

Soil-Max[®] Predelivery, Setup, Calibration, and Use



Predelivery



*Pickup hours are: Monday - Friday (except holidays) 8:00 am - 11:00 am and 12:00 pm - 3:00 pm.

*This information is also listed on all Sales Order Acknowledgements.

Predelivery



*Pickup hours are: Monday - Friday (except holidays) 8:00 am - 11:00 am and 12:00 pm - 3:00 pm.

*This information is also listed on all Sales Order Acknowledgements.

Predelivery

[Stealth ZD Pull-Type Plow]



Predelivery Steps

- Use largest forklift to unload plow from trailer (plow weighs approximately 6,500 lbs)
- While plow is still in the air, mount the wheels/tires (these were removed to stay under the shipping max height)
- Unbolt GPS arm from side of the plow shank and mount on top of the shank
- Rotate SMV sign to face the rear

If required:

- Install the walking tandem assemblies
- Install the power feeder kit

Predelivery

[Stealth ZD 3-Point Plow]

Predelivery Steps



- Use large forklift and plow unloading arm (PN 6101590) to unload plow from trailer (plow weighs approximately 5,000 lbs). Remove arm when done.
- Unbolt the GPS arm from the right side of the plow shank and mount on top of the shank

Recommended:

- Attach plow to tractor and cycle the cylinders (3-point plows do not ship with oil in cylinders)

If required:

- Install the power feeder kit

Predelivery

[Stealth ZD48 Plow]



Predelivery Steps

- Use large forklift to unload plow from trailer (plow weighs approximately 2,000 lbs).

Recommended:

- Attach plow to tractor and cycle the cylinders (3-point plows do not ship with oil in cylinders)

If required:

- Install the power feeder kit

Setup

[Tile Plows]

Display

The InCommand™ display will mount in the cab. Use the provided cables in the cable kit to install power direct to the battery terminals, routing them out of the way, and clear of moving parts. Use the provided zip ties, to secure the cables. Coil excess cables in an area that will not get caught on moving parts. A RAM mount is provided to mount the display in the cab, and allows for flexibility to install where windows and gauges are not obstructed.

Locate the 4001979-3 cable, and route this toward the back of the tractor. For most front wheel assist tractors this cable should reach to the plow harness that is installed on the tile plow. Extension cables are available in 6, 12, and 24 ft lengths for 4-Wheel drive tractors.



Plow Harness

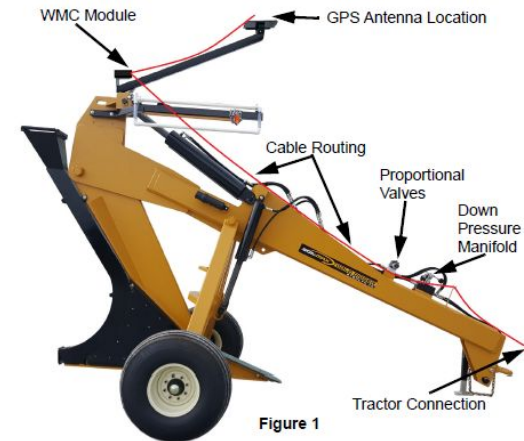
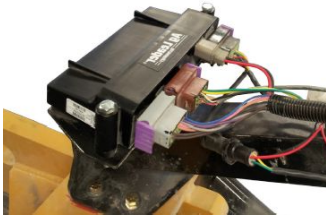


Figure 1

Setup Steps

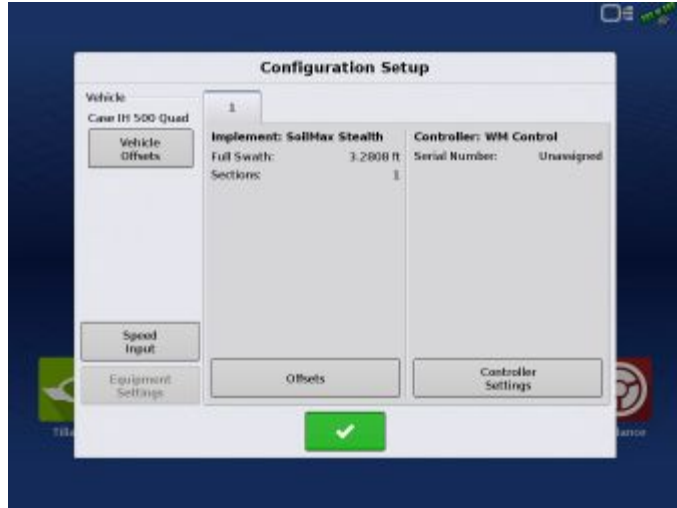
- Install display, display cable kit, and implement adapter cable on tractor.
- Install IntelliSlope kit on plow as shown in figure to the left.
- Mount configured RTK rover to the plow and install appropriate GPS adapter cable between the rover and the WMC.
- Create an “Tiling” operating configuration in the display (next slides).

If required:

- Install the combination controller if plow is a pull-type or if any plow has a power feeder installed.

Setup

[Tiling Configuration]

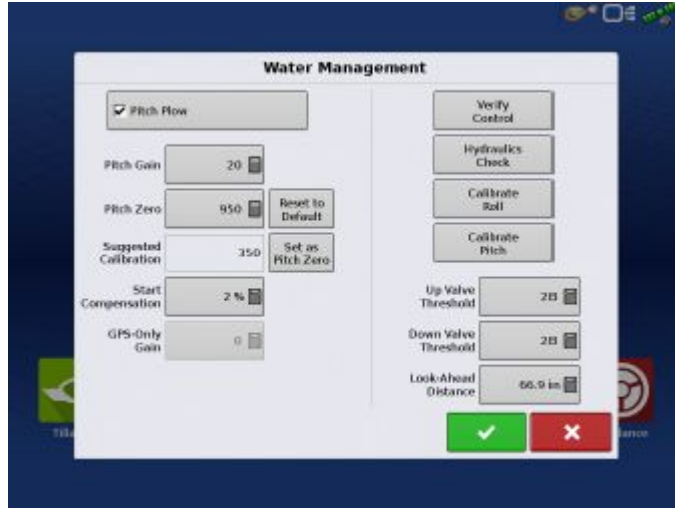


Setup Steps

- Go to the GPS setup screen and uncheck "Use heading detection".
- Create a new Tiling configuration and follow the steps on the screen.
- When you get to the implement offsets screen, enter "1" for the top three measurements.
- When you get to the screen shown on the left, press the "Controller Settings" button.

Setup

[Tiling Configuration]



Soil-Max Stealth ZD recommended starting values

	ZD48/1200	3-PT & PT
Pitch Gain	12	15
Up Valve Threshold	20	22
Down Valve Threshold	20	22
Look-Ahead Distance	45"/1.143m	66.9"/1.69m,

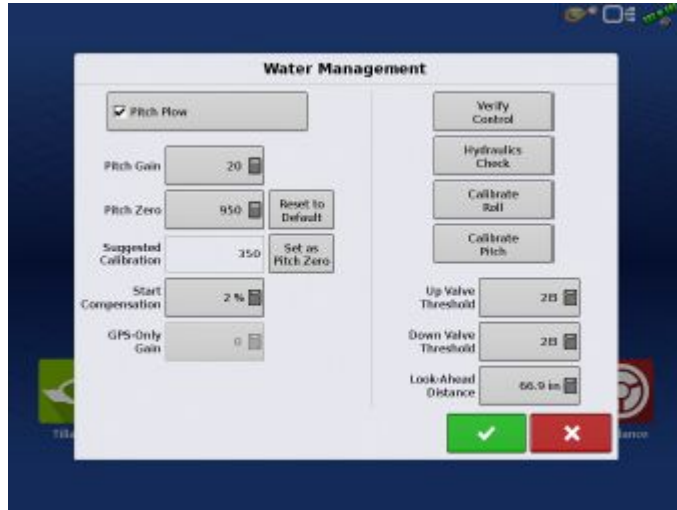
Setup Steps

- Ensure "Pitch Gain", "Up Valve Threshold", "Down Valve Threshold", and "Look-Ahead Distance" are correct for the plow type.
- Engage hydraulics to the plow with flow going to the pressure "P" port of the plow.
- If the plow is a pull-type model, press the "Plow Down" switch to ensure the wheel frame moves.
- Press the "Verify Control" button.

Setup

[Tiling Configuration]

Setup Steps



- Ensure "Pitch Gain", "Up Valve Threshold", "Down Valve Threshold", and "Look-Ahead Distance" are correct for the plow type.
- Engage the hydraulics to the plow with flow going to the "P" port of the plow.
- If the plow is a pull-type model, press the "Plow Down" switch to ensure the wheel frame moves.
- With the plow at max height, press the "Verify Control" button and ensure the Down arrow moves the shank down and the Up arrow moves the shank up. End with the shank all the way up and press the back arrow and then the green check mark.

Setup

[Tiling Configuration]



Know what's below.
Call before you dig.

Calling 811 before every digging job gets your underground utility lines marked for free and helps prevent undesired consequences.

For more information go to www.call811.com.

The 811 logo is a registered trademark of the CGA.

Height when plow is in transport mode, this is also the position the plow is in when surveying.

Implement Wizard: GPS Antenna Offset

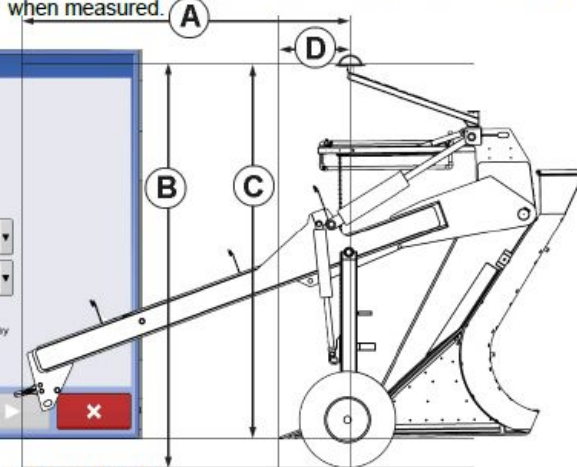
A	Antenna Location from Hitch Point	0 in	
B	Antenna Height from Ground	0 in	
C	Antenna to Plow Base	0 in	
D	Tip Location from Antenna (Horizontal)	0 in	Front ▼
	Antenna Location from Centerline	0 in	Left ▼

Note: Antenna Height from Ground measurement must be taken with the implement raised all the way up in transport position.

Not shown in graphic

Navigation: Previous, Next, Cancel (X)

Make sure plow is pitched and raised all the way up, and tires are properly inflated, when measured. For 3-pt plows, make sure plow is pitched and hitch is raised all the way up when measured.



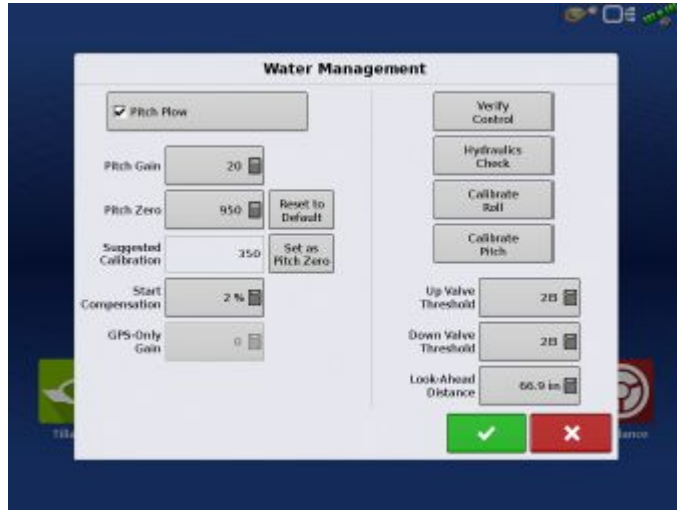
If the tip of the plow is in front of the receiver, select front.

Setup Steps

- Ensure the plow is lifted all the way with either the wheels all the way back or the 3-point hitch all of the way up. (Check for clearances on the top link on the 3-Point models)
- Press the "Offsets" button at the bottom of the screen.
- Use a tape measure to determine the measurements on the is page and then enter them in inches or meters. Once complete, press the check mark.

Setup

[Tiling Configuration]

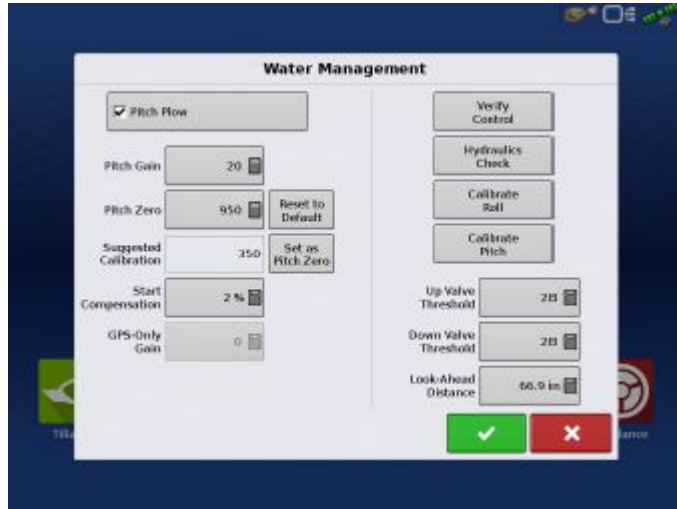


Setup Steps

- Press the "Controller Settings" button.
- Engage the hydraulics to the plow with flow going to the "P" port of the plow.
- If the plow is a pull-type model, press the "Plow Down" switch to ensure the wheel frame moves.
- With the plow at max height, press the "Hydraulics Check" button, read the warnings, accept the acknowledgement and perform the check. Once complete press the green check.

Setup

[Tiling Configuration]



Setup Steps

- Press the “Verify Control” button and pitch the plow all the way up and then press the back arrow.
- With the plow at max height, press the “Calibrate Roll” button, read the instructions and perform the calibration. Once complete press the green check.

Setup

[Tiling Configuration]



**Know what's below.
Call before you dig.**

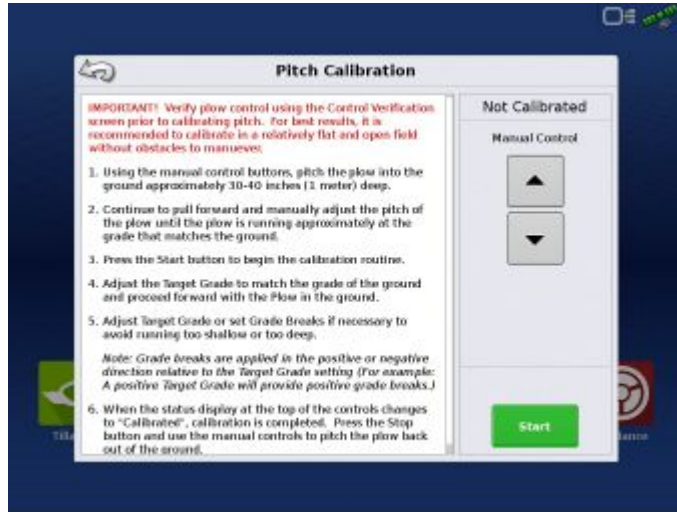
Setup Steps

- **DO NOT PUT THE PLOW INTO THE GROUND FOR ANY REASON WITHOUT HAVING UNDERGROUND UTILITIES LOCATED AND MARKED.**
- It is a free service.
- There is never a reason to not call them.
- It is not worth the risk to assume there is nothing under the ground.
- **Soil-Max will not be present at any setup, training, event, etc. that the plow will be in the ground without valid proof that 811 has been utilized.**

Setup

[Tiling Configuration]

Setup Steps

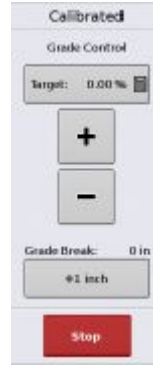
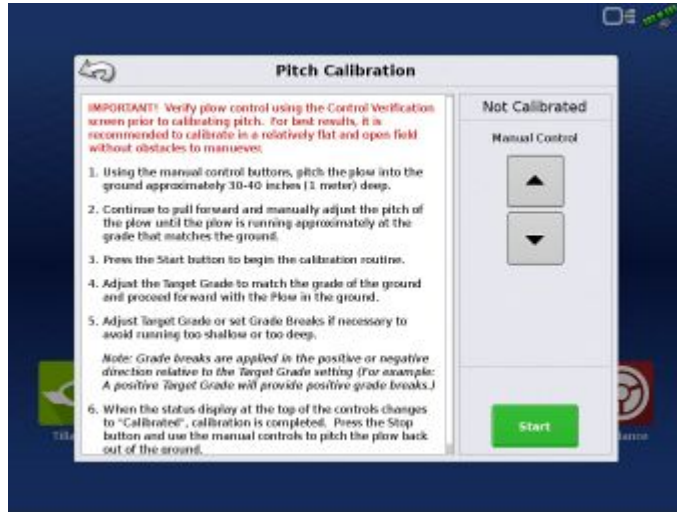


- Press the “Calibrate Pitch” button and read the instructions.
- When calibrating a Pull-Type plow, you need to use the “Plow Down” switch on the combination controller to lower the plow. Once the plow is in the ground, turn on the “Float” switch.
- When calibrating a 3-Point plow or ZD48, set the plow on the ground and then put the hitch in float.
- Start driving slowly forward, once the plow is in the ground deep enough that the depth chain is barely dragging, press the “Start” button.

Setup

[Tiling Configuration]

Setup Steps

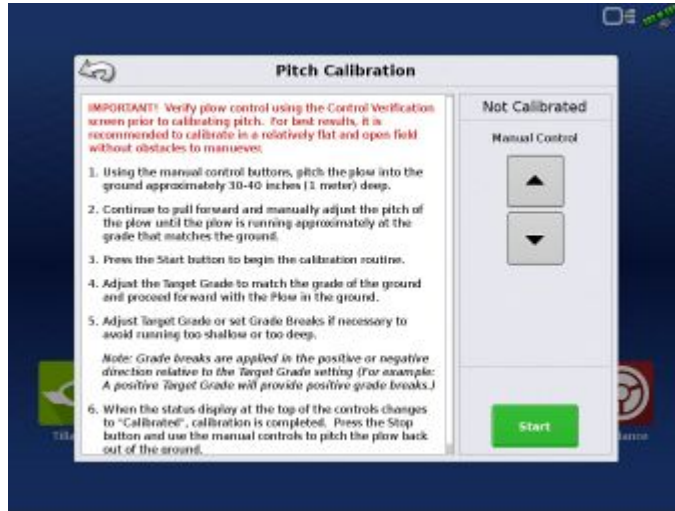


- Press the “Target” grade box and enter the estimated grade of the ground.
- Watch the plow and try to keep the plow at a consistent depth by adjusting the grade. (The less changes you have to make, the shorter the distance required to calibrate.)
- When the calibration is complete, the text above the “Target” box will change from “Not Calibrated” to “Calibrated”.
- Press the “Stop” button.

Setup

[Tiling Configuration]

Setup Steps



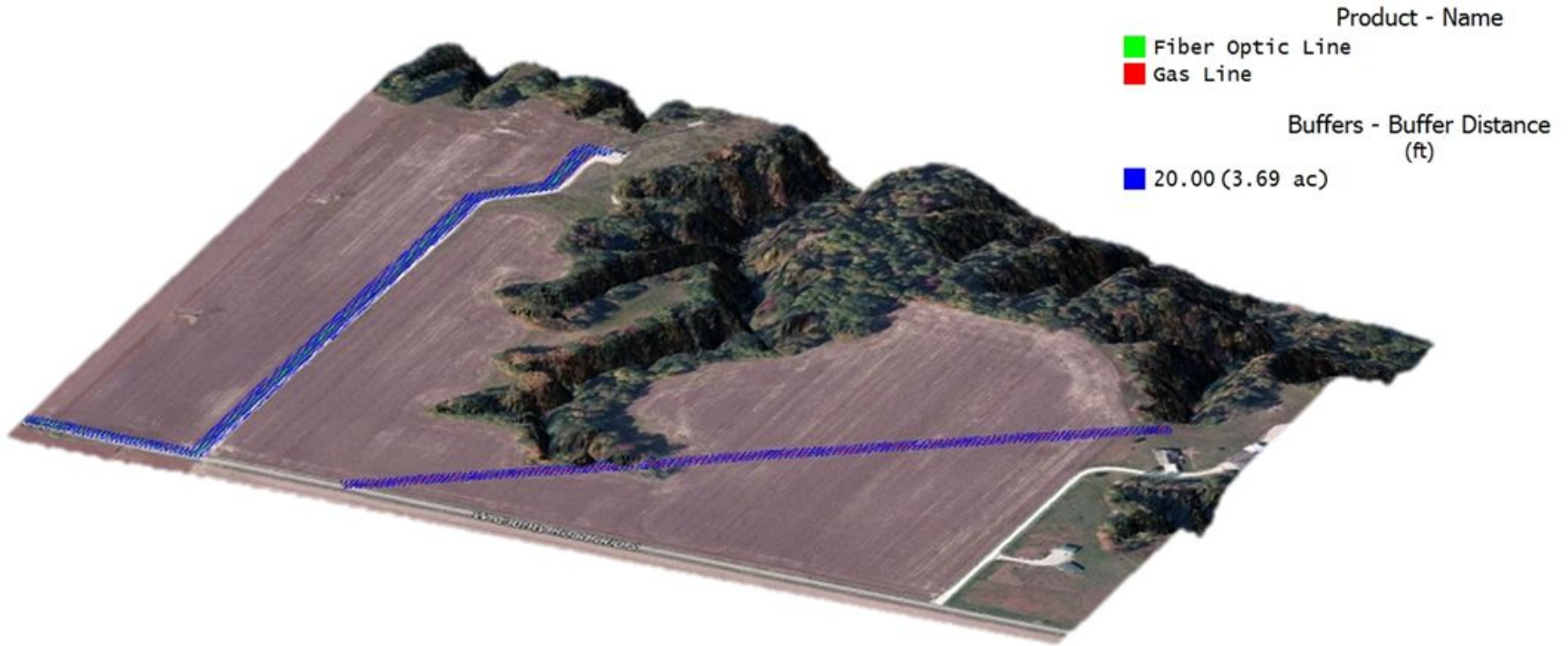
- NEVER PICK THE PLOW UP OUT OF THE GROUND WITH THE WHEELS OR THE 3-POINT HITCH!
- Hold the “Manual Control” UP button and pitch the plow all the way up while driving slowly forward.
- Once the plow is at the surface, you can then pick the plow up with either the wheels or the hitch. (You have to turn the “Float” off on the Pull-Type plows first.)
- Press the back arrow and then the green check mark.

How Ryan Zook Likes to Tile

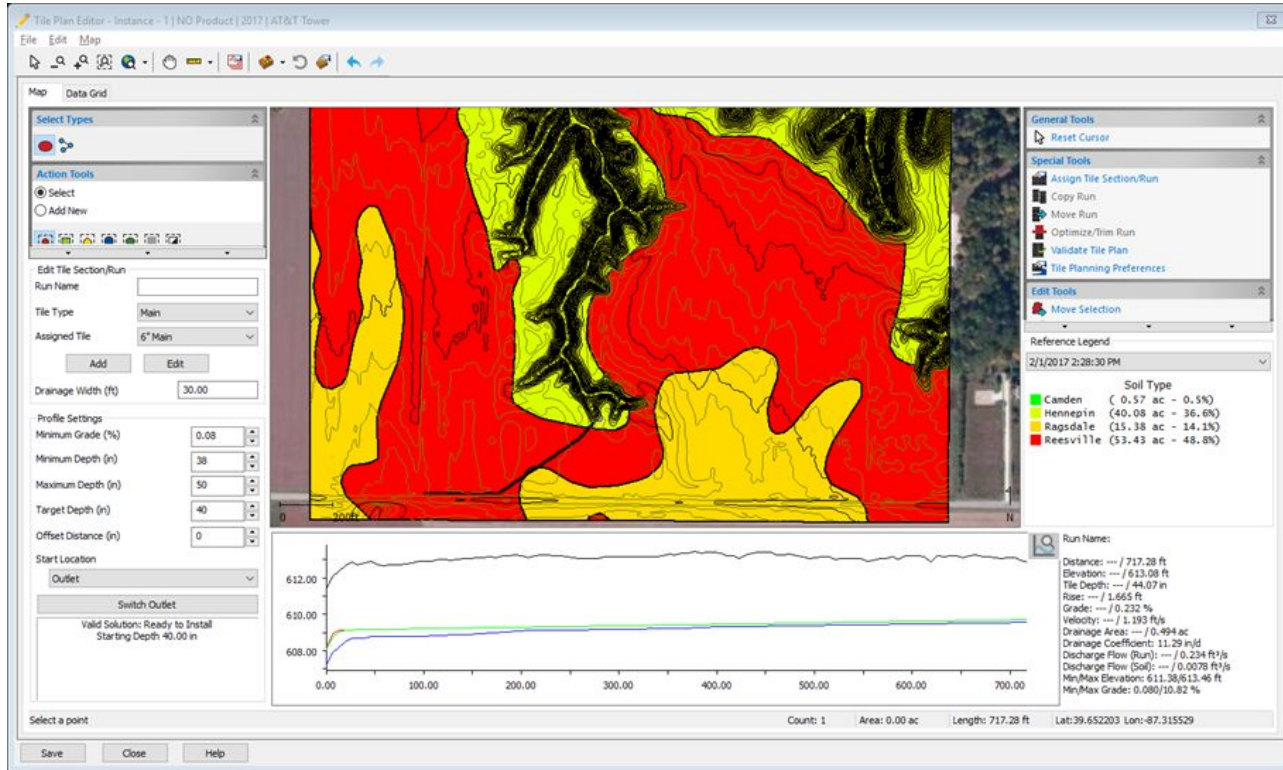
[Everyone has a different approach]

- **Have an outlet**
- **Get approval to drain land from applicable local, state, and/or federal authorities.**
- **Get locations of any underground utilities marked.**
- **Get a tile plan made.**
- **Order tile**
- **Install tile.**

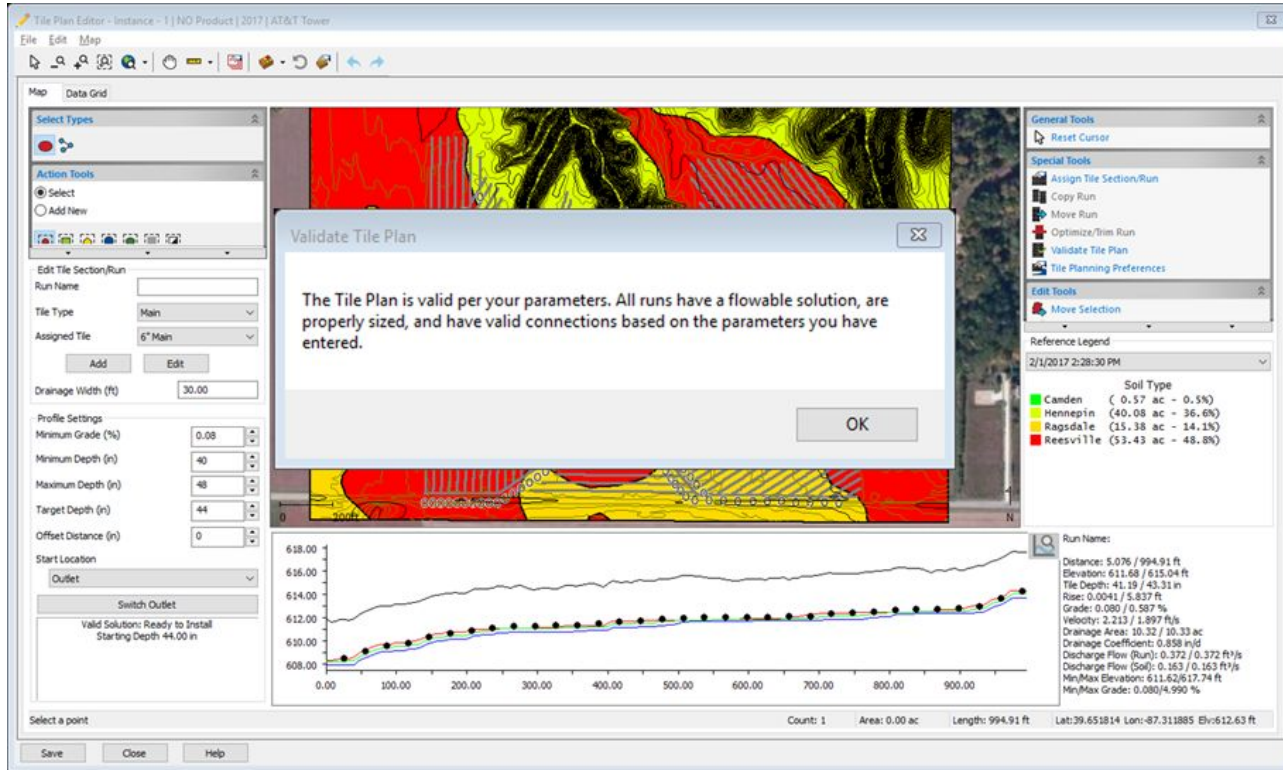
Get Utilities Marked



Create a Tile Plan

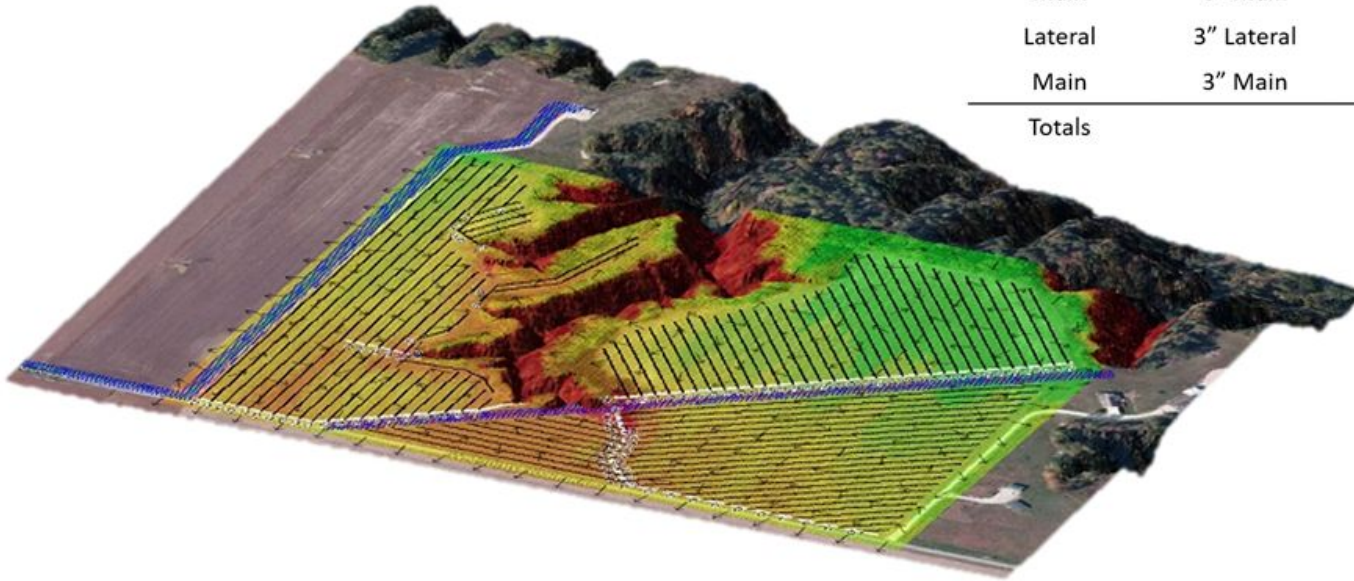


Create a Tile Plan



Create a Tile Plan

Tile Plan			
Tile Type	Tile Name	Length (ft)	Total Outlets
Main	6" Main	2,829	4
Lateral	3" Lateral	46,693	98
Main	3" Main	855	2
Totals		50,377	104



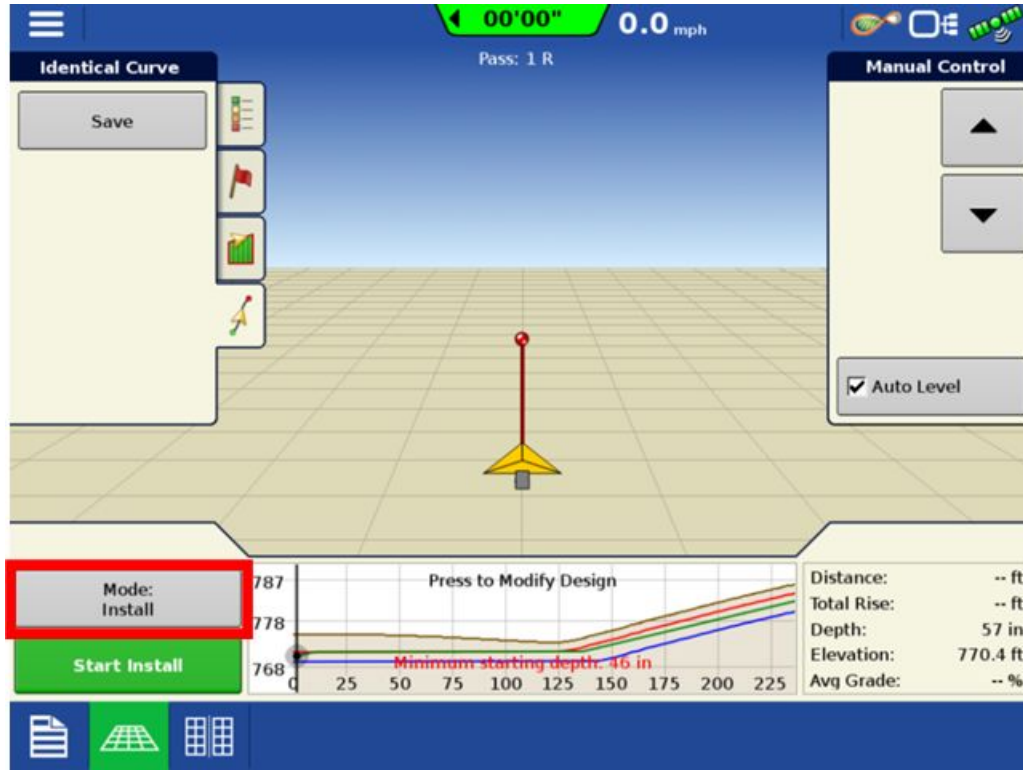
Installing the Main(s)

- **Survey the main**
- **Dig an outlet for the main**
- **String tile for the main and install end cap**
- **Lower plow into the start hole and load pipe**
- **Install the main**
- **Install outlet pipe with animal guard on the end of the main**

Installing the Laterals

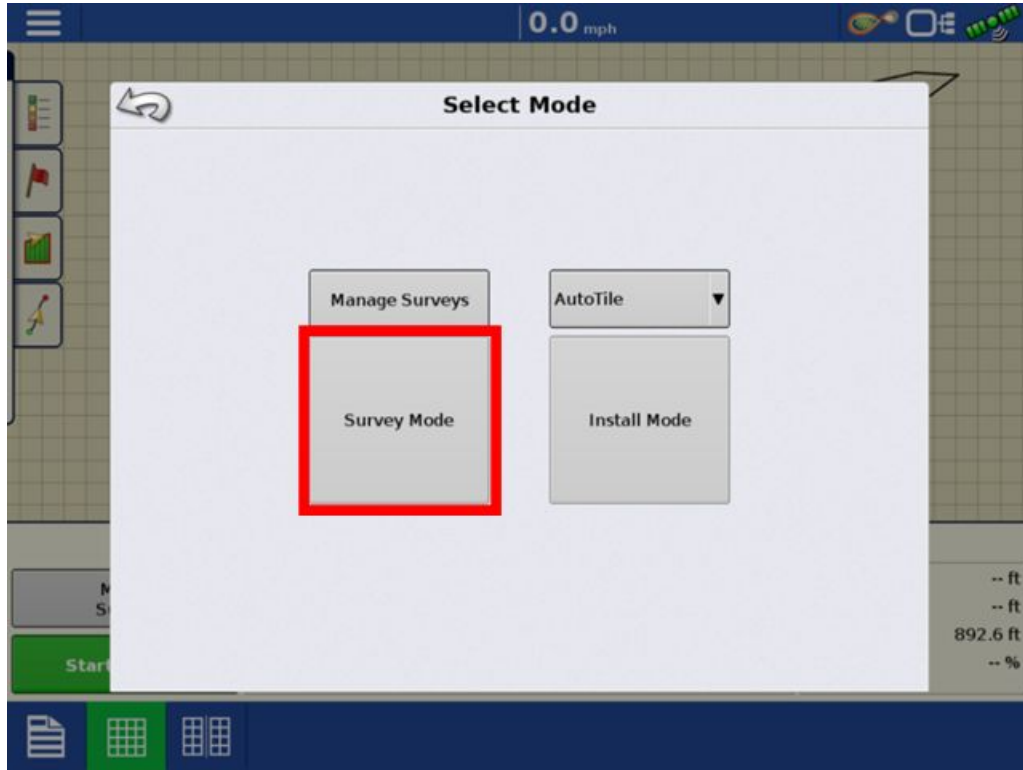
- **Survey the lateral**
- **Dig a hole for connection to the main**
- **String tile for the lateral and install end cap**
- **Lower plow into the start hole and load pipe**
- **Install the lateral**
- **Connect the lateral to the main**
- **Bed and blind the connection and fill the hole**

AutoTile®



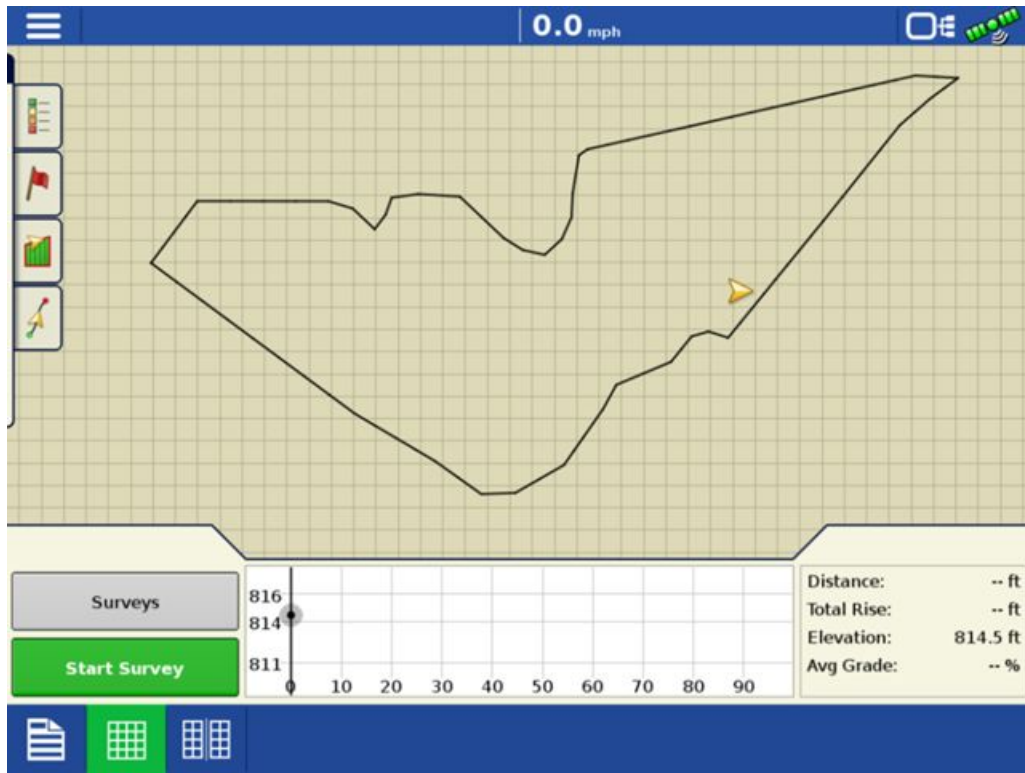
The first step in using AutoTile® with IntelliSlope® is to create a survey line. To do this, press the Mode button, and change to Survey Mode.

AutoTile®



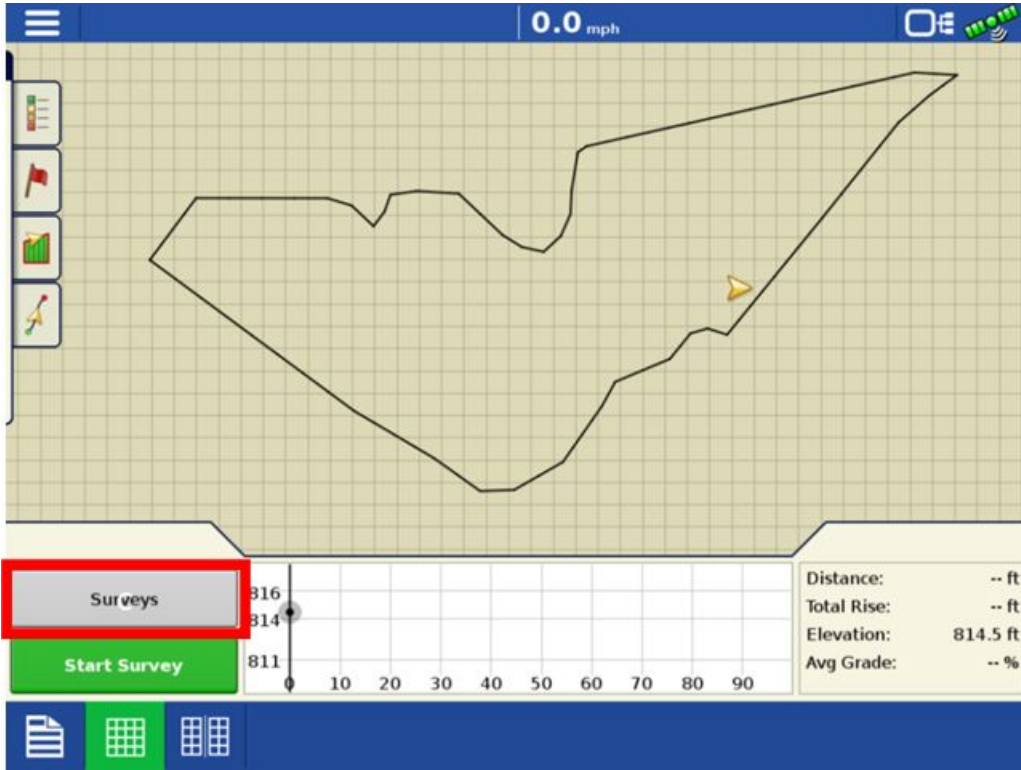
The first step in using AutoTile® with IntelliSlope® is to create a survey line. To do this, press the Mode button, and change to Survey Mode.

AutoTile®



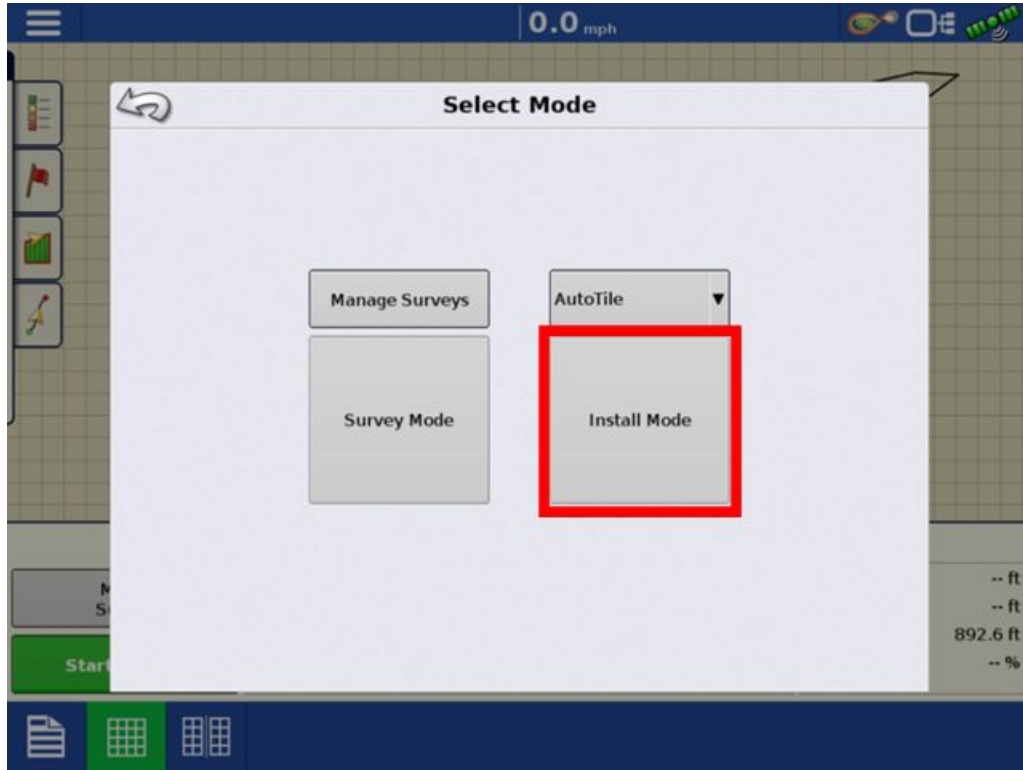
Once you are in Survey Mode and parked at either the beginning or end of a tile run, press the green Start button and drive to the other end of the run. While driving, the system is recording elevations along the entire run and creating a surface profile. At the end of the survey press the red Stop Survey button as well as the green check mark indicating that you want to end the survey.

AutoTile®



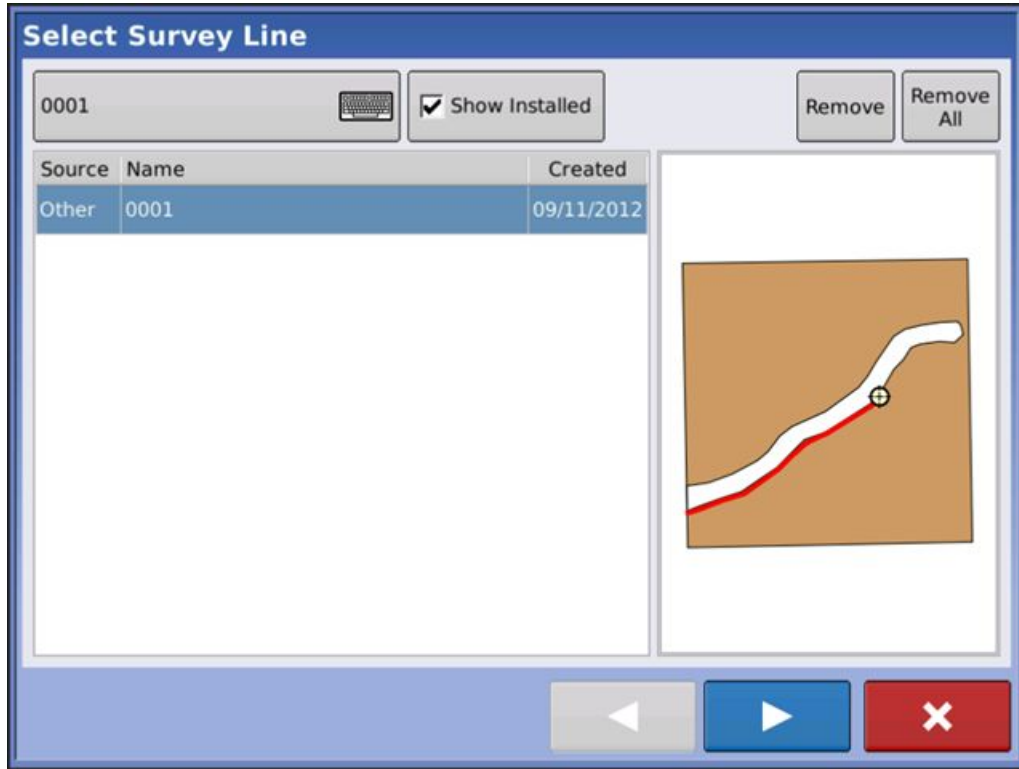
Once the survey is collected, you are now ready to design the tile installation run. To do this, you need to change to AutoTile® installation mode. Press the Mode button, and then the Install Mode button.

AutoTile®



Once the survey is collected, you are now ready to design the tile installation run. To do this, you need to change to AutoTile® installation mode. Press the Mode button, and then the Install Mode button.

AutoTile®



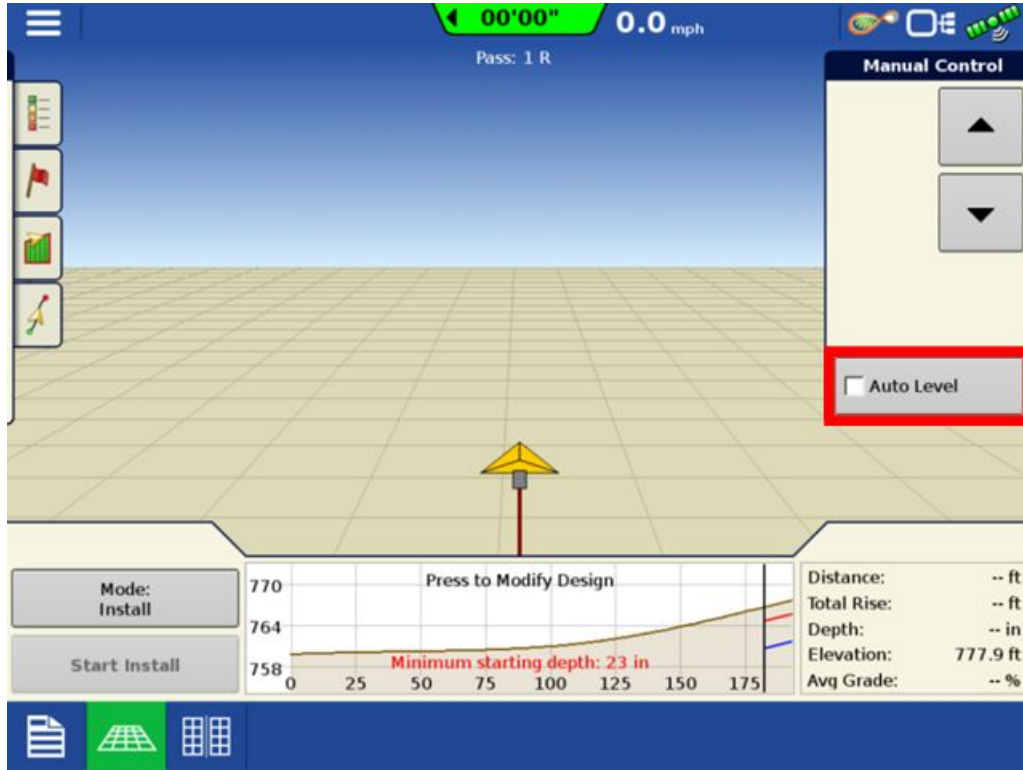
The line you previously surveyed will be highlighted and you are ready to press the right arrow at the bottom of the screen.

AutoTile®



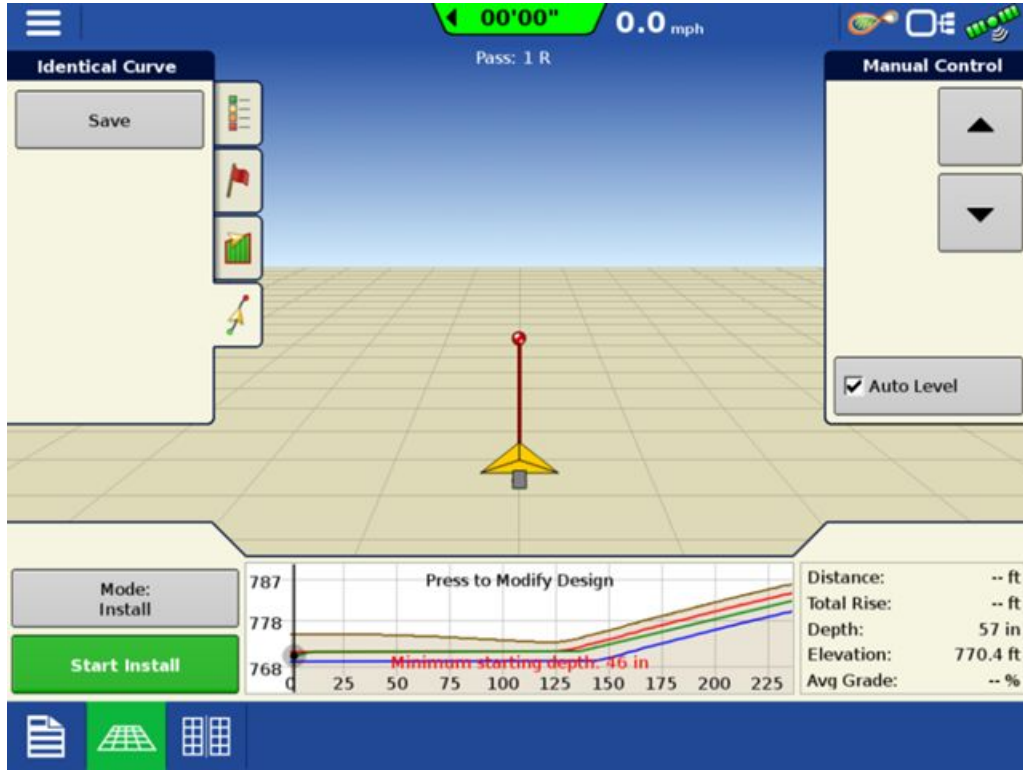
The survey line that was previously selected is now ready for design. On the profile view, the black line is the surveyed elevation, the red line is the minimum depth and blue line is the maximum depth. If the system can calculate a line that falls inside those depths and never has a grade less than the minimum grade, then you have a valid solution and are ready to install.

AutoTile®



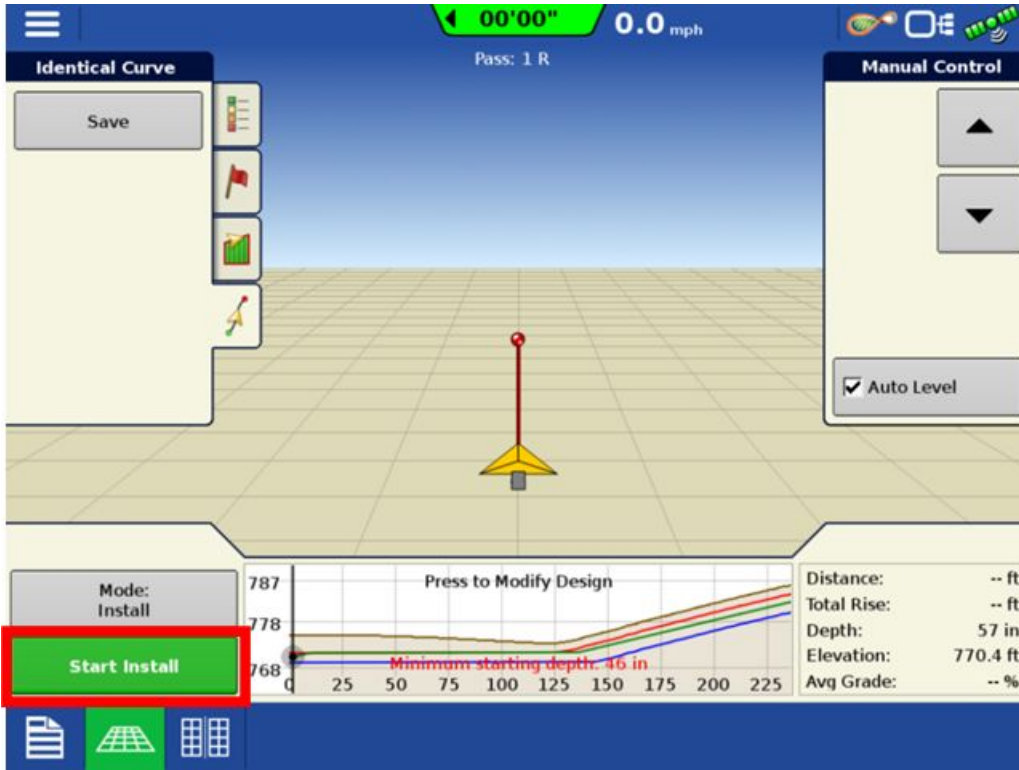
With the plow backed over the start hole, press the Auto Level button, and lower the plow into the hole.

AutoTile®



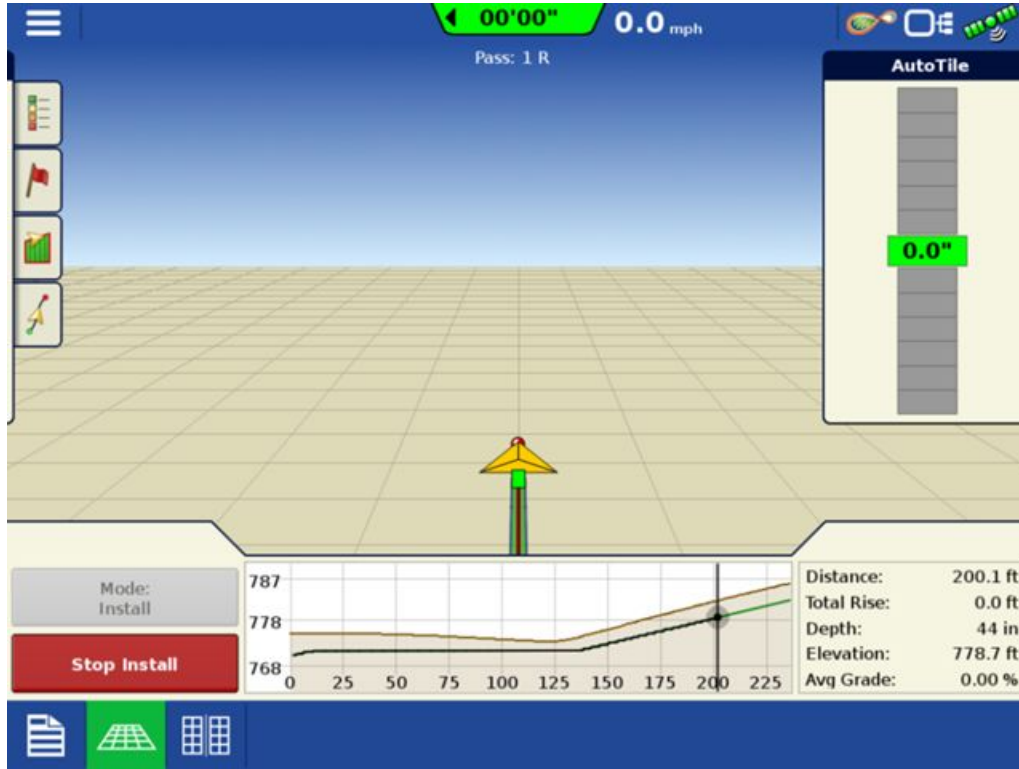
Once the plow is in the bottom of the start hole and deep enough, the start install button will turn green.

AutoTile®



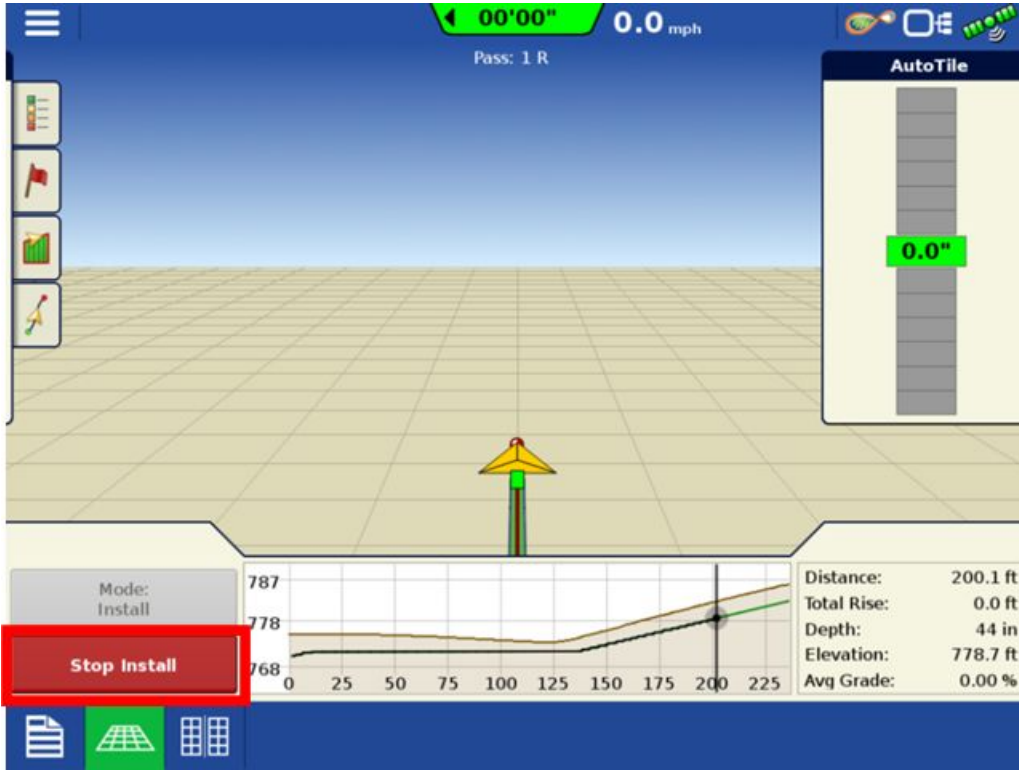
While someone is holding on to the end of the pipe coming out of the boot, start slowly pulling forward and press the green Start Install button.

AutoTile®



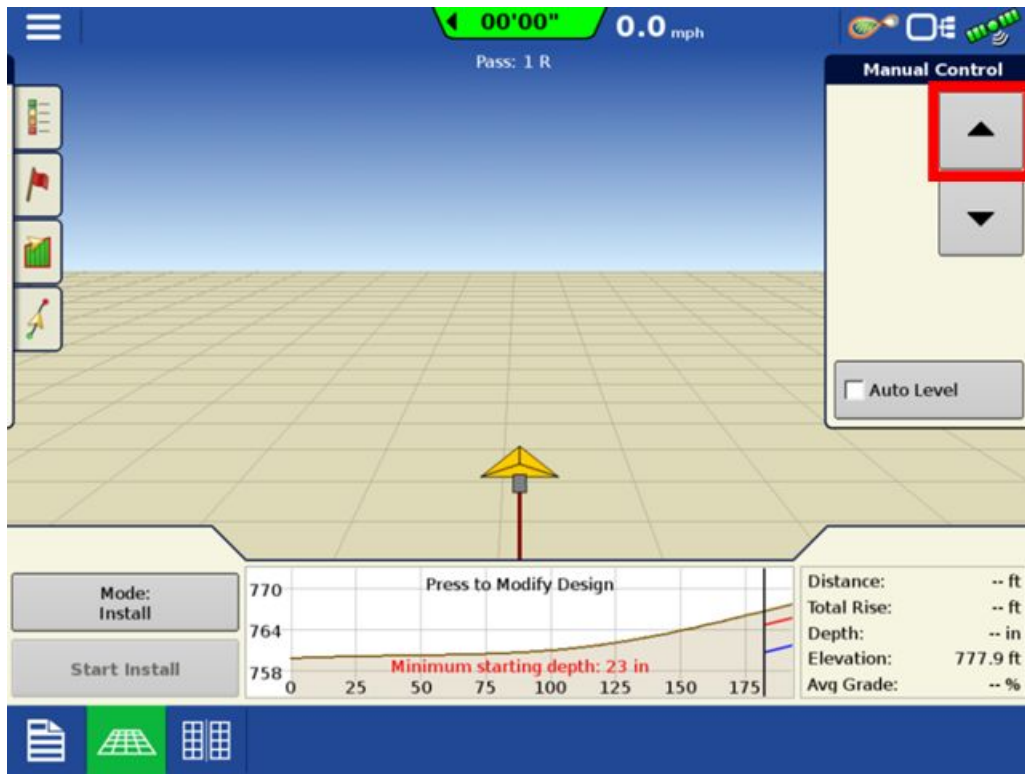
At this point, the system is in control of the plow. As you drive, the system is plotting where it is installing the tile and showing you where the tile is in relation to where the system wants it to be.

AutoTile®



At the end of the run, press the Stop Install button.

AutoTile®



Use the manual control up button to pitch the plow all of the way up so that the plow rides up out of the ground. Once the plow is out of the ground, pick it up with the wheels or 3-point arms and move to the next run and then start the process over again.

The Soil-Max® Advantage

[Unmatched Technical Support]

Unmatched Technical Support

Soil-Max® and Ag Leader® products have always had and always will have technical support included with the purchase of the product.

888-SOIL-MAX 888-764-5629

Option 1: Sales

Option 2: Tech Support/Parts



Thank You

[For your time and patience]

