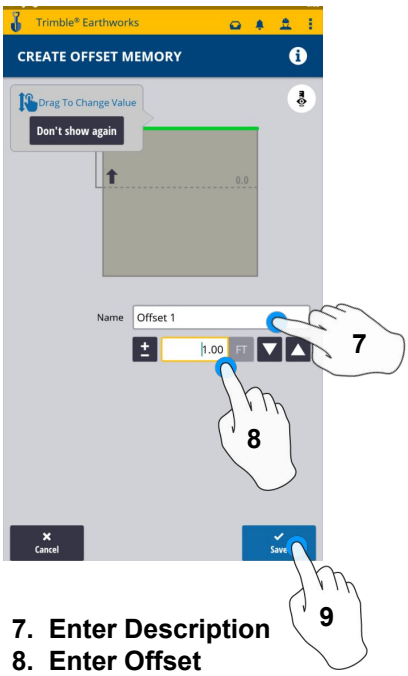
4. Touch and Hold Vertical Offset



5. Touch Memories

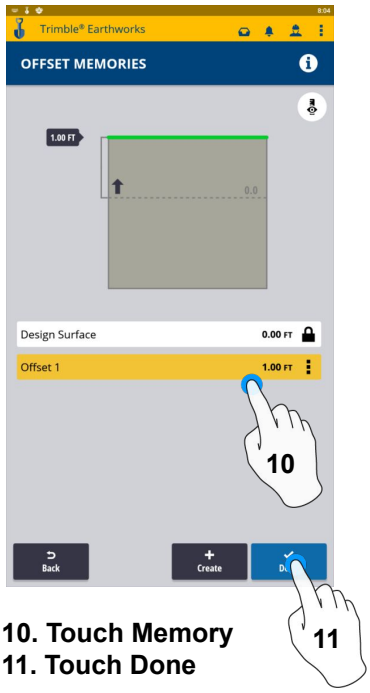


6. Touch Create to Add New Offset

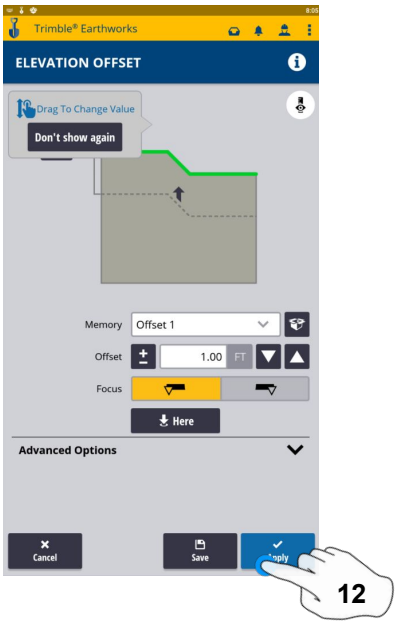


7. Enter Description
8. Enter Offset
9. Touch Save

Vertical Offset / Memories Cont:

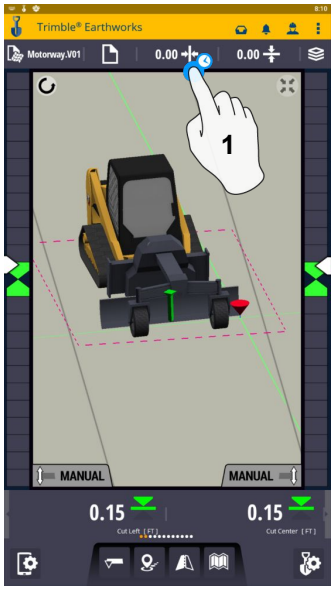


10. Touch Memory
11. Touch Done

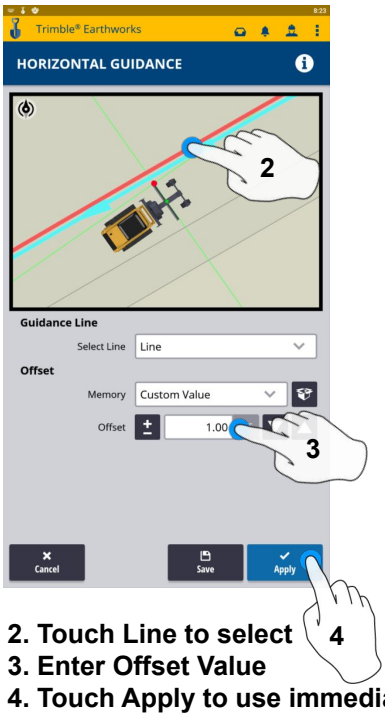


12. Touch Apply

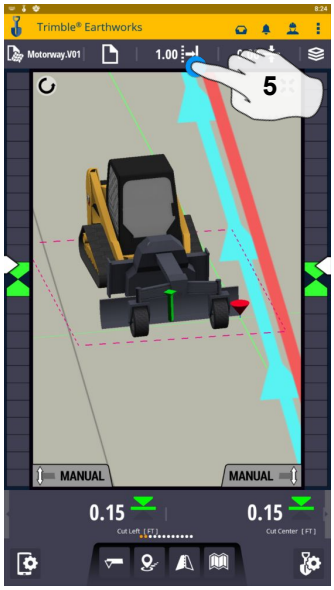
Horizontal Offset / Memories



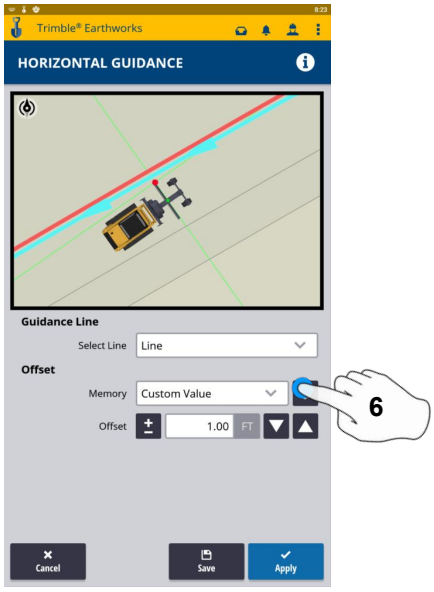
1. Touch and Hold Horizontal Offset or touch to cycle through memories



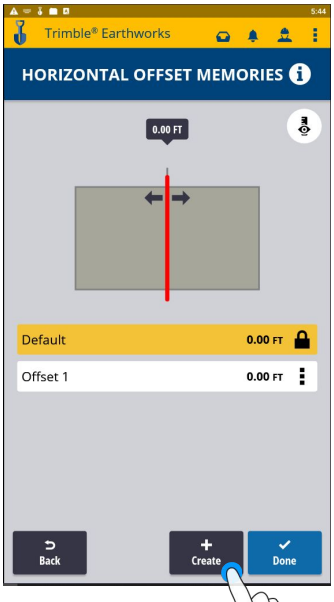
2. Touch Line to select
3. Enter Offset Value
4. Touch Apply to use immediately



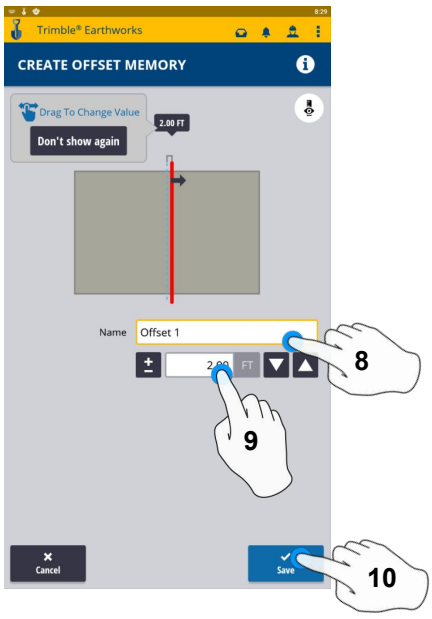
5. Touch and Hold Horizontal Offset



6. Touch Memories

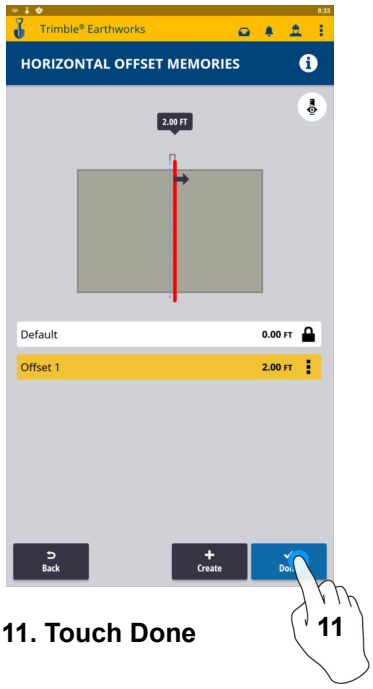


7. Touch Create

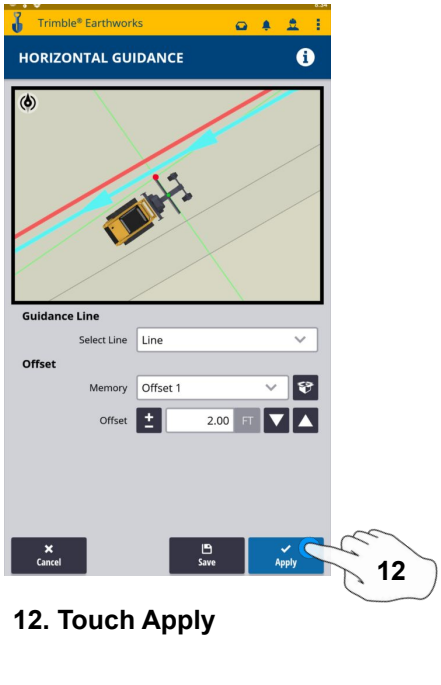


8. Name Offset to be saved
9. Enter Offset Value
10. Touch Save

Horizontal Offset / Memories Cont:

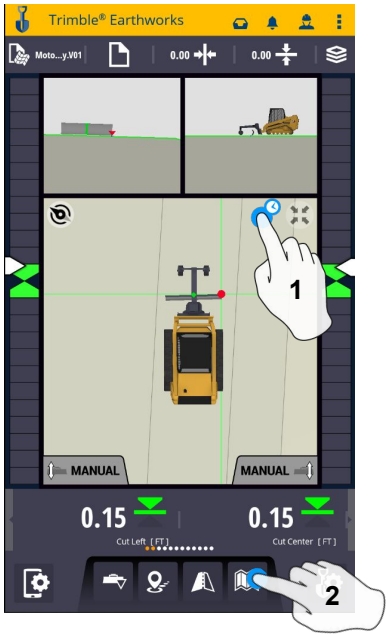


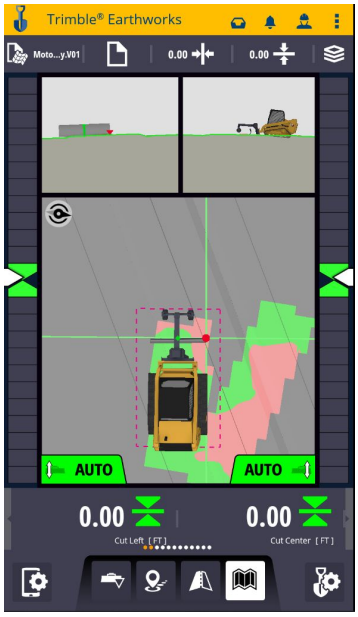
11. Touch Done



12. Touch Apply

Cut and Fill Mapping

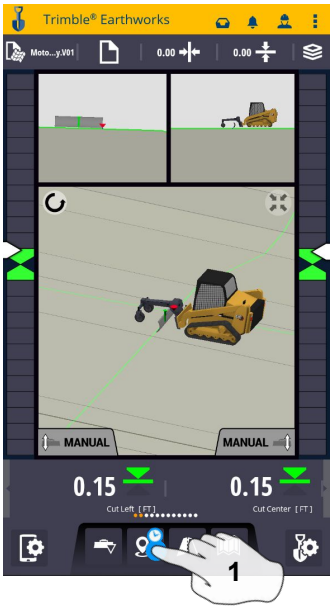




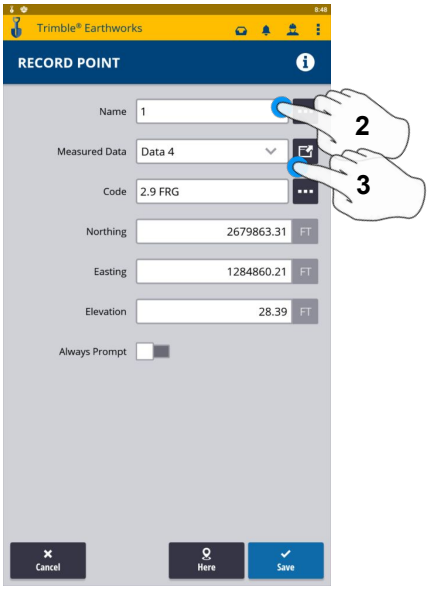
1. Touch and Hold screen to change to plan view
2. Press Mapping Icon to view

****Cut Fill Mapping will only be visible in Plan, Cross section, and Profile views****

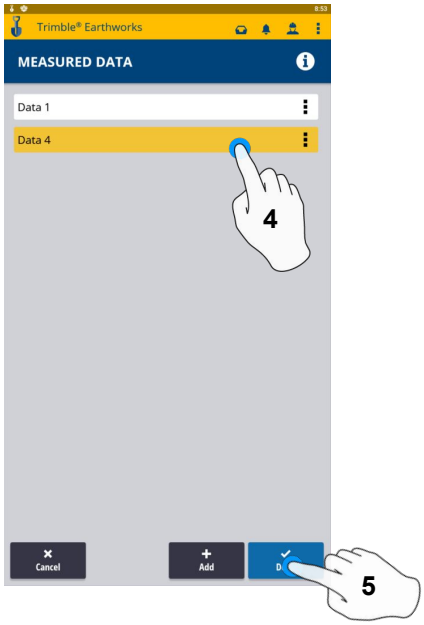
Record Point



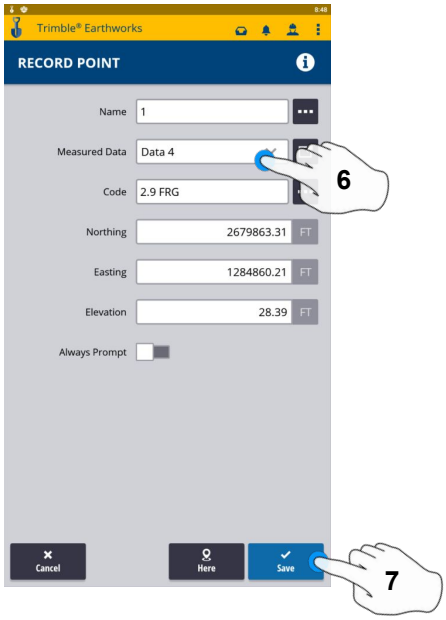
1. Press and Hold Record Point



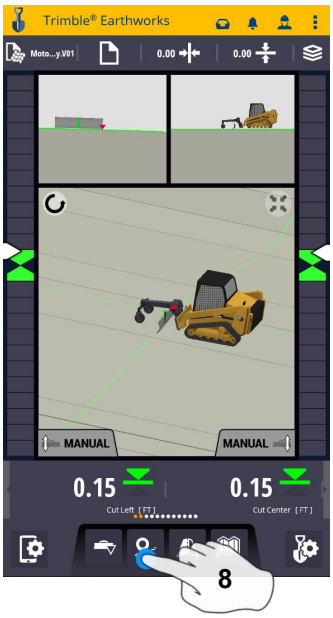
2.Touch to Edit Name
3.Select or create Measured Data



4. Select Work order for point location
5. Select done



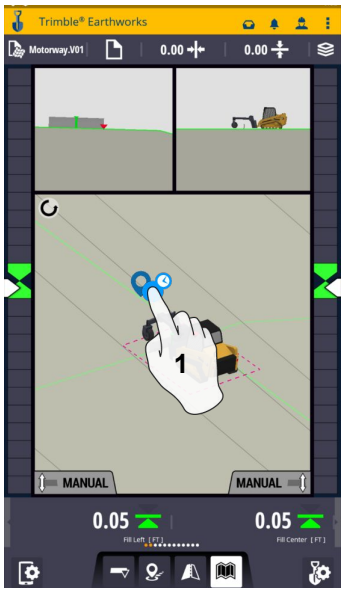
6. Type Code
7. Touch Save to record point



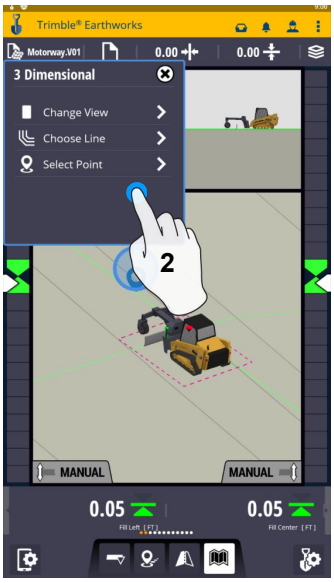
8. Touch Point Icon Records Point

**** Note- After recording a point, it will save automatically in the Measured Data folder Created during project setup. ****

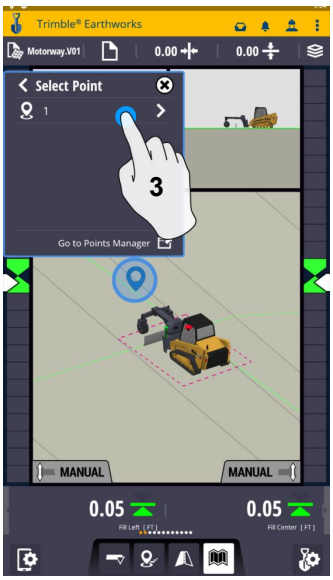
Delete / Edit Point



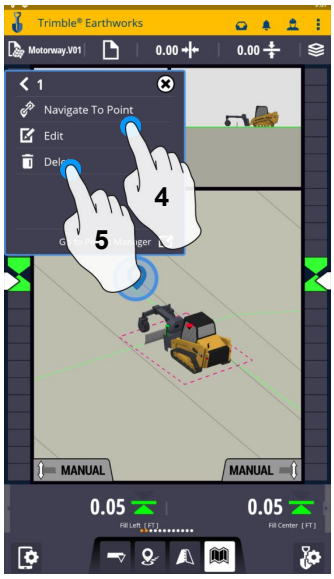
1. Touch and Hold over point



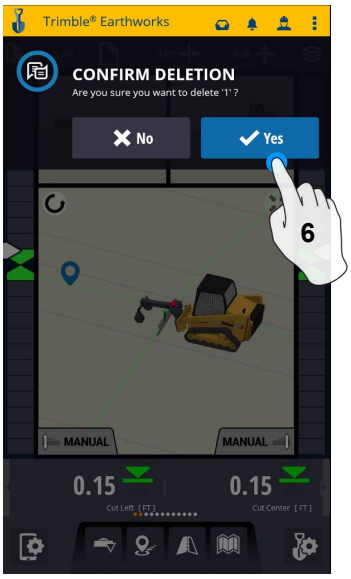
2. Touch Select Point



3. Select Point

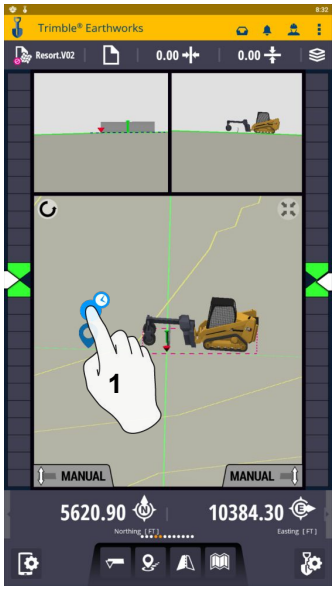


4. Touch Edit to Edit Point
5. Touch Delete

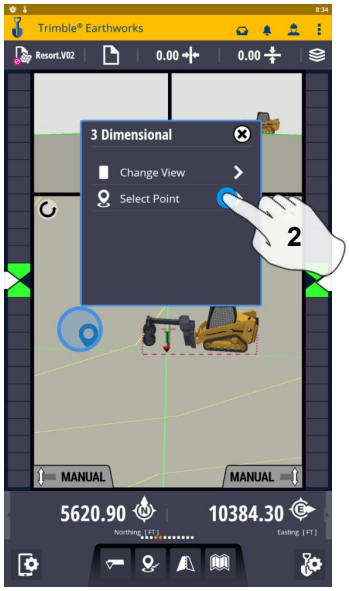


6. Confirm Delete
(Once Deleted it can no longer viewed)

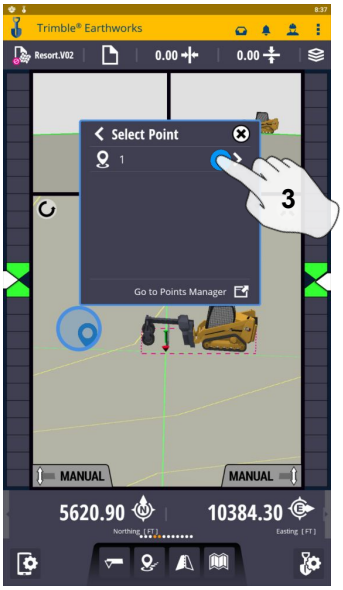
Navigate to Point



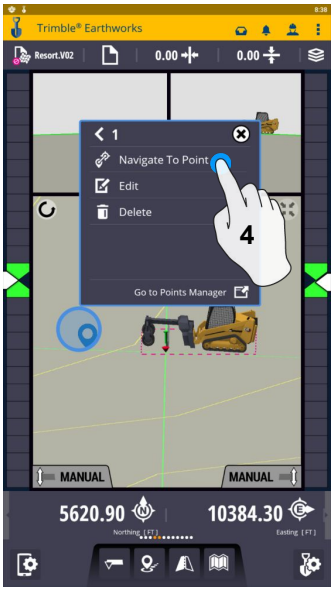
1. Touch and Hold on Point



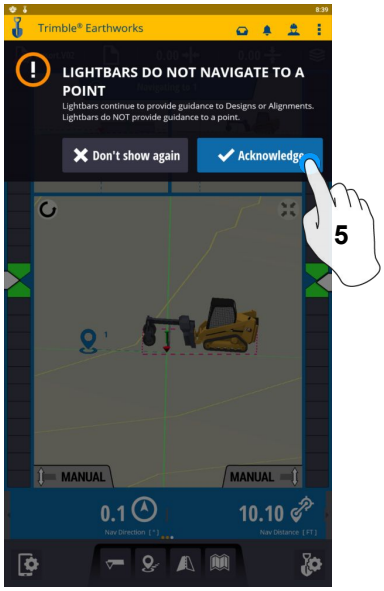
2. Touch Select Point



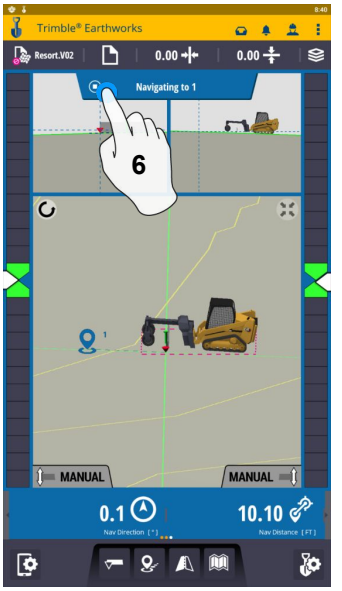
3. Select Point



4. Touch Navigate to point

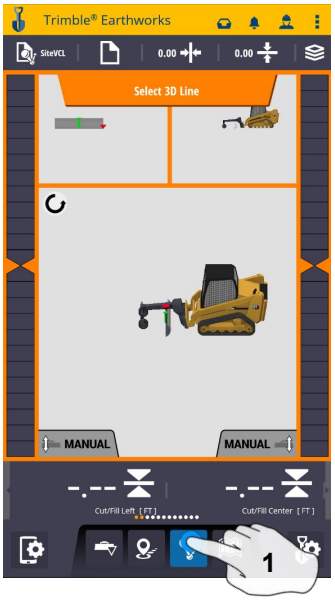


5. Touch Acknowledge

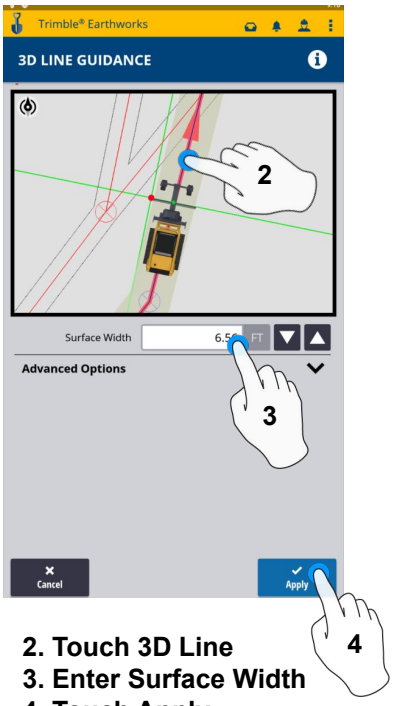


6. Touch Stop Icon once complete

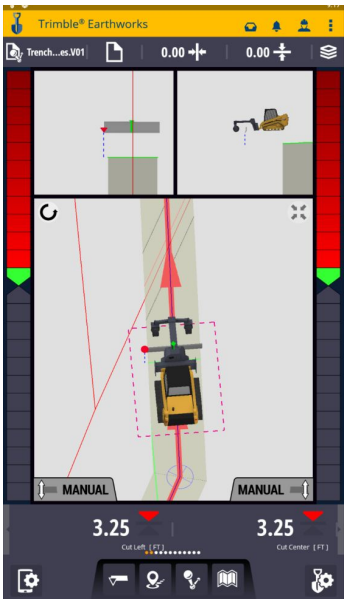
3D Line Guidance



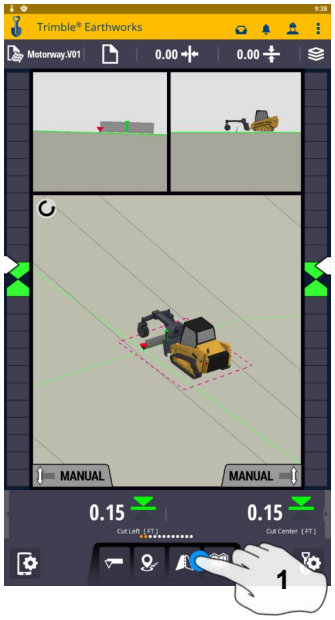
1. Touch 3D Line Select



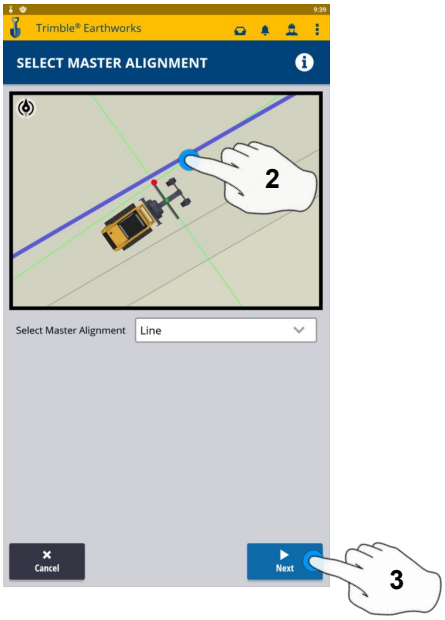
2. Touch 3D Line
3. Enter Surface Width
4. Touch Apply



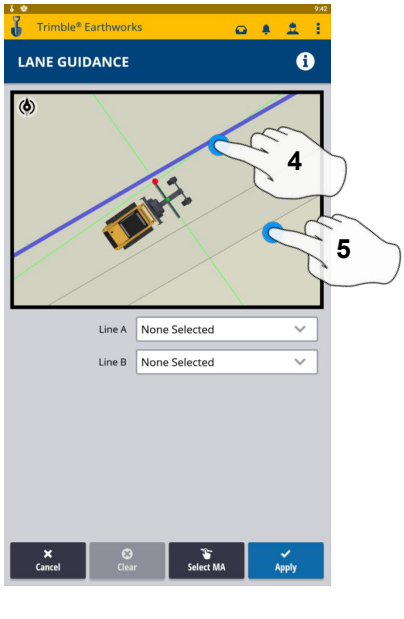
Lane Guidance



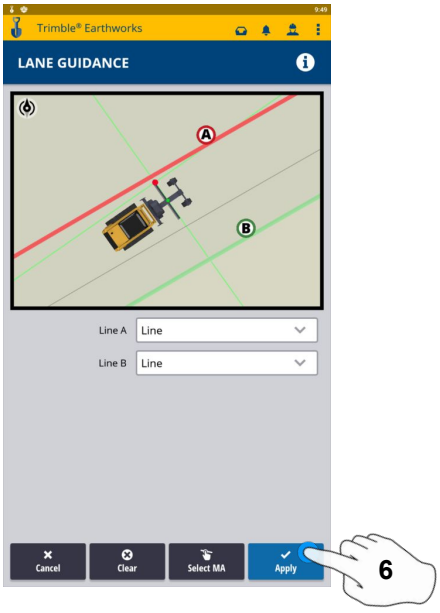
1. Touch and Hold Lane Guidance



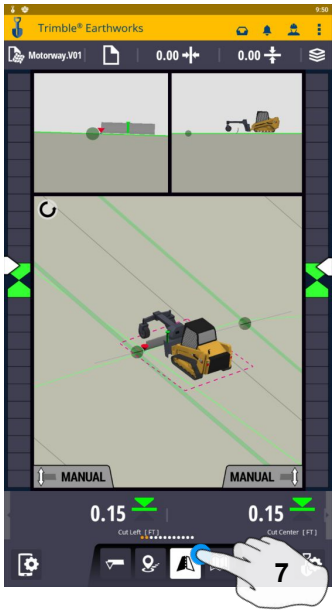
2. Select Master Alignment
3. Touch Next



4. Select Line A
5. Select Line B



6. Touch Apply

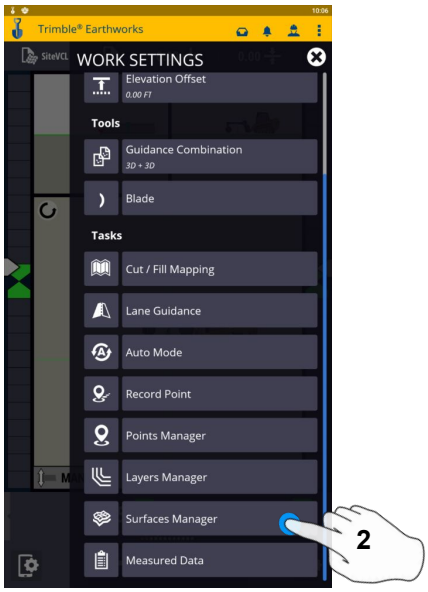


7. Touch Lane Guidance icon to stop

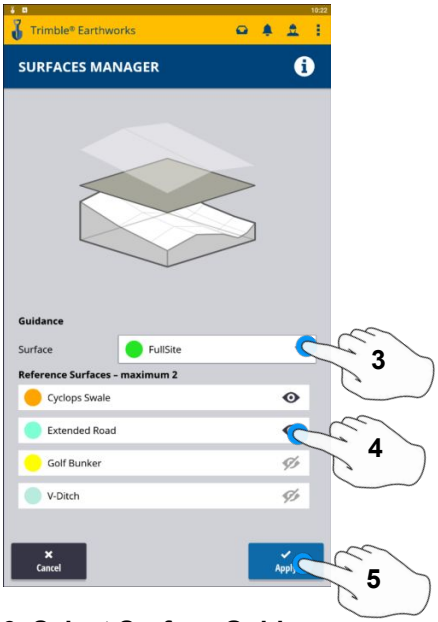
Note: Slope Between Alignment A and B will be projected slope

Surface Manager ** Will only work in VCL format Designs**

1. Touch Worksettings



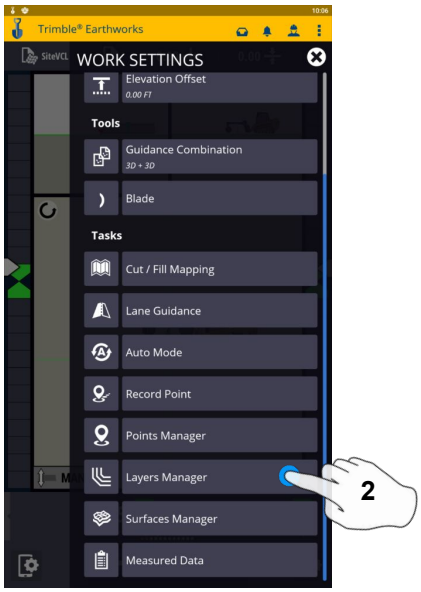
2. Select Surface Manager



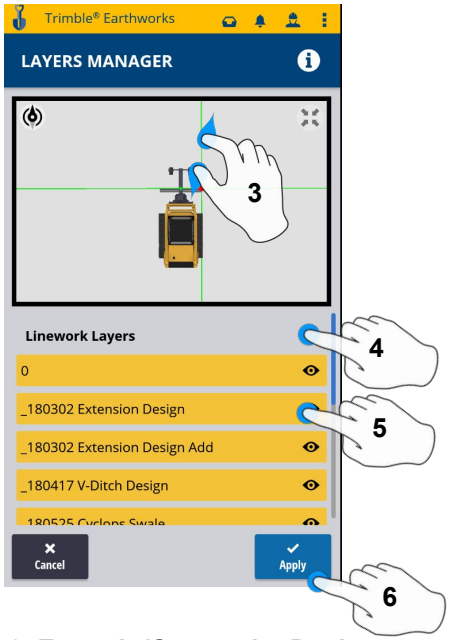
3. Select Surface Guidance
4. Select Reference Surface (Maximum of 2)
5. Touch Apply

Layers Manager ** Will only work in VCL format Designs**

1. Select Worksettings

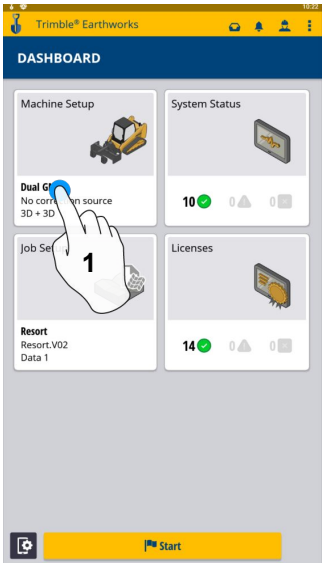


2. Select Layers Manager

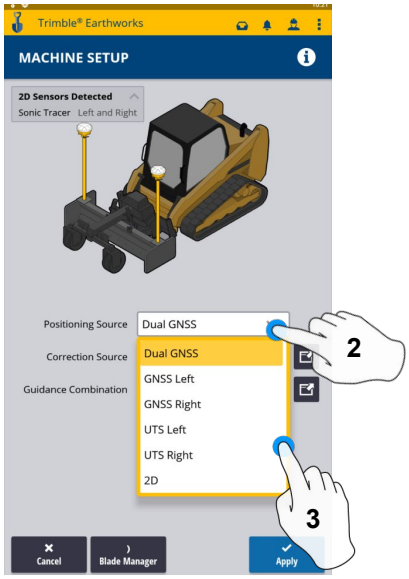


3. Zoom In/Out on the Design
4. Option to Select all Lines
5. Option to select individual Lines
6. Touch Apply

UTS Setup

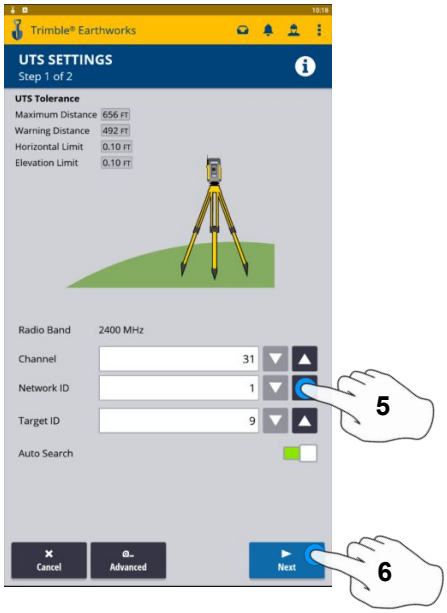


1. Touch Machine Setup

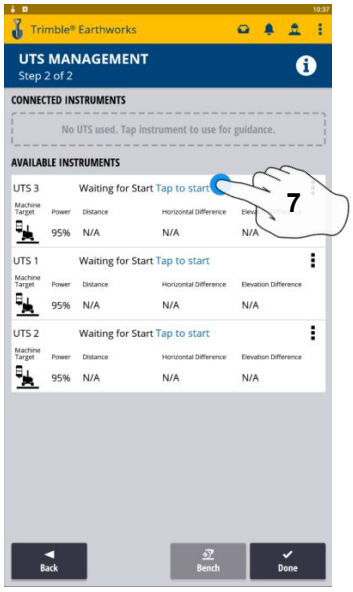


2. Touch Positioning Source
3. Touch UTS (Right or Left)

4. Touch to Edit / Add UTS

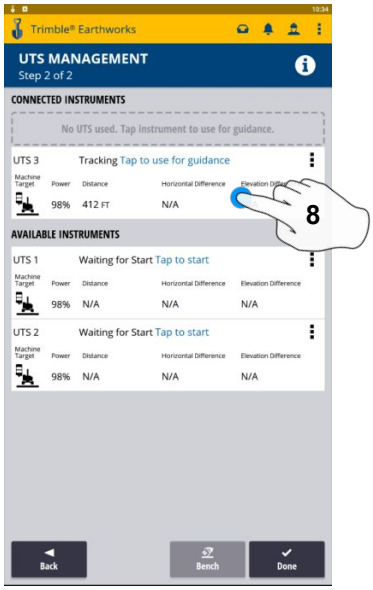


5.Select Channel / ID / Target ID
6.Touch Next

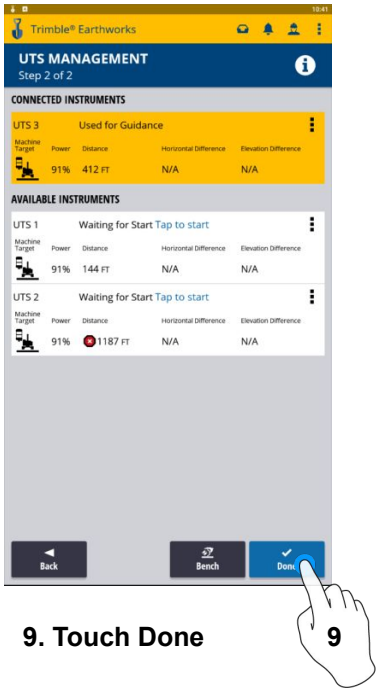


7. Tap to Start

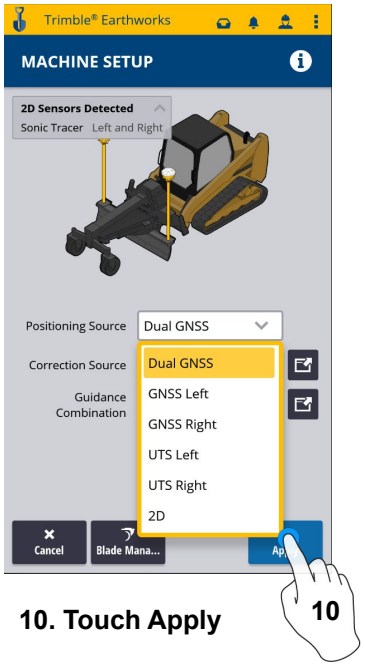
UTS Setup Cont:



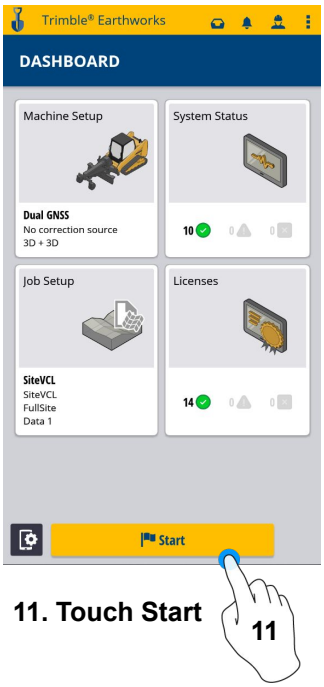
8. Tap to use for Guidance



9. Touch Done

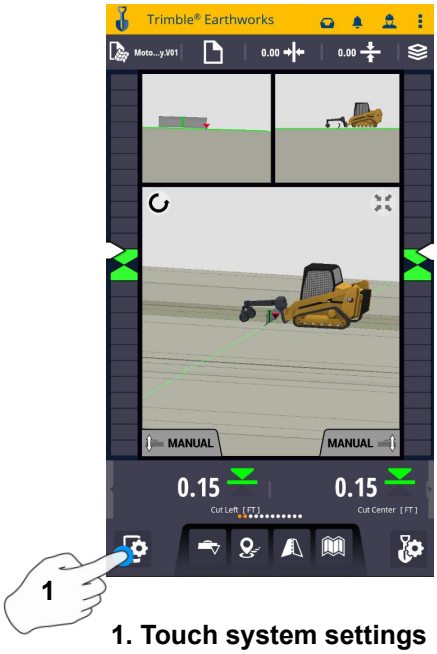


10. Touch Apply

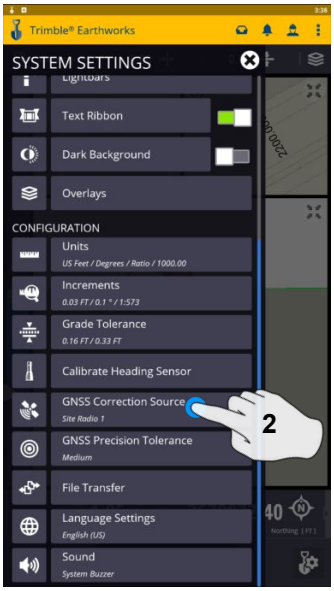


11. Touch Start

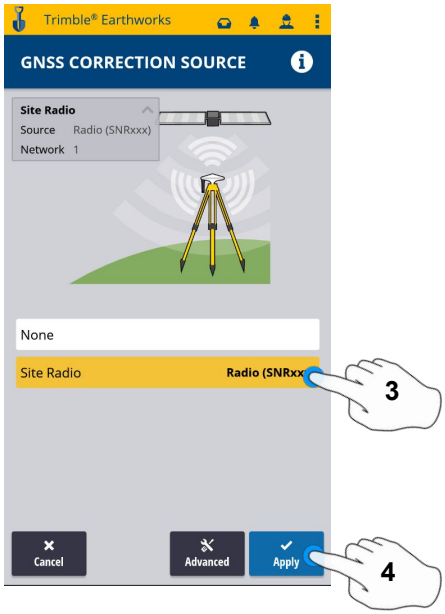
Change Radio Network (GNSS)



1. Touch system settings



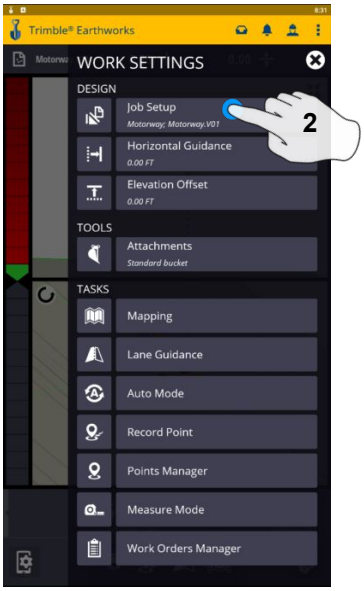
2. Touch GNSS correction source



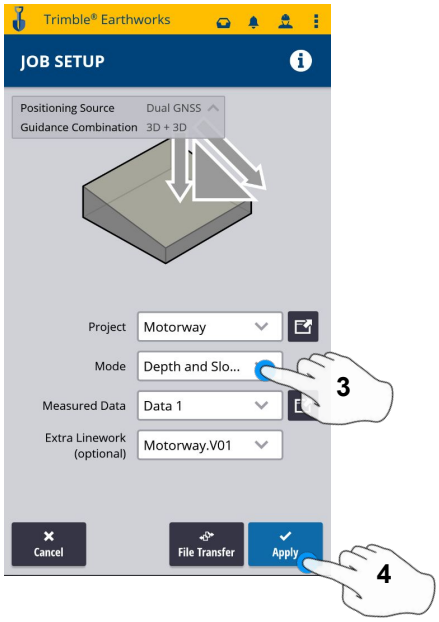
3. Touch Radio Network
4. Touch Apply

Level Surface

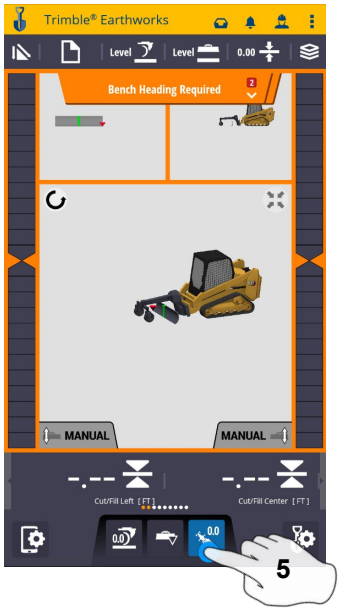
1. Touch Work Settings



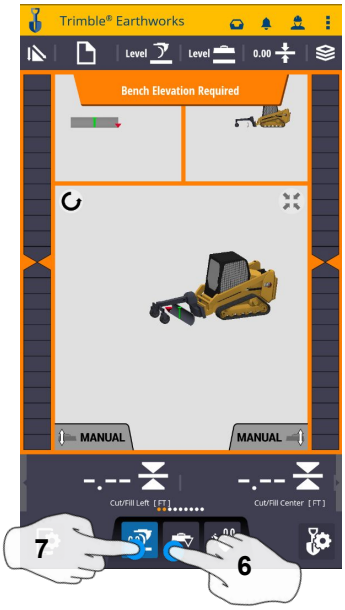
2. Touch Job setup



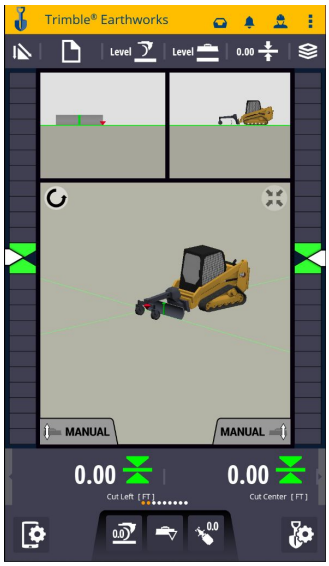
3. Touch Mode and select Depth and Slope
4. Touch Apply



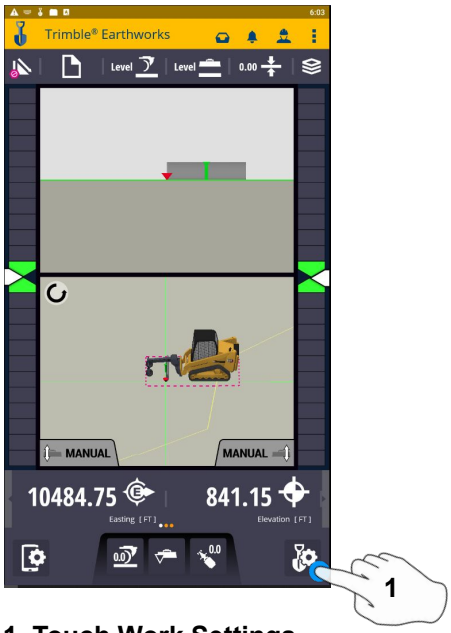
5. Touch Bench Heading



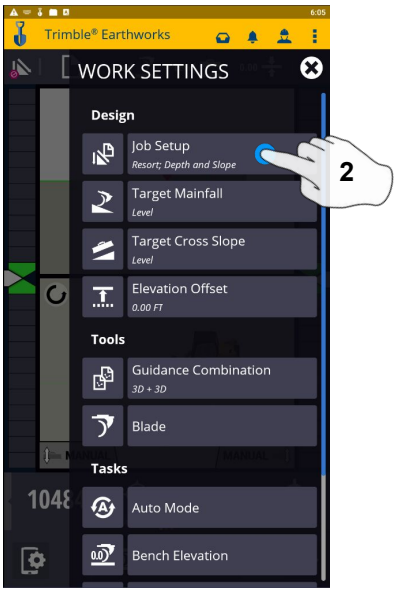
6. Select Blade Tip Focus Point
7. Place Blade Tip at Elevation and Touch Bench



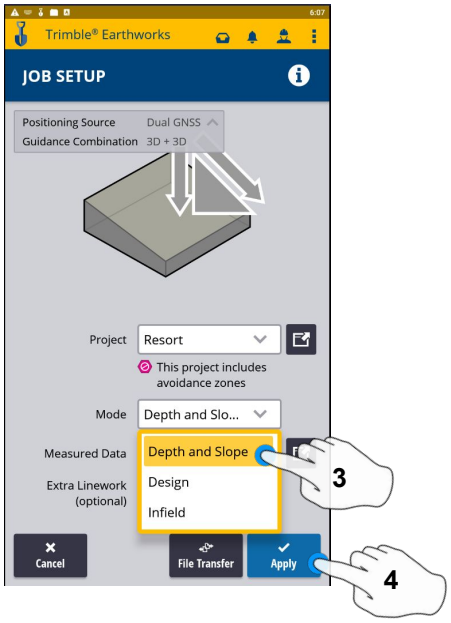
Sloping Surface



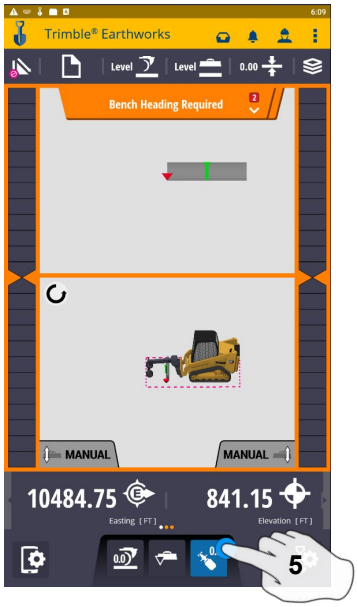
1. Touch Work Settings



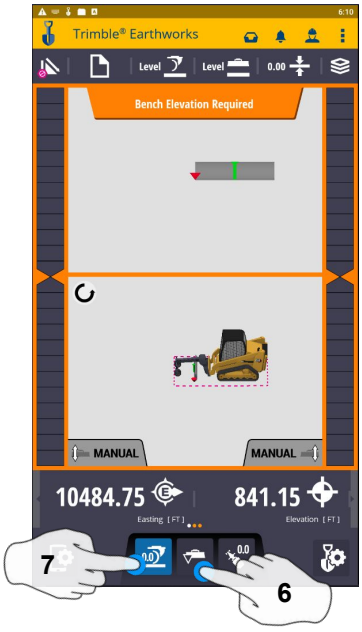
2. Touch Job setup



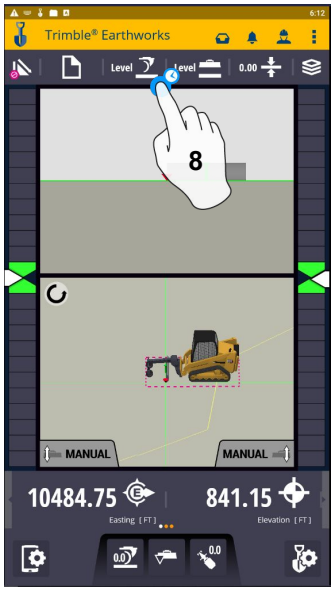
3. Touch Mode and select Depth and Slope
4. Touch Apply



5. Touch Bench Heading



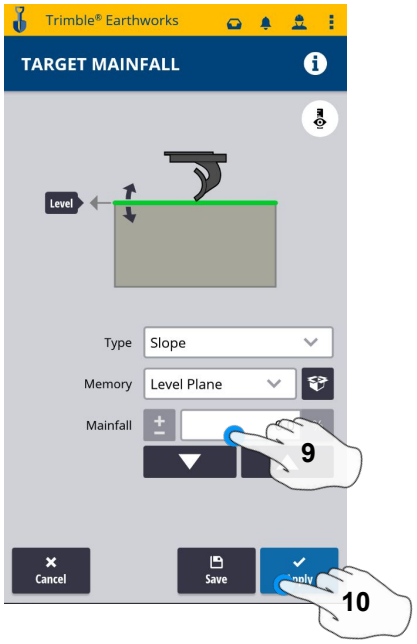
6. Select Blade Tip Focus Point
7. Place Blade Tip at Elevation and Touch Bench



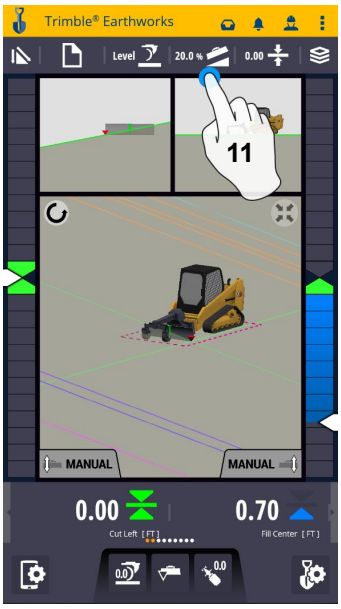
8. Touch and Hold Target Mainfall

Note: This will apply a slope parallel to the direction of heading

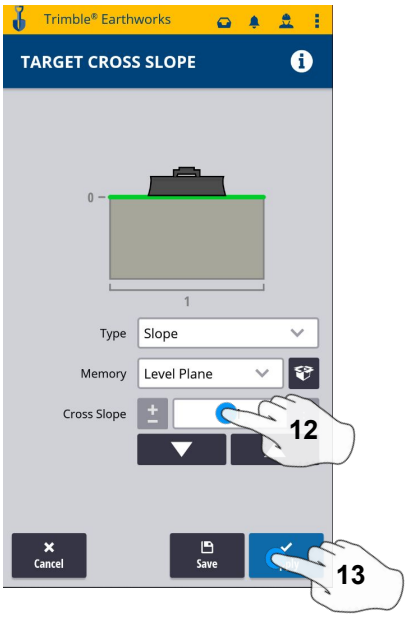
Sloping Surface Cont:



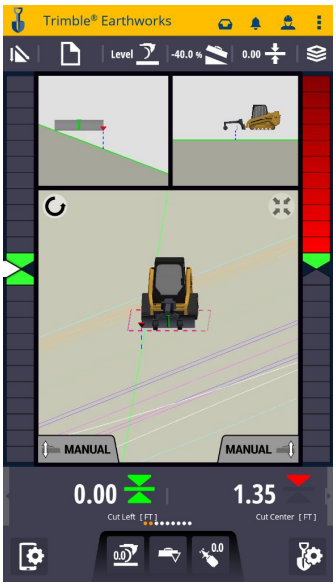
9. **Enter Mainfall Slope**
10. **Touch Apply**



11. **Press and Hold Cross Slope**
    Note: This will apply a slope perpendicular to the direction of the heading



12. **Enter Cross Slope**
13. **Touch Apply**



SITECH

Trimble
Authorized Dealer