TRIMBLE BUSINESS CENTER 5.2 FOCUSED ON CONSTRUCTION INSPECTION
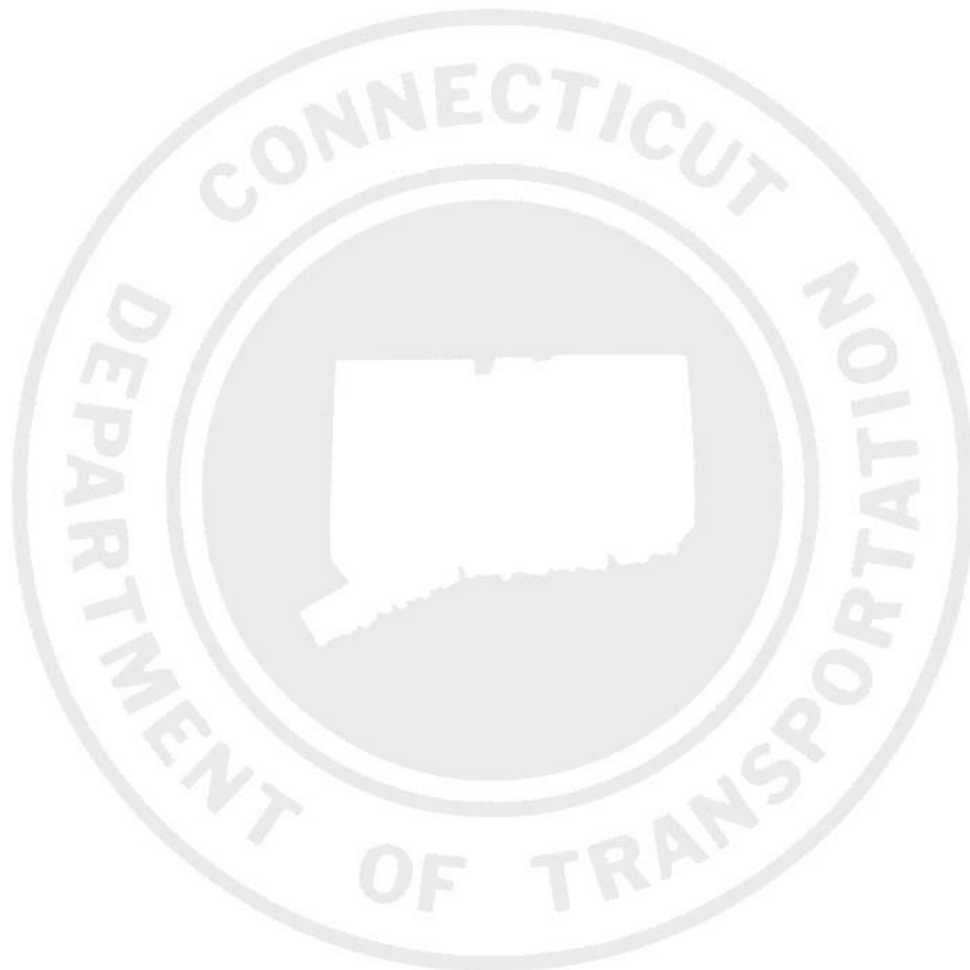
&

TRIMBLE SCS900 & Site Works

Inspector Training

By

The Office of Architectural, Engineering and Construction Applications

Class Notes:

Contents

Section 1 Trimble Business Center 5.0

Note: This section is for primarily administrators, it is provided to inspectors as background information.

1.1 Introduction

Trimble Business Center 5.0 is office software that utilizes both electronic engineering data and field data collected with SCS900 Tablet Edition site controller software (SCS) and Site Works. TBC 5.0 is used to prepare the project data for use in SCS900 & Site Works field software, manage field collected data and generate reports. Today we will be using TBC 5.0, Trimble SCS900 and Site Works Emulator and the data set for this training is located on your desktop in a folder called: **Training data set 2020**.

1.2 Creating Trimble Business Center Project

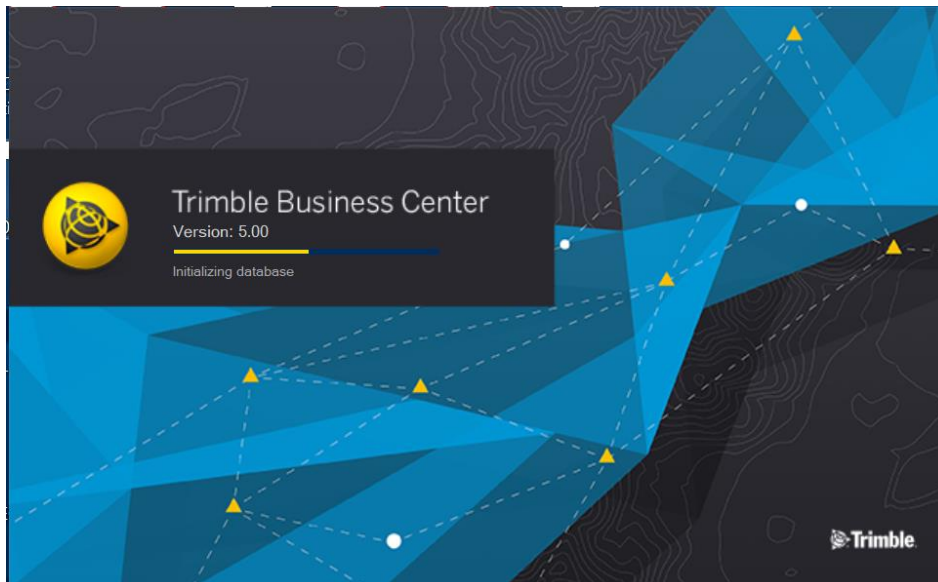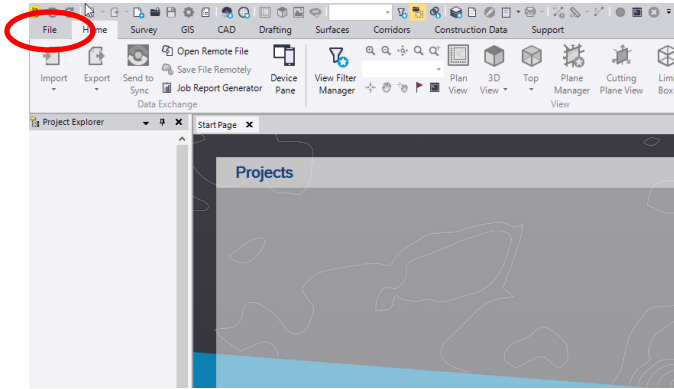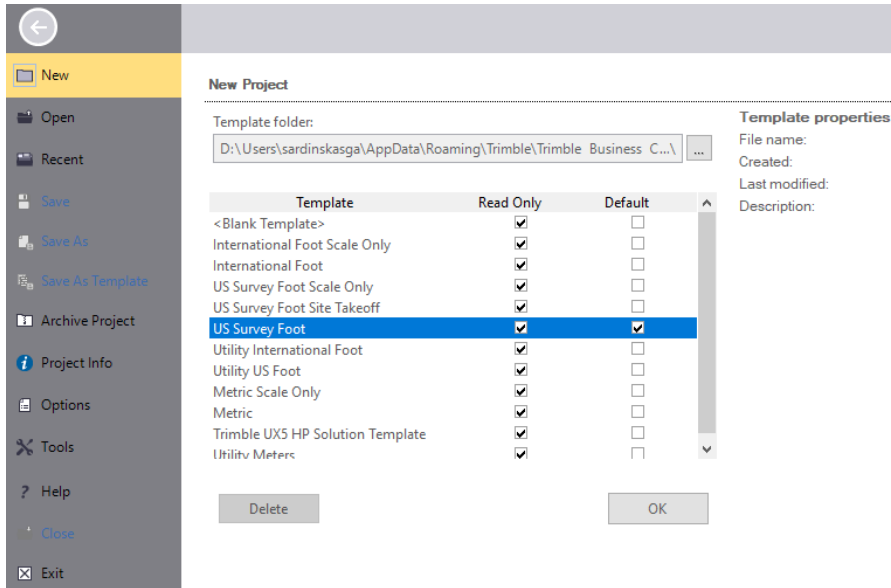1. **Start** by Opening Trimble Business Center by clicking the icon on your desk top

Figure 1 Trimble Business Center

2. Next Click **File > New Project** in the upper left of the screen shown above

1.3 Units

3. Select the 2020 CTDOT Standard Template with the proper units of your project data. (Select US Survey Foot for this training)

4. Click **OK**

1.4 Naming project

1. Click **File>Save Project As** this will create a folder within your documents folder
2. Name the Project File Training 2020

1.5 Displaying the Electronic Engineering Data

As explained above, EED is the data produced during the design phase. The MicroStation CAD files, InRoads or Open Roads coordinate geometry alignment files, and InRoads orOpen Roads surface files. These can be leveraged during construction for verification purposes.
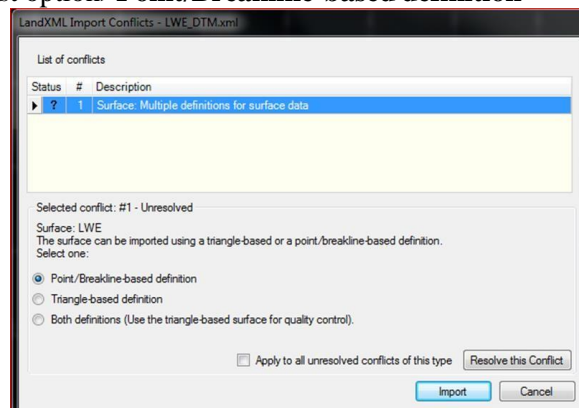
1. Locate the Training 2020 folder on your desk top

2. Import the project data by dragging and dropping all ? files into Business Center one at a time, Listed below is the EED for this project.

   The dxf format is the converted MicroStation CAD files. The XML format is the converted InRoads files, which the alignment files having ALG in the name and surface files having surface in the name.
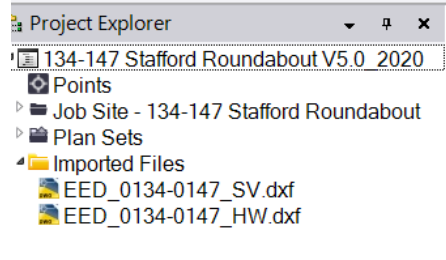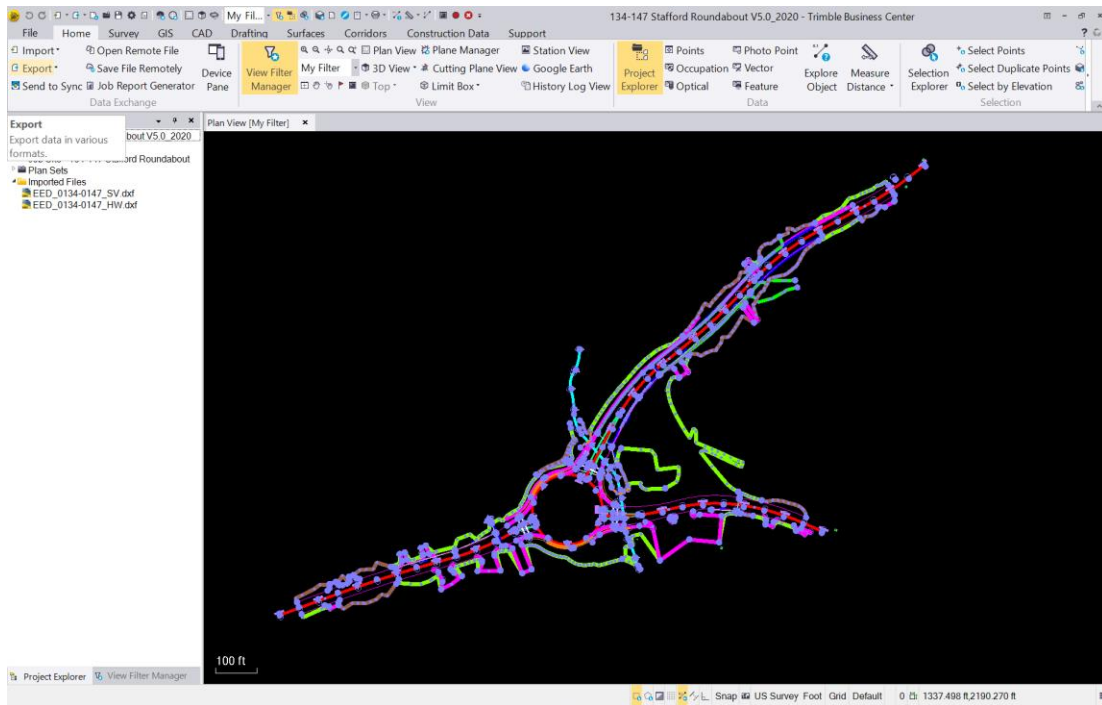

Change pic when other data is brought in.

3. When bringing surface xml files (DTM) into TBC the software will prompt you to select a definition shown in the box below
4. Choose the first option>**Point/Breakline-based definition**

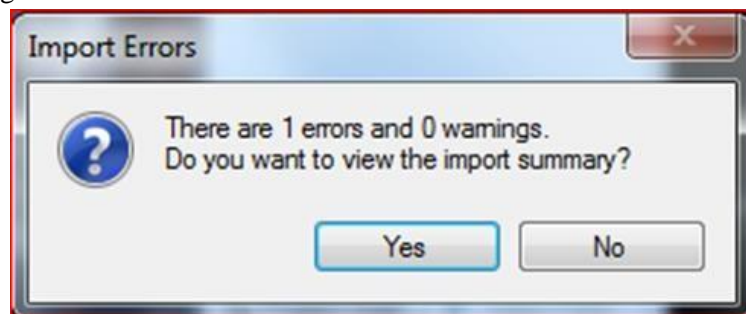5. **Click Import** and you will see the file displayed on your screen

6. **Next drag and drop** (EED_0134-0147_HW)

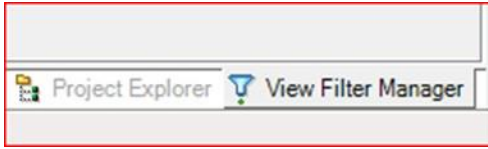7. **Continue dragging and dropping** the project EED into Business Center and click **no** to any errors or warnings

8. Next go to the **View** pull down from the top of the screen and make sure the View Filter Manager is displayed

9. Next review the Layers and Surfaces within the View Filter manager
    a. Take time turning layers on and off
    b. Turn surfaces off and on

10. Open the Project Explorer by clicking view and then Project Explorer option
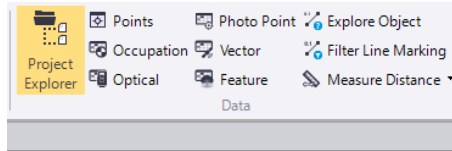
11. The Project Explorer will show you the EED that is in Business Center

Section 2 Job Site Manager

2.1 Creating Job site

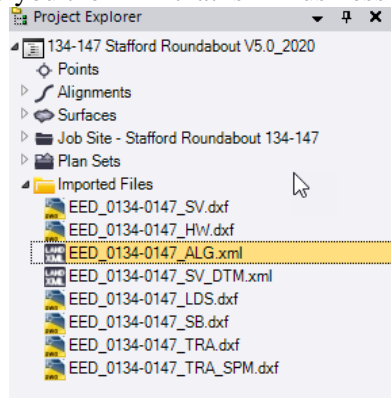The Job site contains specific site project data that gets created in your project. The Job site gets assigned to the controller which assists in data transfer to the PC. Each project contains one job site but for multi-year projects the job site can become an external site in a new project bringing forward everything except the work orders.
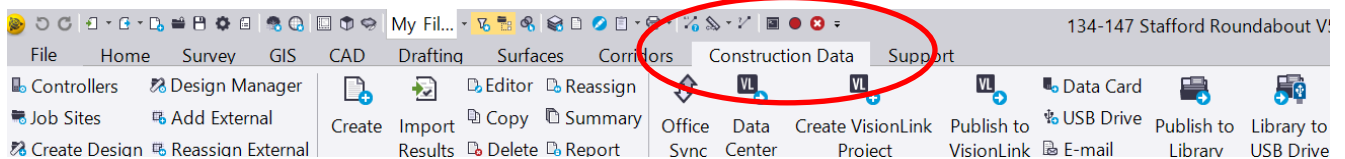
Note: For this training proceed to step 4

1. Start by Opening Trimble Business Center by clicking the icon on your desktop
2. Select **File>Open** and browse to the location of the Business Center project
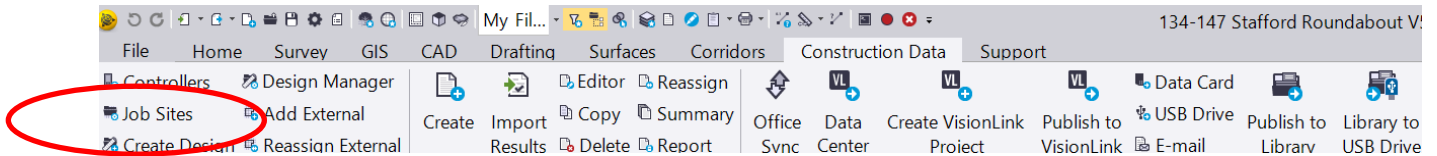

D:\Users*username*\Documents\Business Center >Training2020.vce

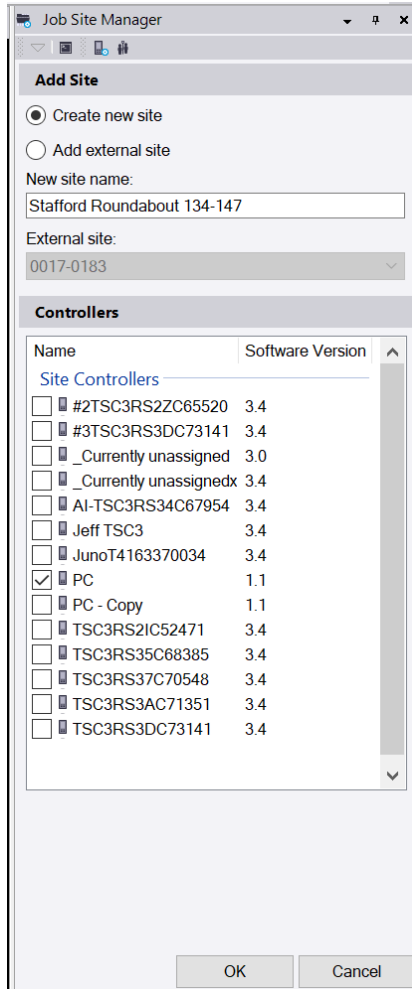3. Go to the **Construction Data** tab on the top of the interface window:


4. Select **Job Sites:**

5. Click on **Create new site**
6. Name the Job Site **Training2020**
7. Click on the **PC** to assign a controller to the job
8. Click OK

2.2 Site Map

The site map is a 2D background map that can be toggled on and off from within the map options in SCS900. This map is primarily used for existing topo or survey ground file type maps. The limitation to this map is none of the layers can be turned on or off and none of the line work can be staked within the stakeout capability of SCS900.

1. Next the Job Site manager will appear on your screen
2. Scroll down to the Site map
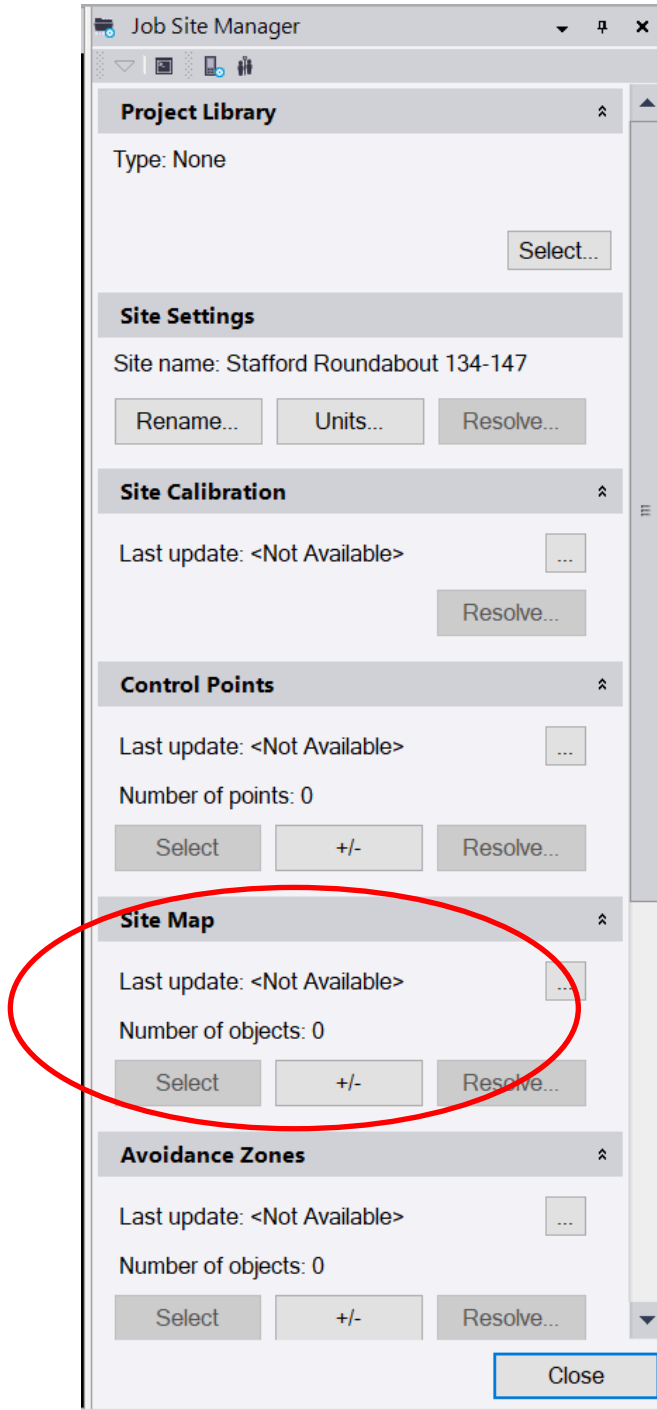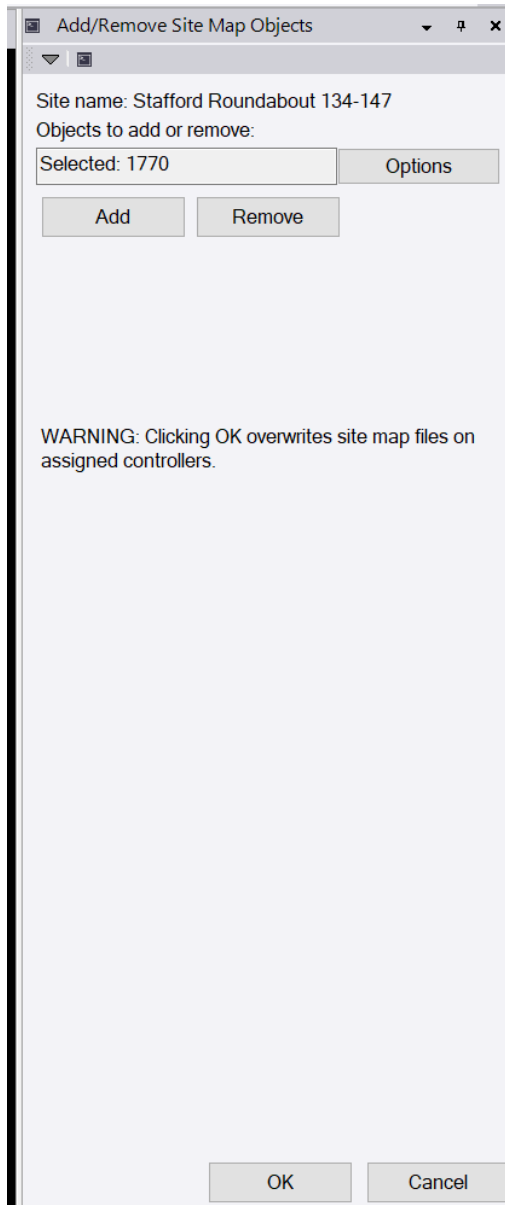
3. Click the +/- button

4. Within your selection set check the existing survey file so that is the only graphics shown

5. Turn off any layers you do not want to be shown in your site map

6. Drag a window and select the existing ground file

7. Click the Edit tab at the top of your TBCHCE interface window

8. Click Invert and see the number at the bottom of the screen, these ghost elements that cannot be seen in TBCHCE but need to be deleted so they do not show up in SCS900 in the field

9. Next click Invert again and see the original selection light up as being selected


10. Click the Add button. This will let you select graphics from the site map to be displayed on the tablet in the field.

11. Scroll down to verify the controller is listed in the box PC 1.1 in this case
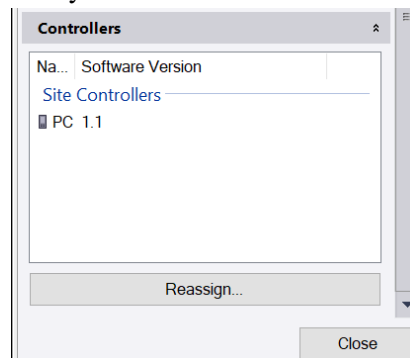
12. Click the SCS Data Icon at the top of the screen. This is a standalone application that allows you to added survey control data and project calibration files to your project quickly and easily.
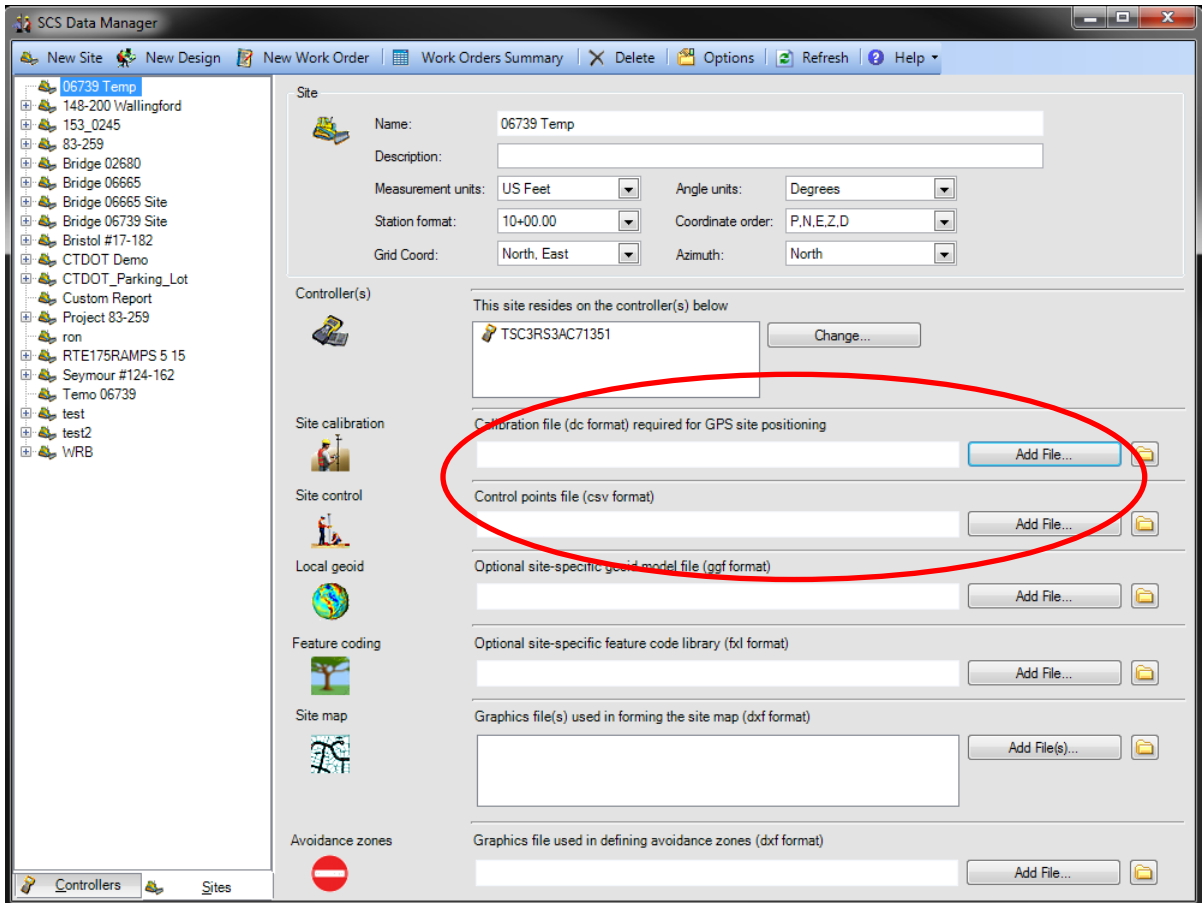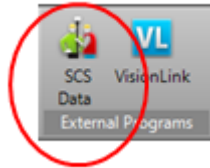
13. Click the Add File to the far right of the screen and browse to the Training data 2018 folder on your desk top to access the .csv survey control file
14. Repeat these steps and select the .dc calibration file
15. Then click the red box at the top right of the screen to close the application
16. Going back to the Job Site Manager notice the Site Calibration and Site Map are populated with data
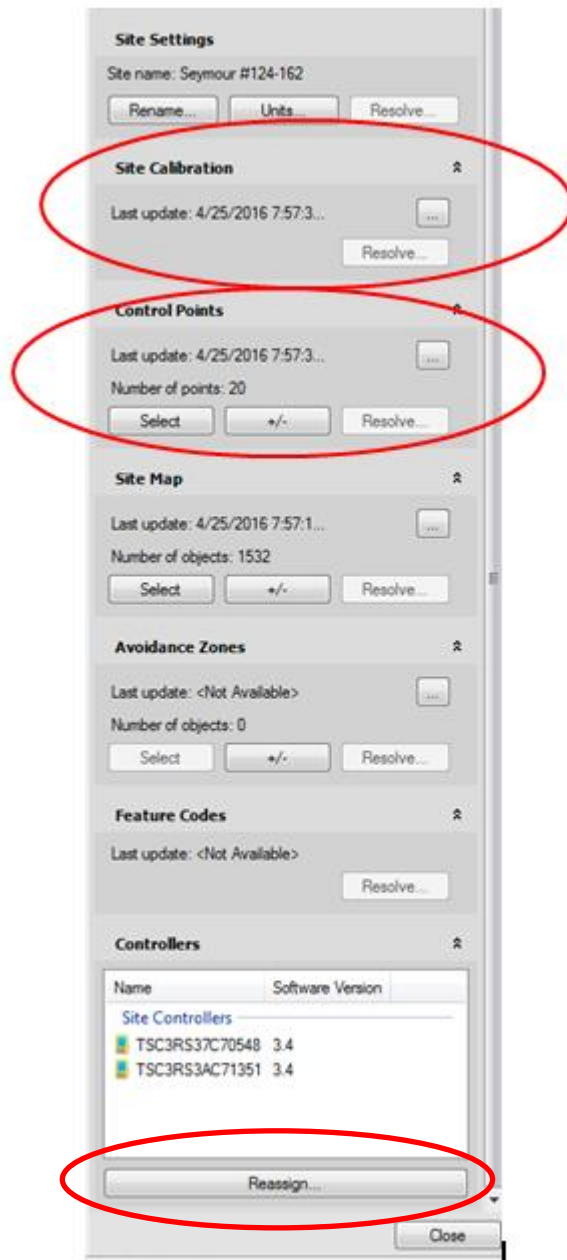
17. The user has the ability to Reassign controllers if needed by clicking the Reassign button and select a new controller
18. Close the Job Site Manager

2.3 Design Map

The Design map is usually the 2D proposed corridor model of the project. This map is located in the Design Manager. Layers can be turned on and off in SCS900 which cannot be done in the site map. Also the graphical line work can be used in the staking capability of the SCS900 software.
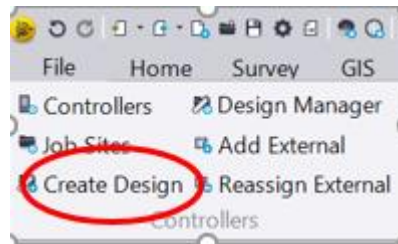
1. Next go to the View Filter manager and turn on only your proposed design work. Also turn off any layers you don't want shown in your design map.
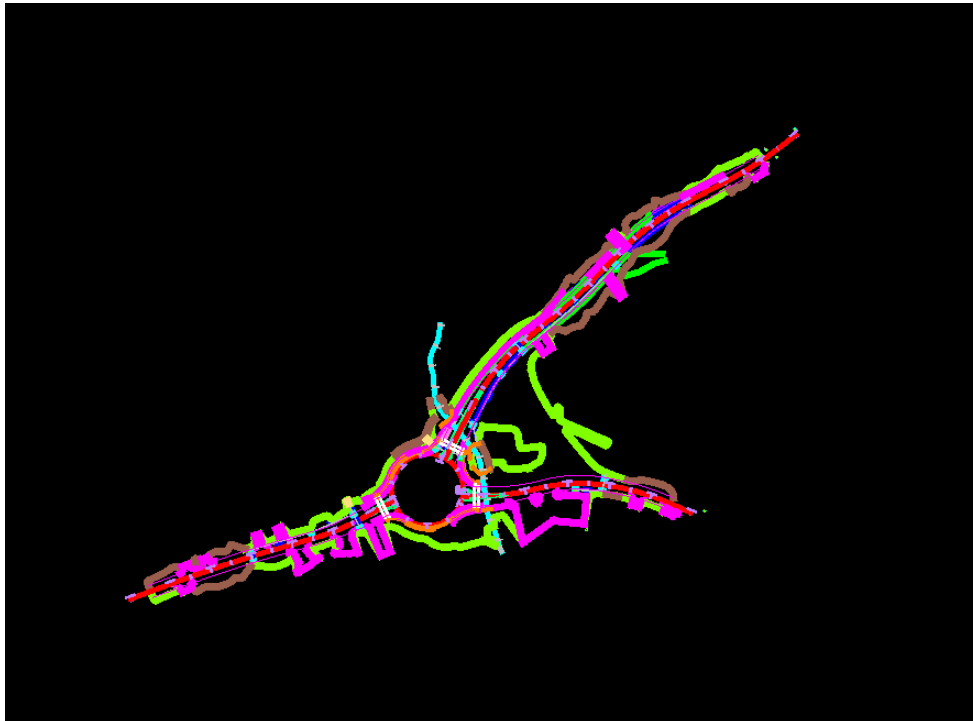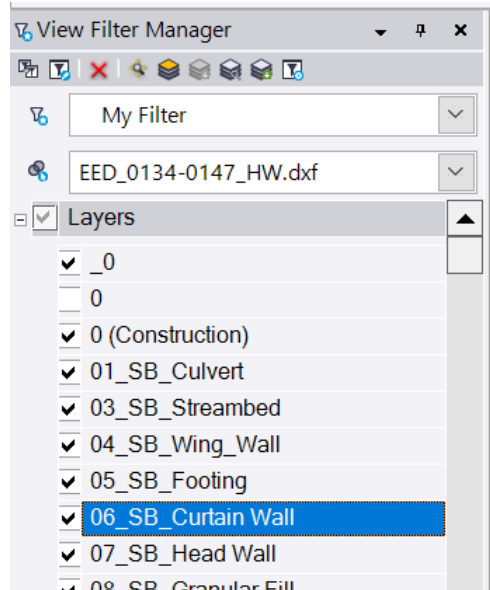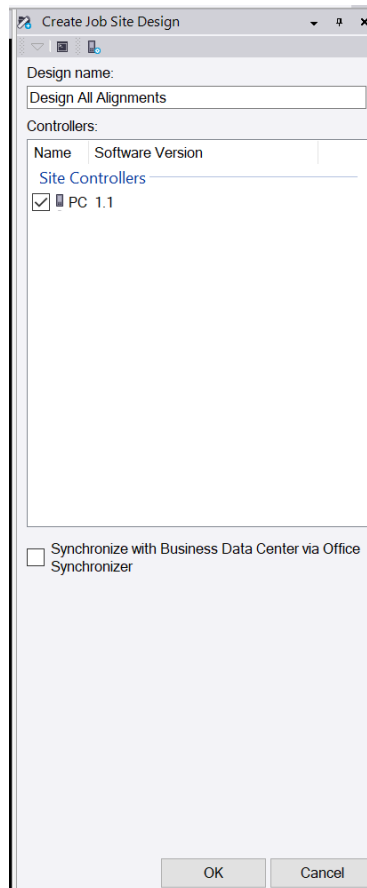
2.3.1   Design model

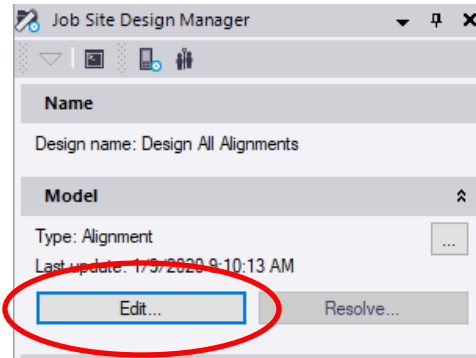1. Go back to the Construction Data pull down and select Create Design:

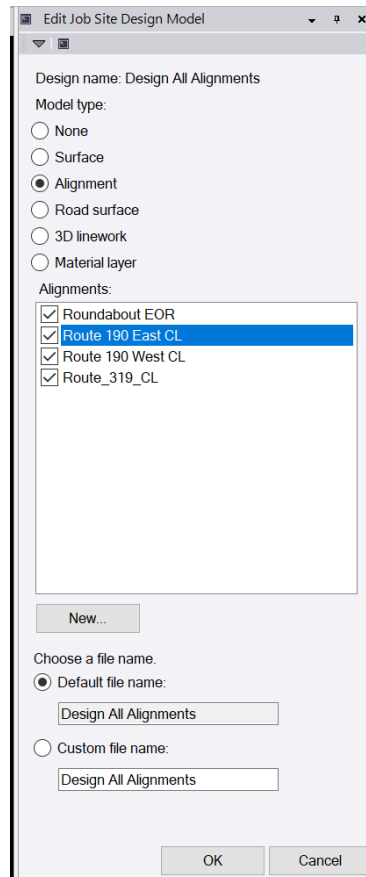2. Name the Design: Design All Alignments

3. Click the PC controller and then click OK
4. Click Edit within the Model box shown

2.3.2   Alignments

5. Next click the **Alignment** button and check all the alignments, then click OK.
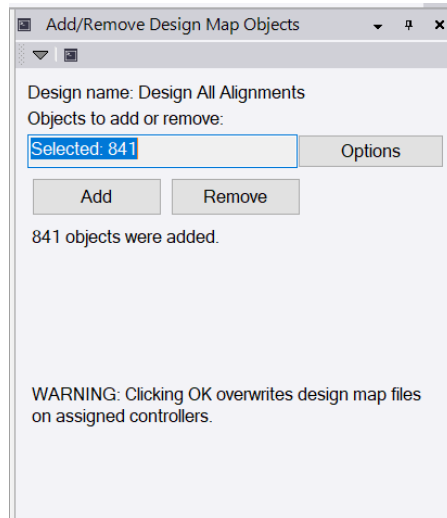
6. Next go back to the **Construction data** pull down and click **Create Design**
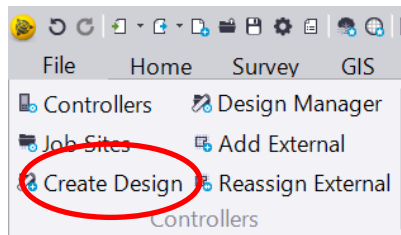
2.3.3 Surfaces

7. Name the second design **Existing Surface**
8. **Click OK**
9. Click **edit** in the model section
10. Next select the Surface button, next you will see the available surfaces to add to your design, for this training select Existing Surface
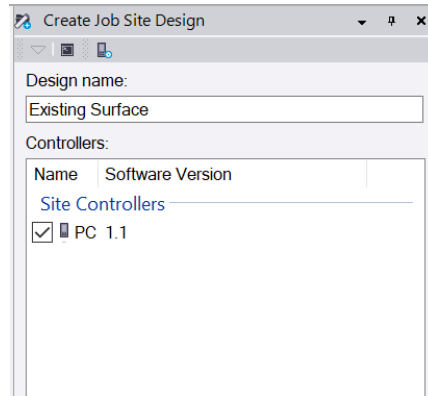
11. Click OK

12. Next click the Edit

13. Next select surface and also select existing under the surface tab and click ok

14. Turn off any layers you do not want shown in your design map, such as the design contours
15. **Drag a box to high light the Design map content** and click add, you will see the number of object shown in the box.
16. Click OK and you will see **the number of objects** within the Design map section
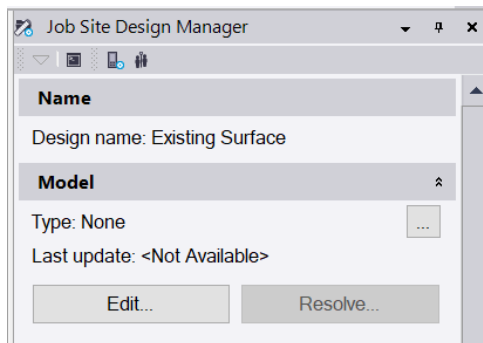17. Also make sure your design is assigned to a controller at the bottom of the Design manager

2.4 Work Orders

2.4.1   Creating Work Orders

1. Go to the **Construction Data** pull down and select the **Controller Manager:**
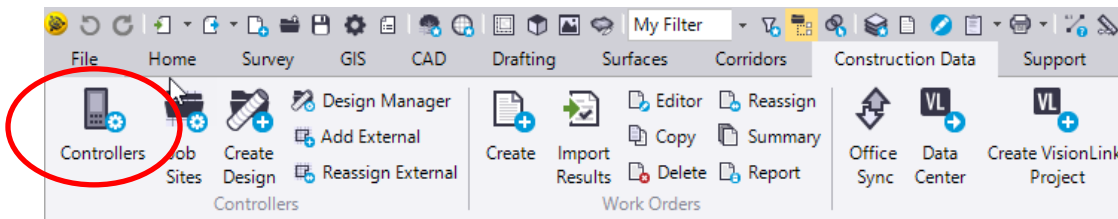
2. If there is nothing populated in the box you must refer to **Section 2.51 Syncing thumb drive to PC**
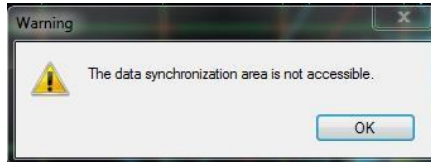
3. If you see the **PC listed then you can proceed with the training**
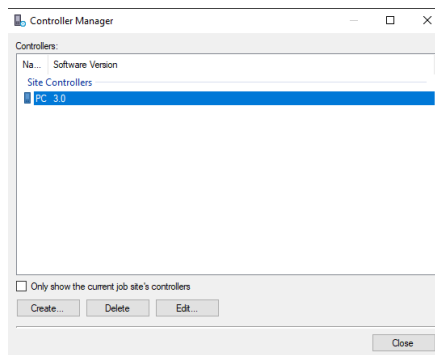
4. Close the Controller Manager box

5. Go to the Construction data pull down and select **Create** in the **Work Order** section
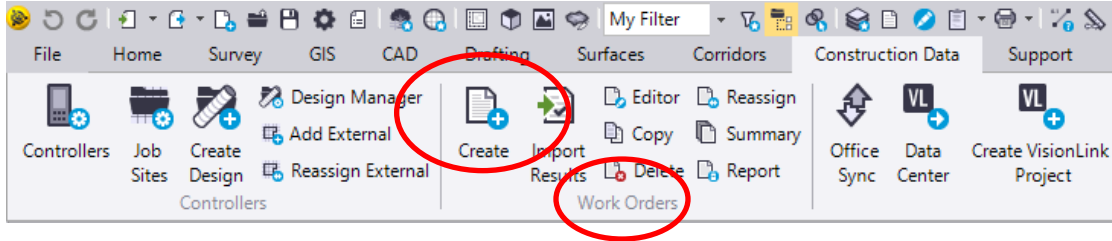
6. Name the Work Order 20200226seed and click OK
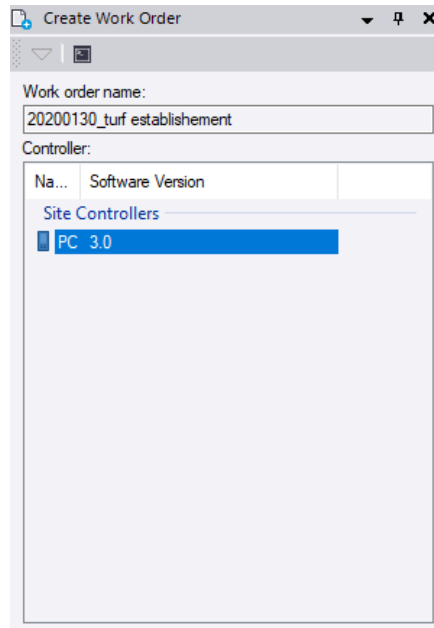
7. The Work Order box will appear as shown below

8. Review the information in the Work Order section
9. Pick **Design**: from the pull down to assign to the work order
10. For this **work order** we will assign the **PRO** which is the **base line geometry**
11. This will **display the station and offset dynamically** on the tablet
12. Change the work order **status** accordingly

13. Click **View** to review the work order graphics then clicking OK.
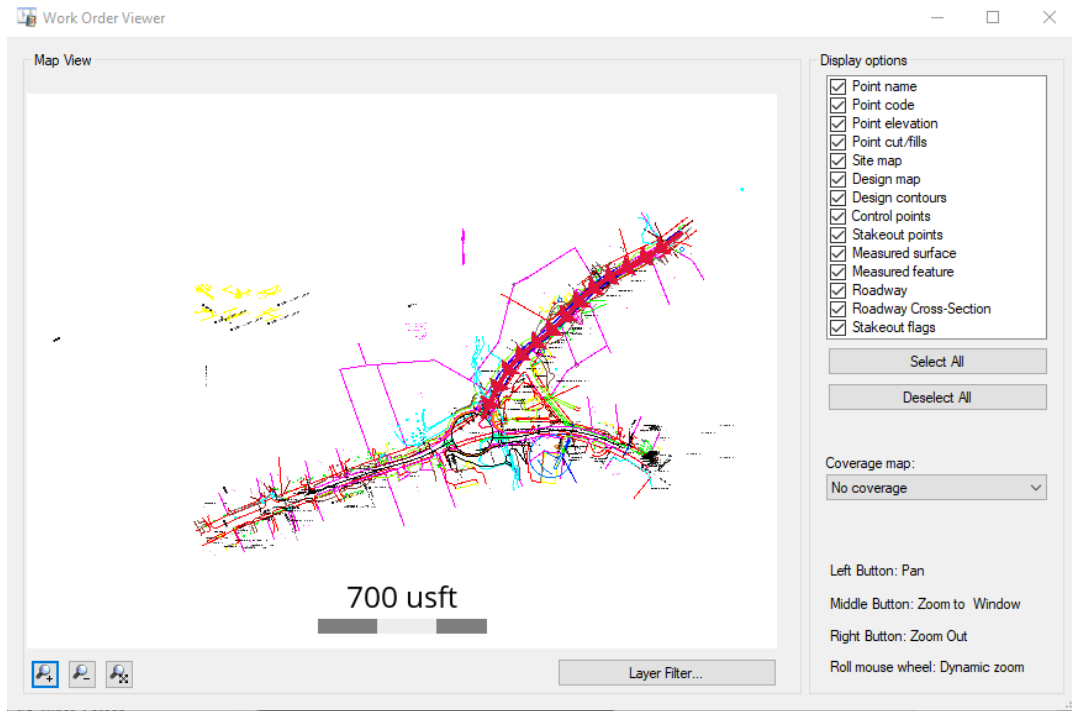
14. **Repeat and create a new Work order** called **20200226seed** assigning the **Design all alignments** to the work order
15. Click OK

2.5 Data Transfer

2.5.1 Transferring data from PC to Tablet or controller

Once the work order is complete on the PC the work order file gets transferred from the Trimble Synchronizer data folder located in the C: drive on your PC. The work order file gets copied to the synchronizer data folder on the tablet or data collector.

This can be done with a USB flash drive. Next section we will review the process to sync the flash drive to your Business Center project on the PC and your scs900 project on the tablet or data collector.

1.   Open the explorer window and navigate to the C: >Trimble Synchronizer Data on the PC
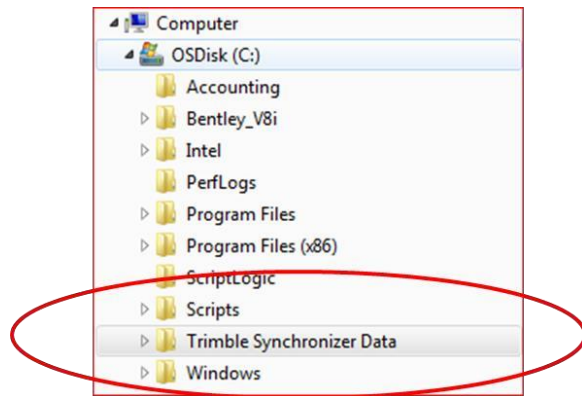
2.   Open the Synchronizer data folder
3.   Next click on the PC folder
4.   Next click the Trimble SCS900 Data folder
5.   Review your project files
6.   Place the flash drive provided into the tablet or data collector and copy the work order file to the same location onto the tablet or data collector
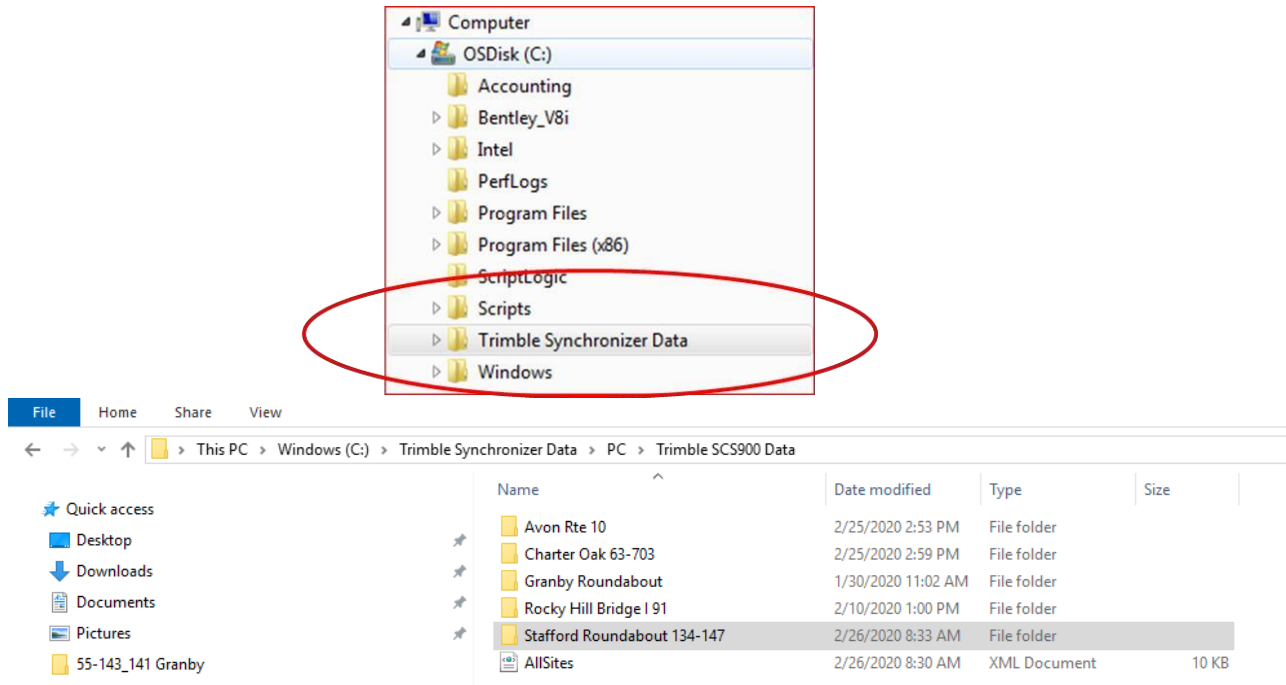
Section 3 SCS900 Site Controller Software

3.1 Introduction

The SCS900 software is a site measurement tool that streamlines earthworks and surface finishing operations. It enables construction inspectors to measure material volumes, monitor grades and laid material thicknesses, and to perform site measurement tasks such as point, line, and surface stakeout. The next generation of SCS900 called Siteworks, and is introduced in Section 9.

1. Open **Trimble SCS900 Emulator** by clicking on the **emulator** icon on your desk top

General Note:
The Site: Work Order: and Design: names will vary depending on what you named them previously in TBCHCE

2. Mode will be set to **Rover**
3. Connection Type will be set to **Emulator**
4. Correction method will be set to **radio inside the receiver**
5. **Network ID** will be set **1**.
6. Connected to Base will be **Emulator/Zephyr**
7. Antenna height will be **6.562usft**
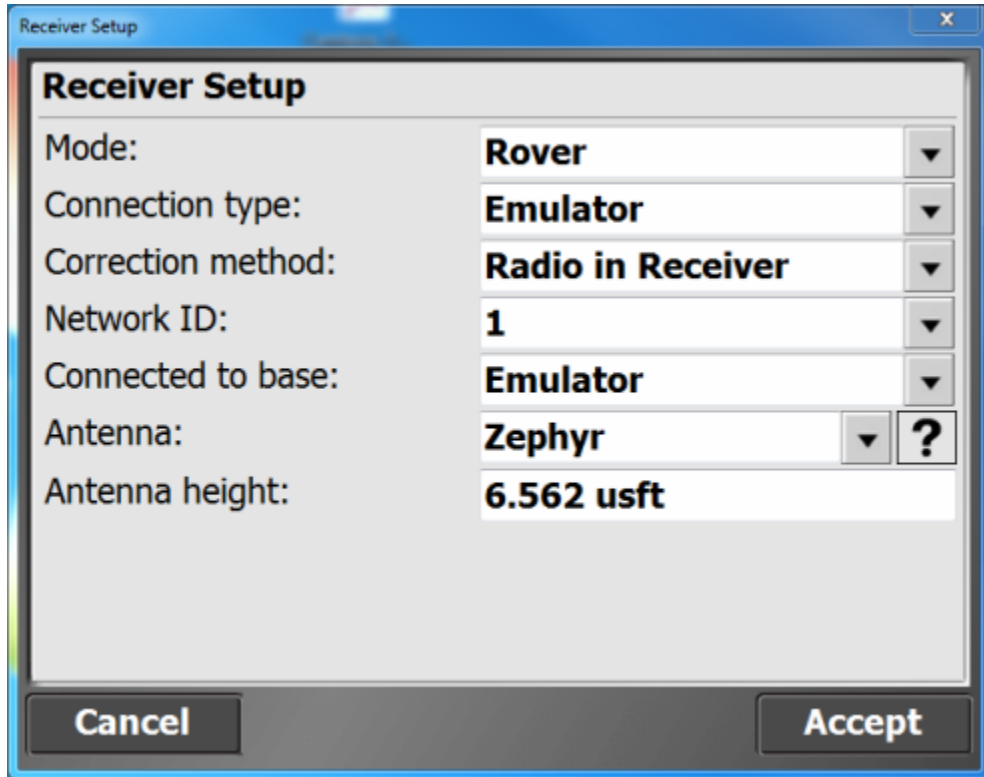
8. Click **Accept**
9. The software will prompt you to **calibrate, click NO because the emulator has false coordinates streaming and the software will not be able to make sense of the coordinate geometry**
10. Select Road Job by clicking the alignment on the screen or select the box in the upper right corner of the screen and choose the base line you wish to use.
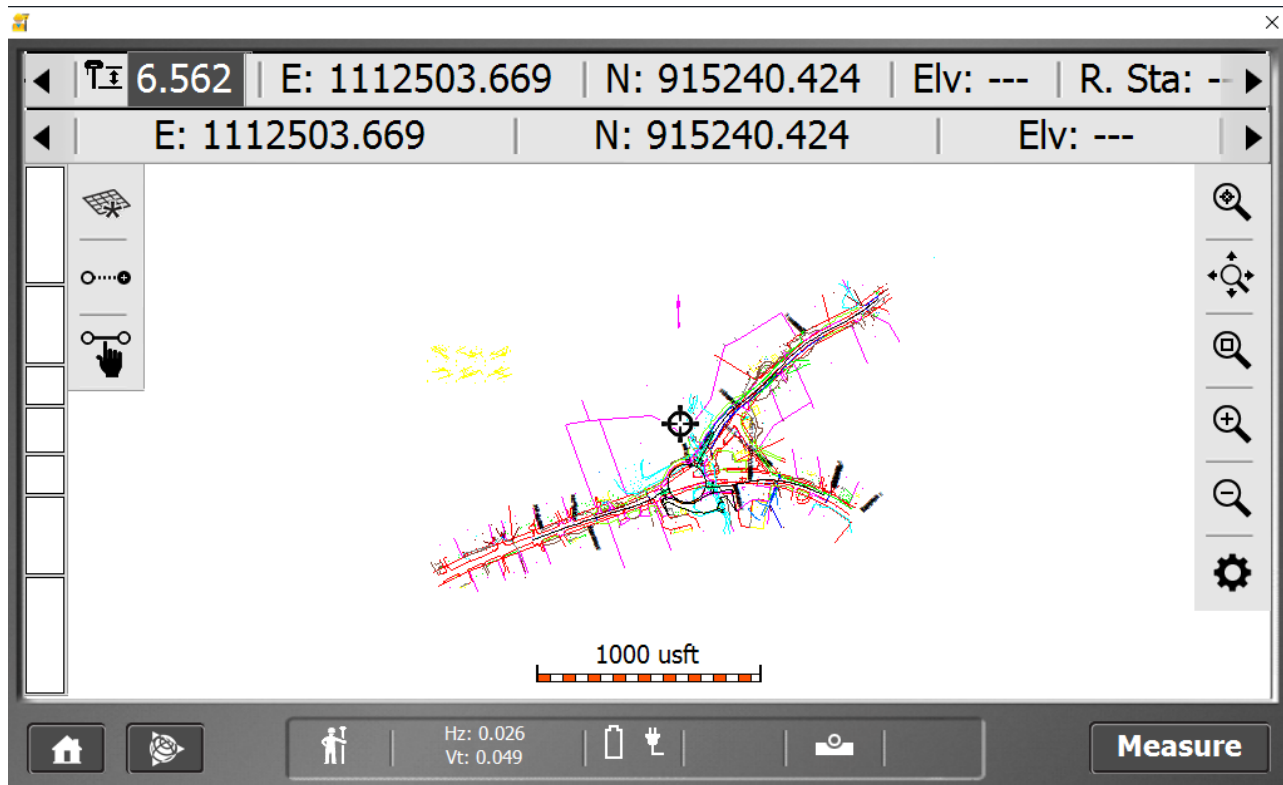
11. Click: **Accept**

3.2 Taking Field Measurements

3.2.1   Measuring a surface area

1. Click the icon circled in **Red** below:

2. Next click on the **New Line Tab** and type in **seed**
3. Set Line type to **volume boundary**
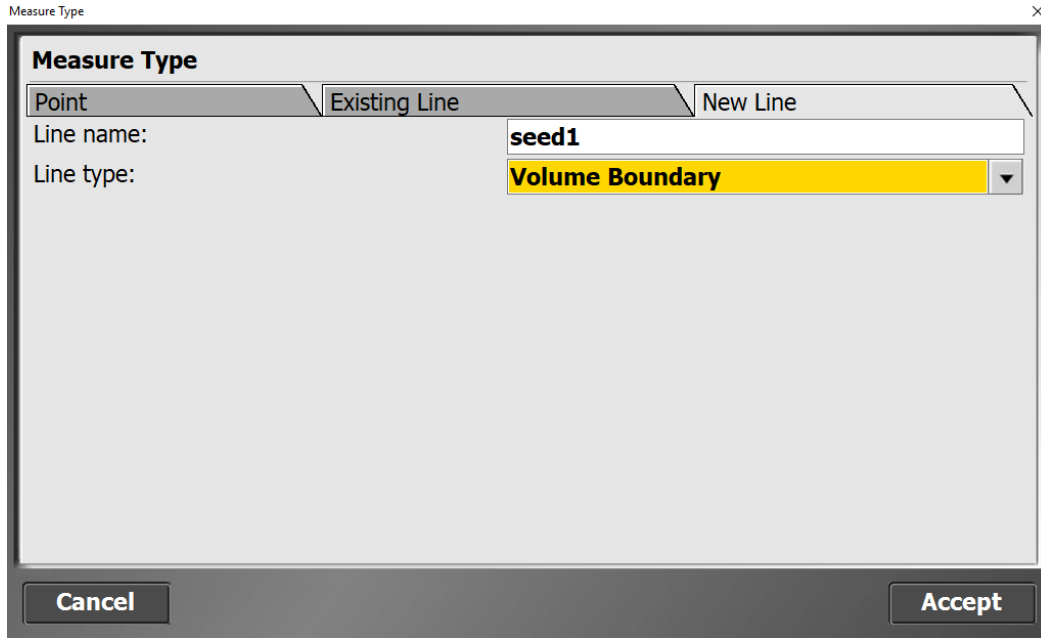
4. Next click the **Zoom icon** shown highlighted in yellow
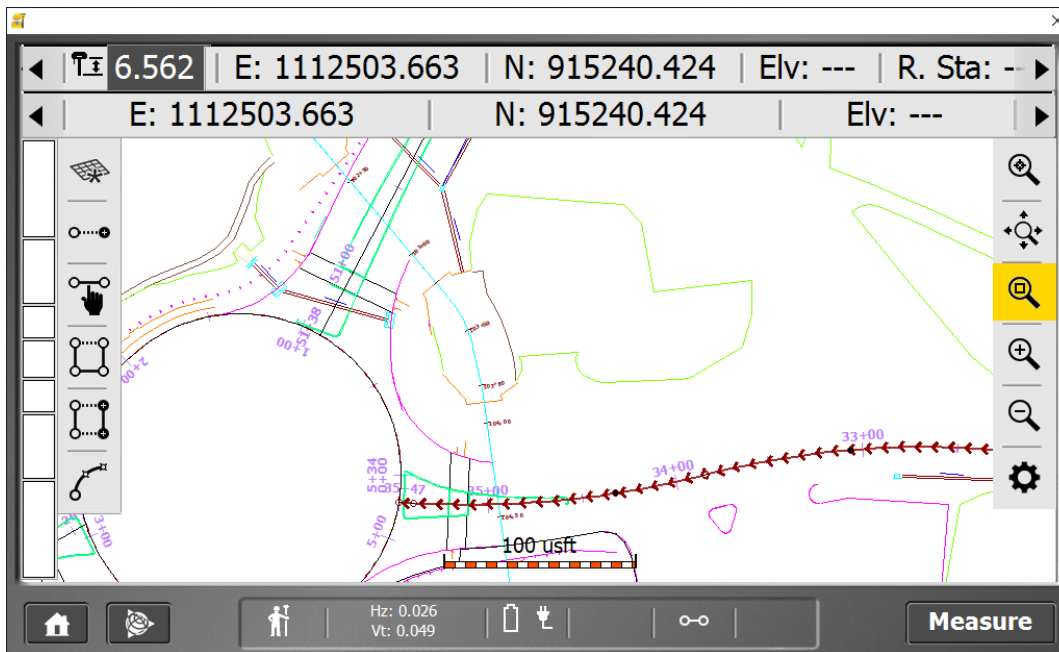
5. Drag a window to zoom in on the **active alignment** shown with the **directional arrows**
6. Make sure you click the **zoom icon** again to release the command
7. Next click measure and take a measurement along the seeded area using a volume boundary
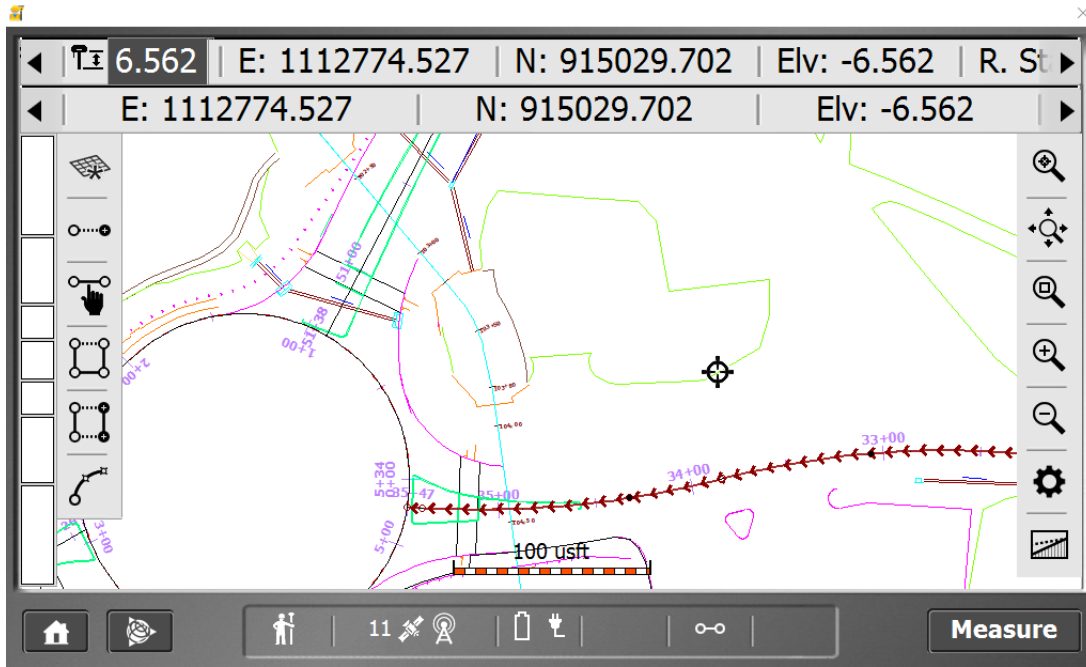
8. Next click the measure icon and take shots around your seeded area using a volume boundary
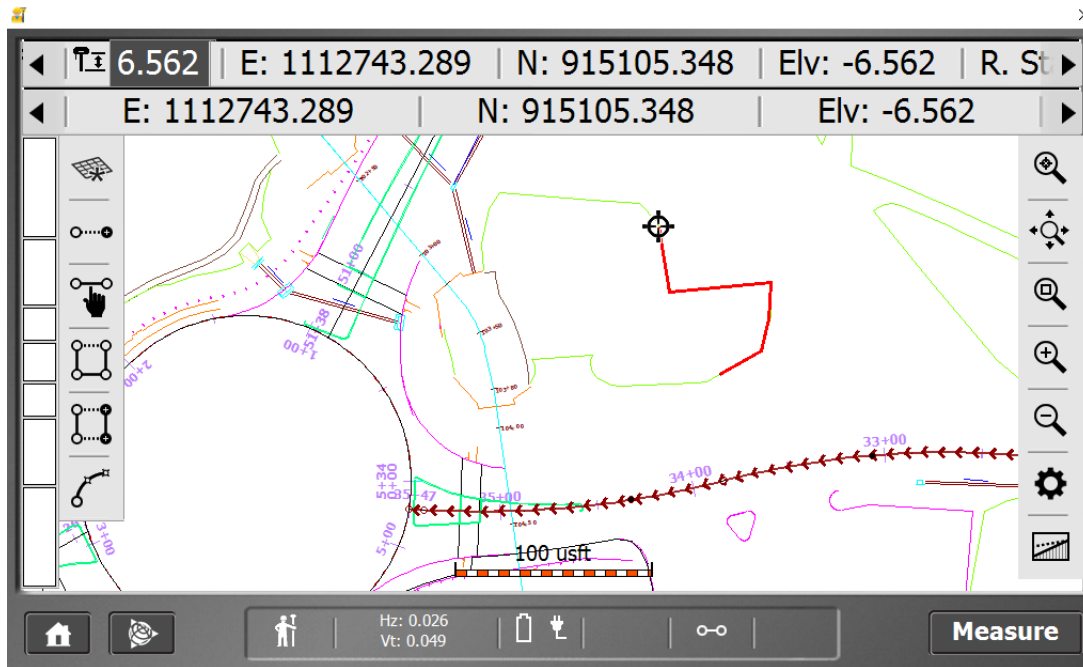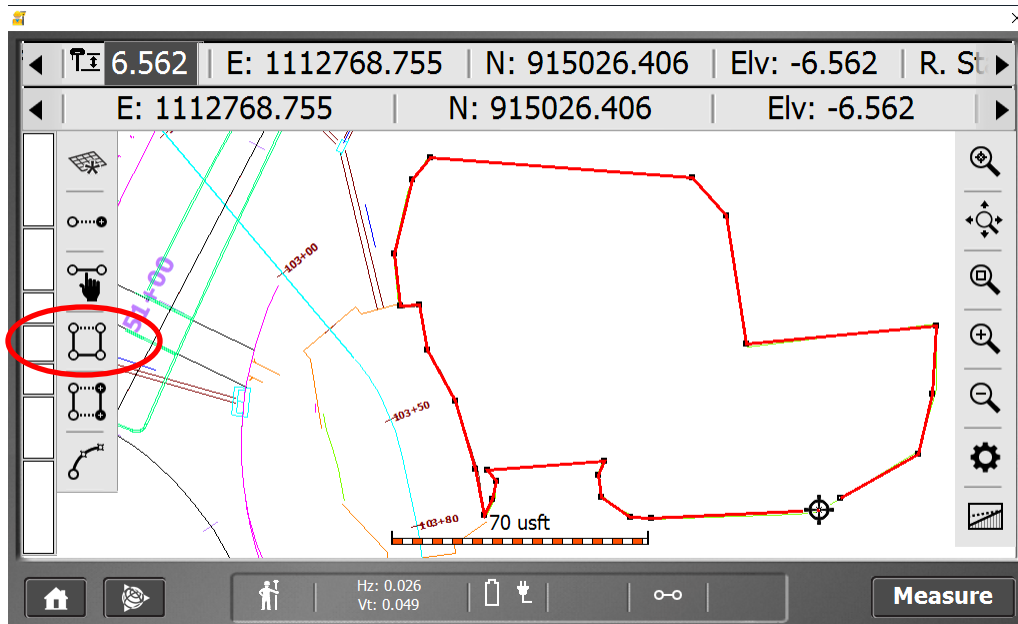
9. Upon your last shot click the icon circled in red to close the shape
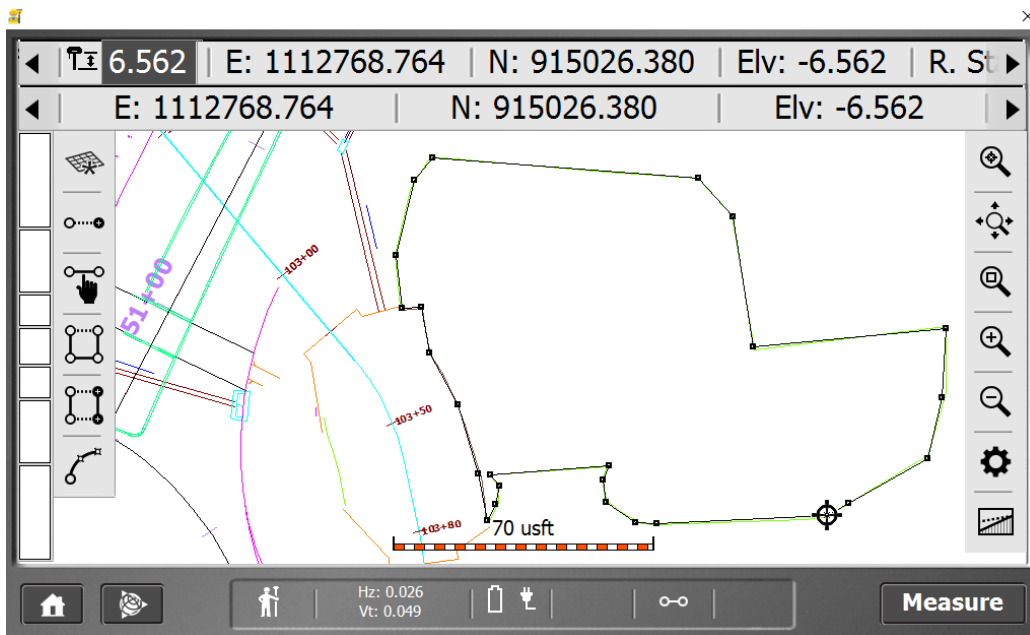
10. **Click and hold on the shape** until it gives you the **line information**

11. Click line information and review data

12. Click Close

13. Select any point and choose the **point information** and scroll down to the station and offset to the base line

VGASimpleChoiceDialog   ×

◄ | N: 915042.291 | Elv: -6.562 | R. Sta: 33+52.072 | R. Off: 61.27 ►

◄ | E: 1112796.472 | N: 915042.291 | Elv: -6.562 | ►

LinePt61   ✕

Point Information

Select Feature Code

Edit Attributes

Edit Data

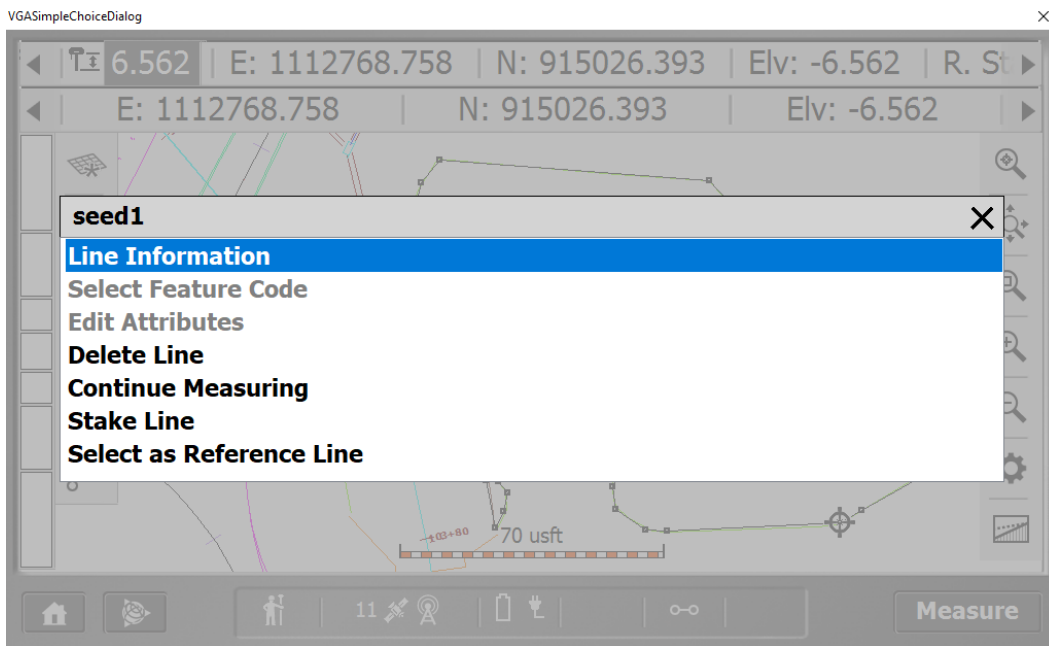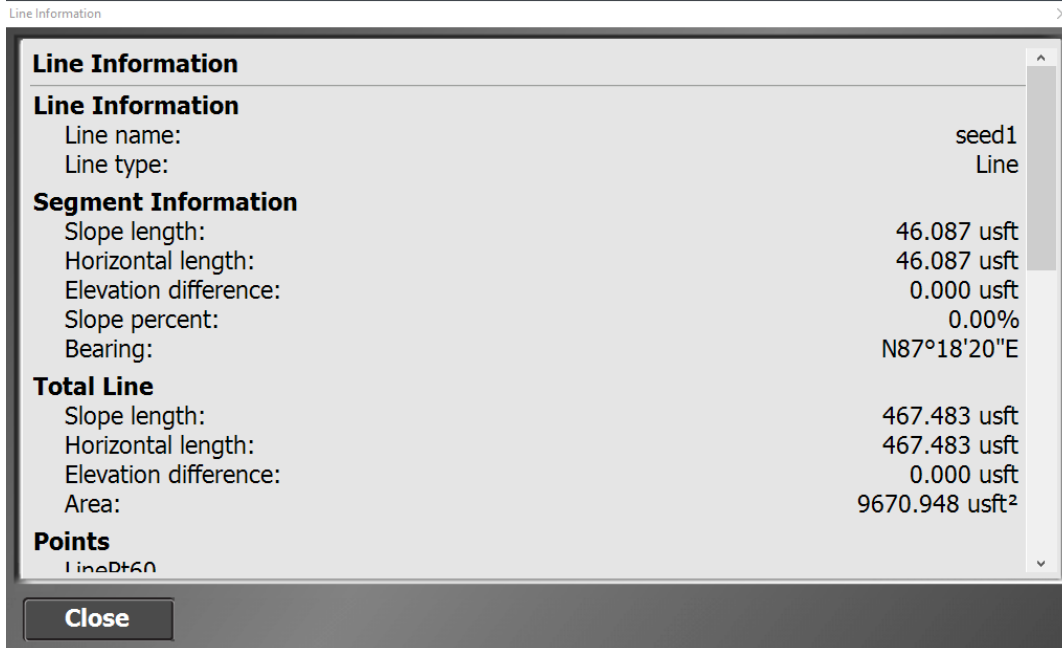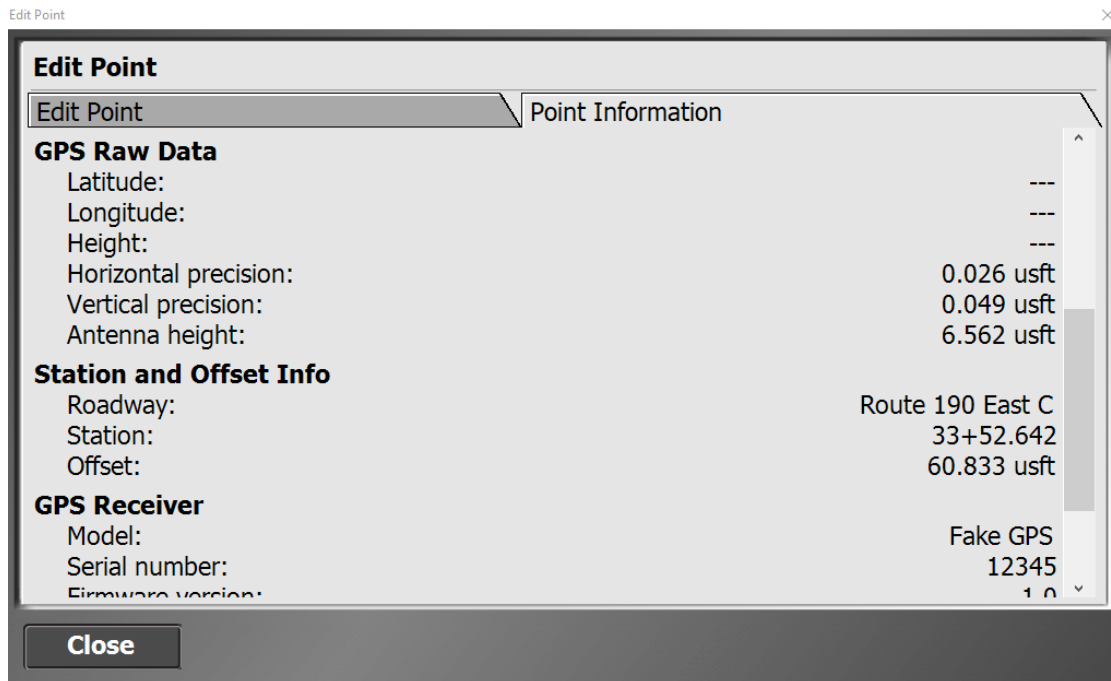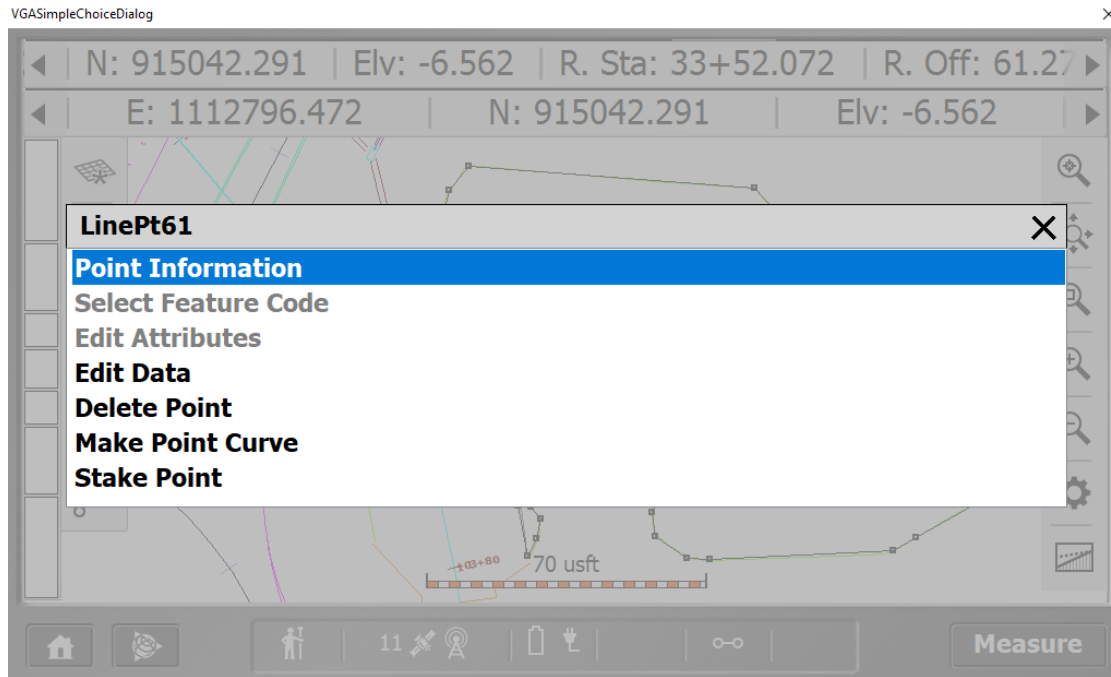**Delete Point**

Make Point Curve

Stake Point

03+80   70 usft

11   Measure

Edit Point   ×

Edit Point

Edit Point	Point Information

GPS Raw Data

Latitude: ---
Longitude: ---
Height: ---
Horizontal precision: 0.026 usft
Vertical precision: 0.049 usft
Antenna height: 6.562 usft

Station and Offset Info

Roadway: Route 190 East C
Station: 33+52.642
Offset: 60.833 usft

GPS Receiver

Model: Fake GPS
Serial number: 12345
Firmware version: 1.0

Close

3.2.2   Measuring a Feature

In SCS900 features are contract items measured in a linear type series of shots. For example, line stripping, MBR, and drainage pipes. The exercise below shows the measurement of a drainage pipe from catch basin to catch basin

1. Locate the drainage pipe at station 51+20 if the reference line is not selected go to the Trimble icon
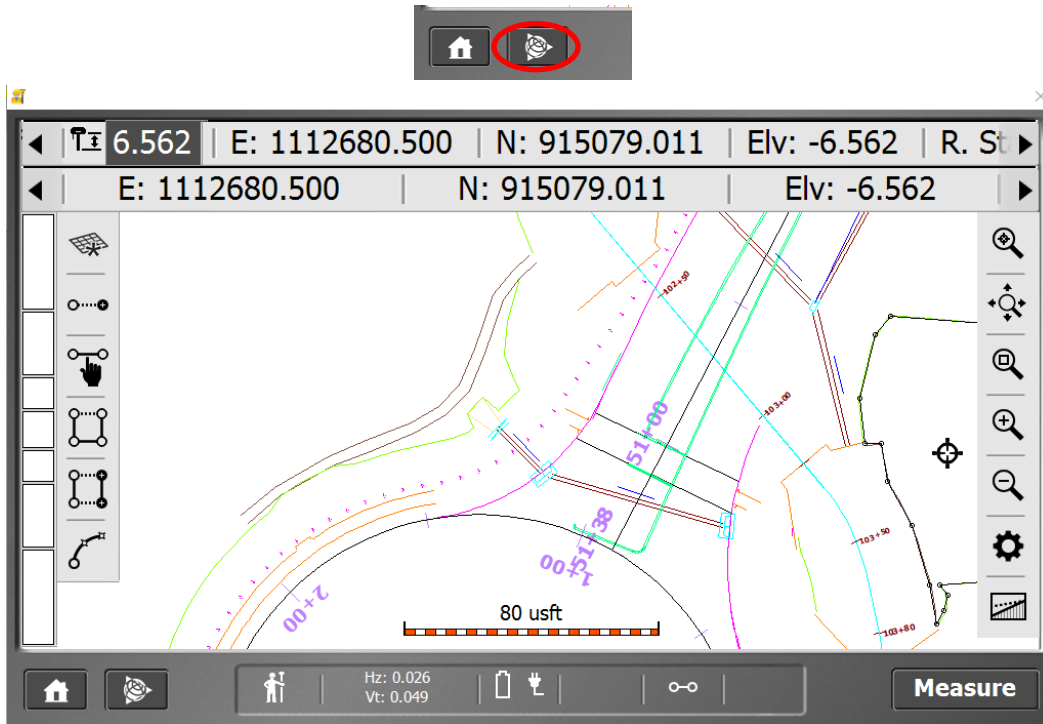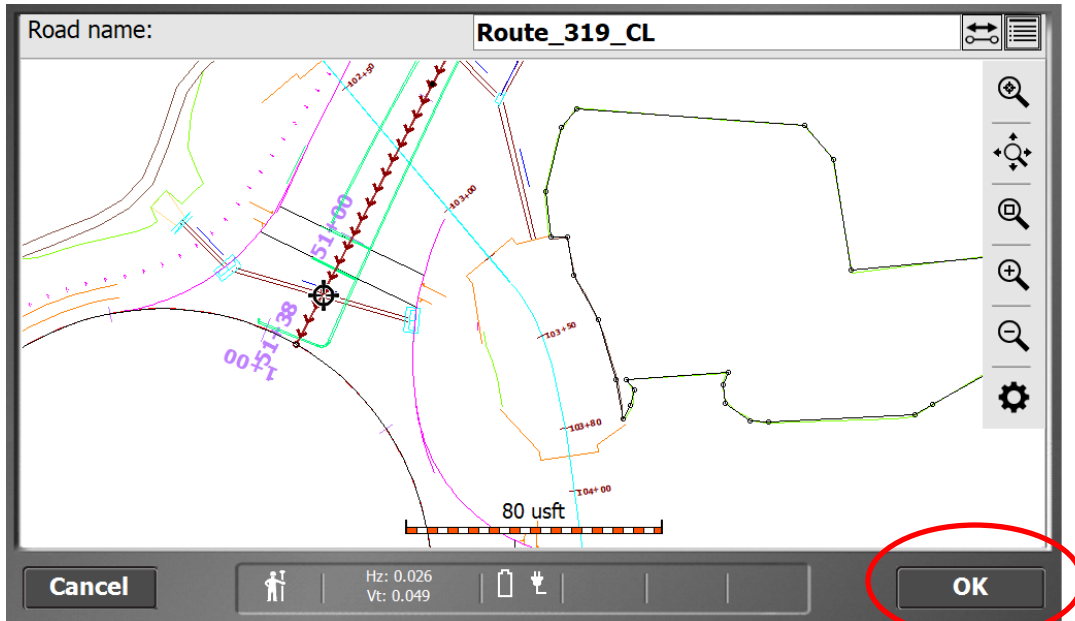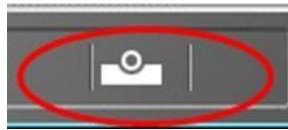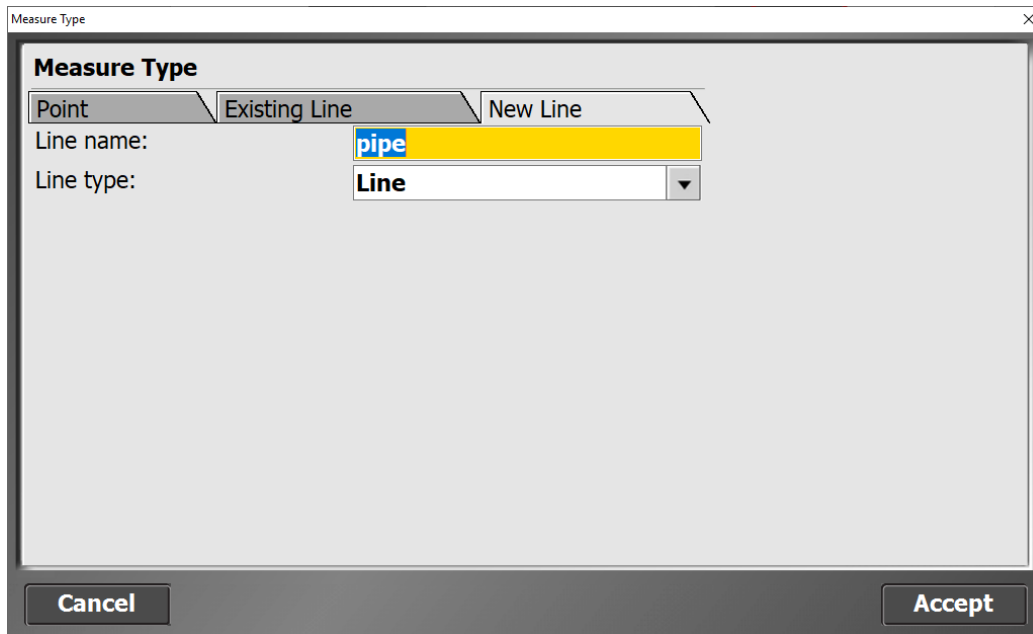

2. Next select reference line
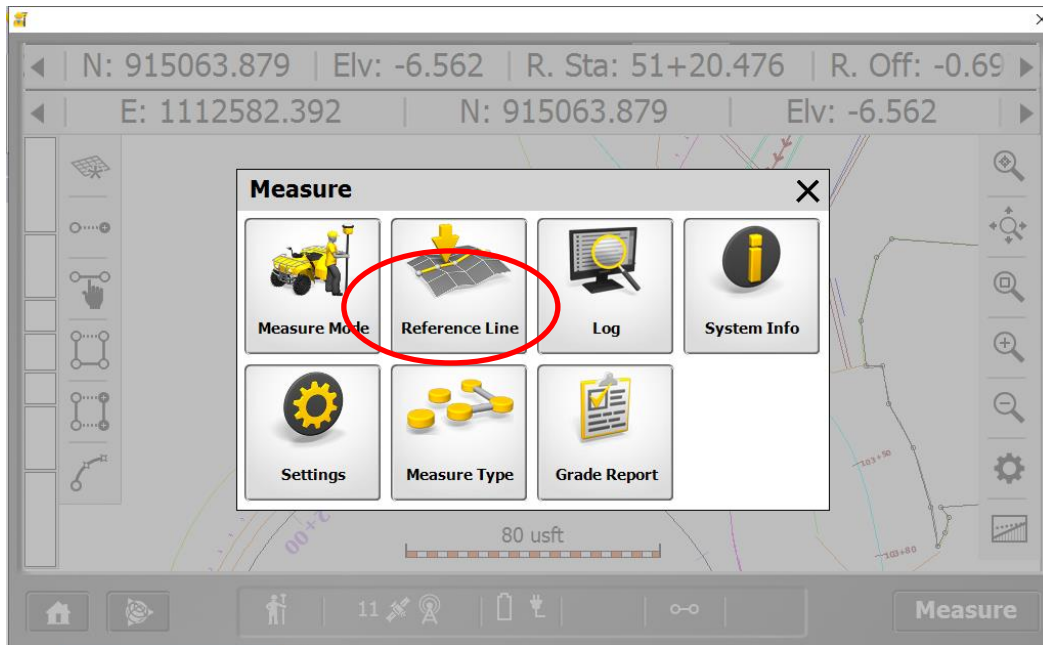
3. Next click the baseline on the screen and click **OK**

4. Click the **measure type icon**

5. Navigate to the **New Line tab**

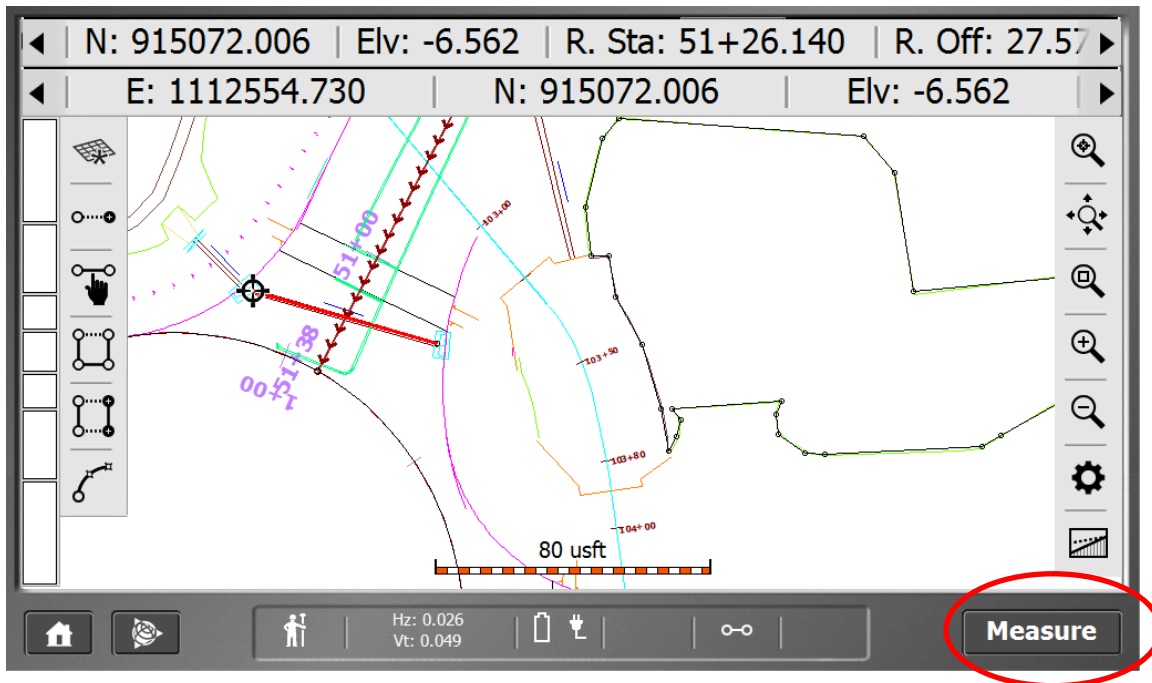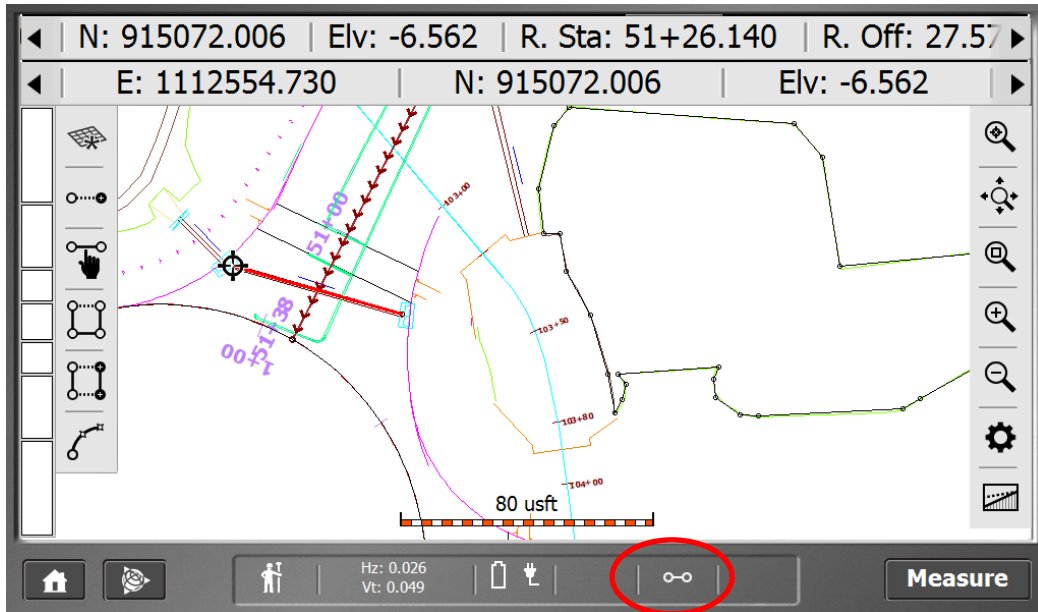6. Line Name: **pipe**
7. Change the Line type: **Line**
8. Click Accept
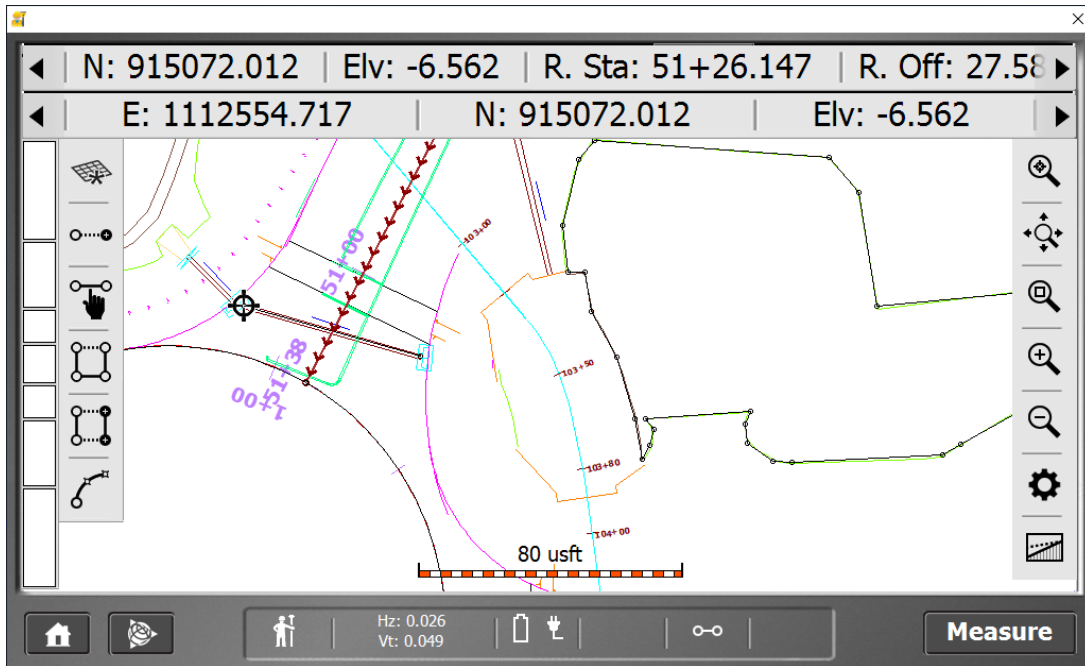9. Next line up the target with the start of the pipe and click the **Measure** icon
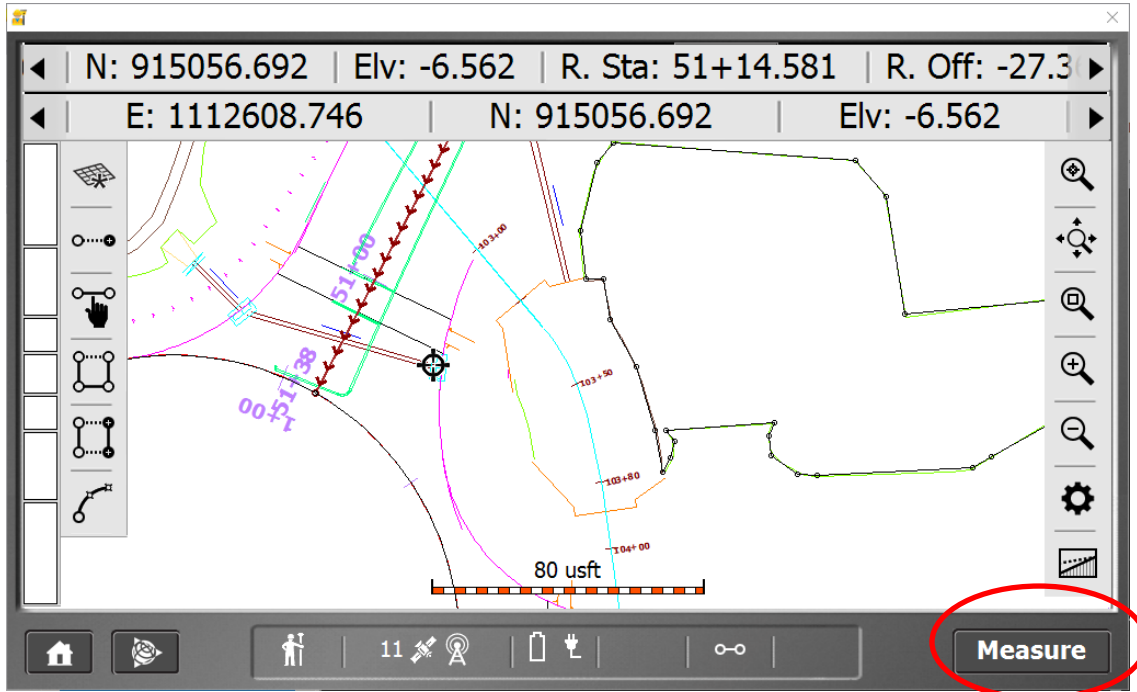
10. Next navigate to the end of the pipe and click measure

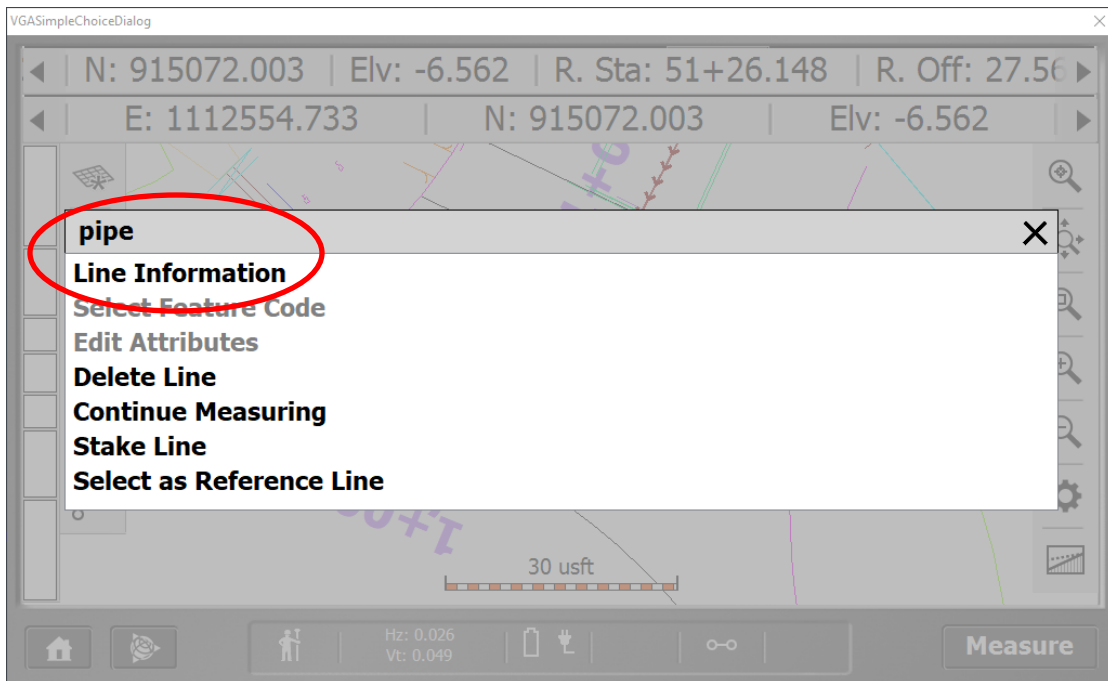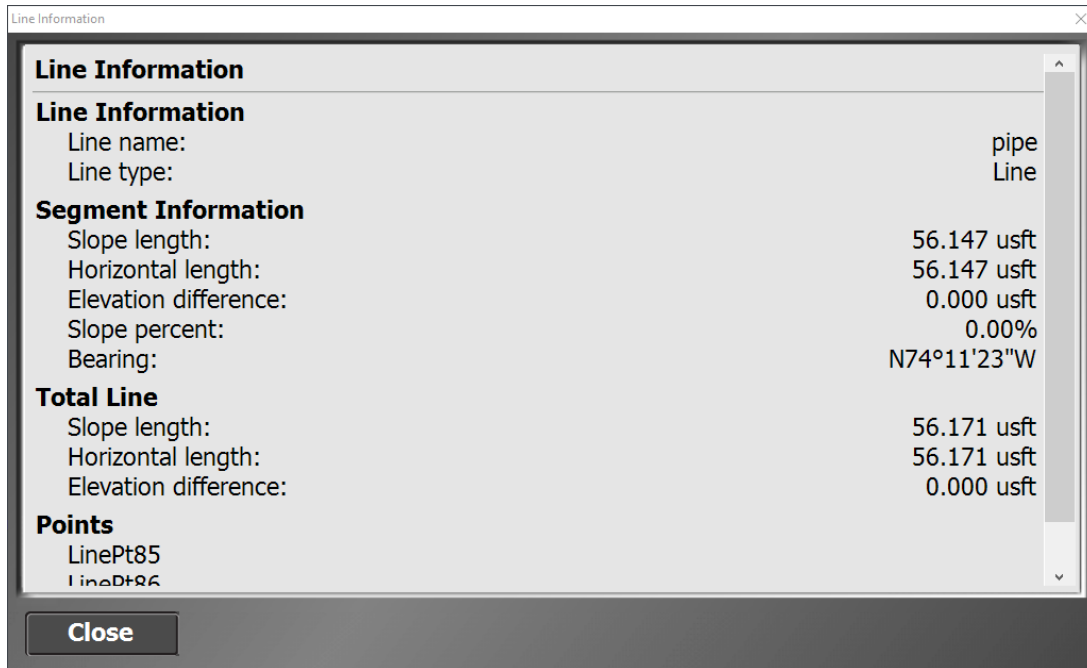11. To end the measurement click the measurement type icon

12. Next click Accept to finalize the measurement

*Note: The only way to end a measured feature is to start a new line

13. Next long click on the measured line (pipe) and click on the **Line Information**

14. Review line information and notice your length for measurement/payment

Line Information   ✕

Line Information

Line Information
Line name:	pipe
Line type:	Line

Segment Information
Slope length:	56.147 usft
Horizontal length:	56.147 usft
Elevation difference:	0.000 usft
Slope percent:	0.00%
Bearing:	N74°11'23"W

Total Line
Slope length:	56.171 usft
Horizontal length:	56.171 usft
Elevation difference:	0.000 usft

Points
LinePt85
LinePt86

Close

3.3 Volume Methods

This exercise shows how to take work order data and create a design surface used for volumetric calculation real time in the field

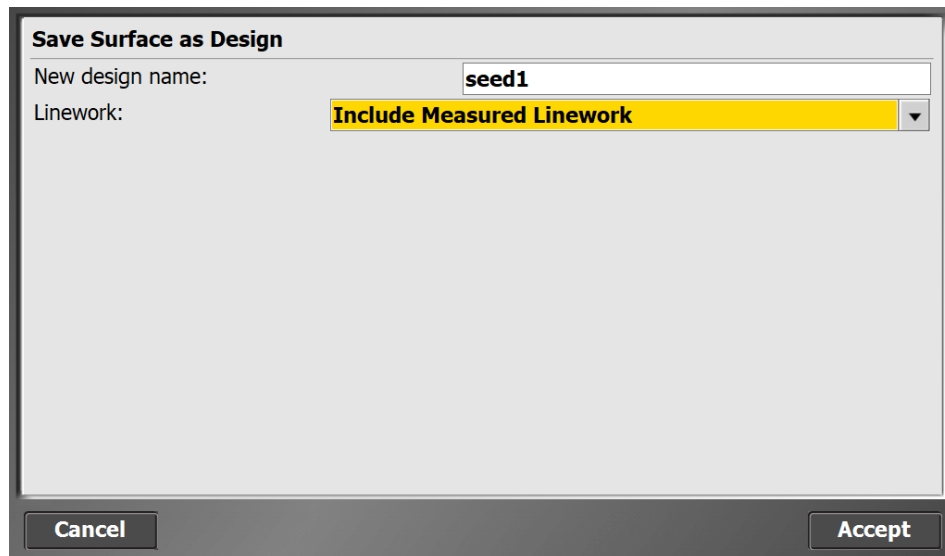## 3.3.1   Saving a Work Order as a Design Surface

1. Click the **Home icon**

2. Next click the **Import/Export icon**
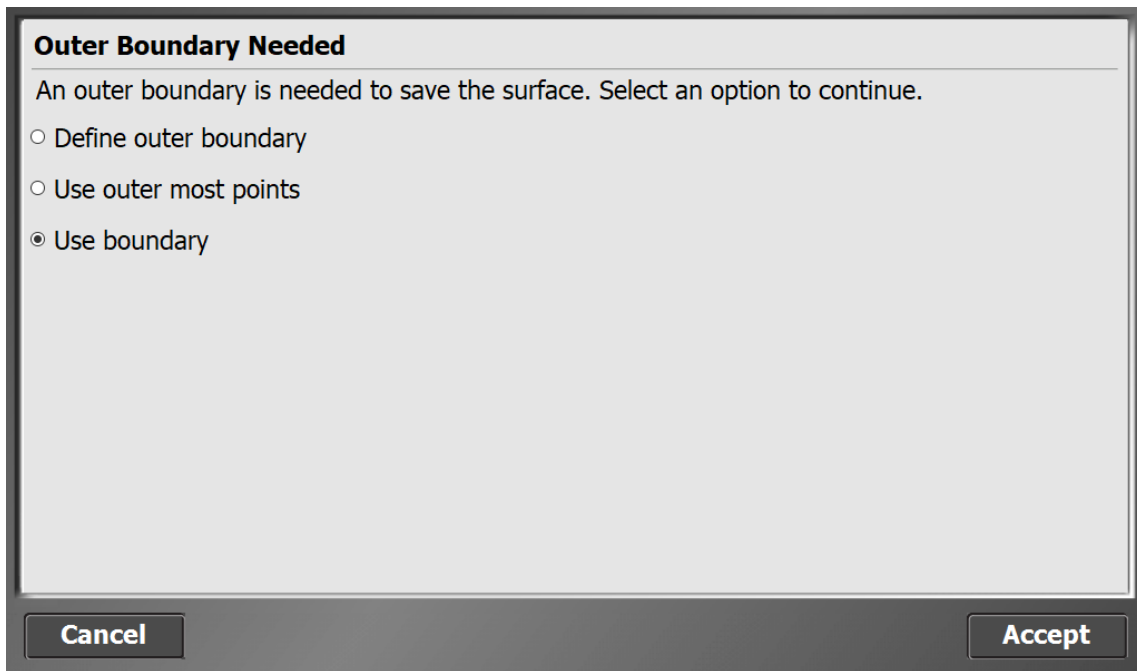

3. Next click **Surface as Design**

4. Name the surface **seed1** and **Include Measured Line work**

5. Click Accept

6. Select **Use volume boundary or closed break line**

Outer Boundary Needed

An outer boundary is needed to save the surface. Select an option to continue.

○ Define outer boundary

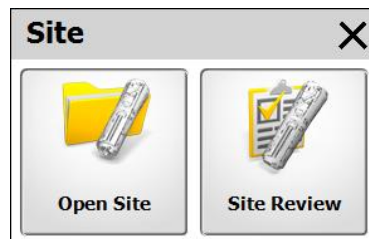○ Use outer most points

◉ Use boundary

| Cancel | Accept |

7. Click Accept and now the work order is available as a design for future volume computations

3.3.2 Measuring a stock pile for volume quantities

1. Next go to the **Home icon and then click Site**

Site

2. Click the Open **Site icon**

Site ✕

Open Site   Site Review

3. Click **New Work Order** and name it **20200226wsa** and click **Finish**
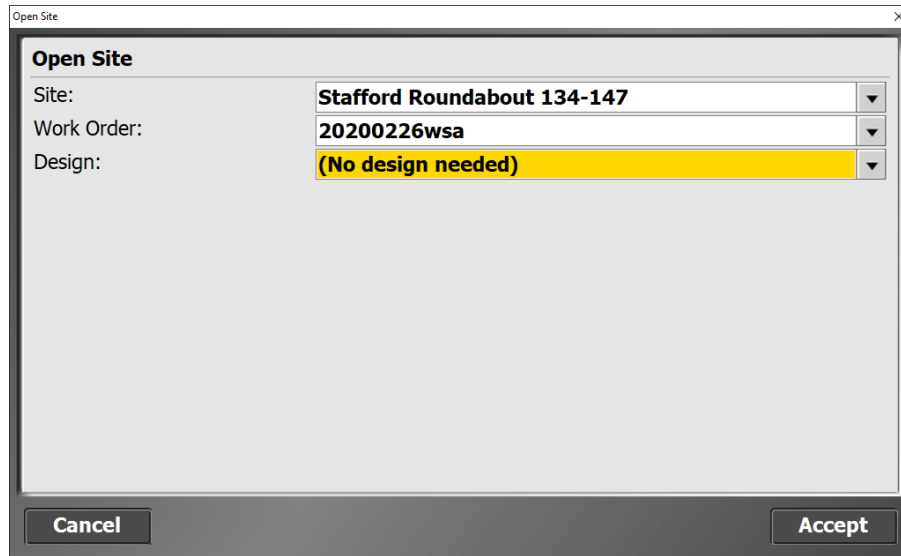
4. In the **Open Site** box in the design area select (No Design Needed) and **Accept**
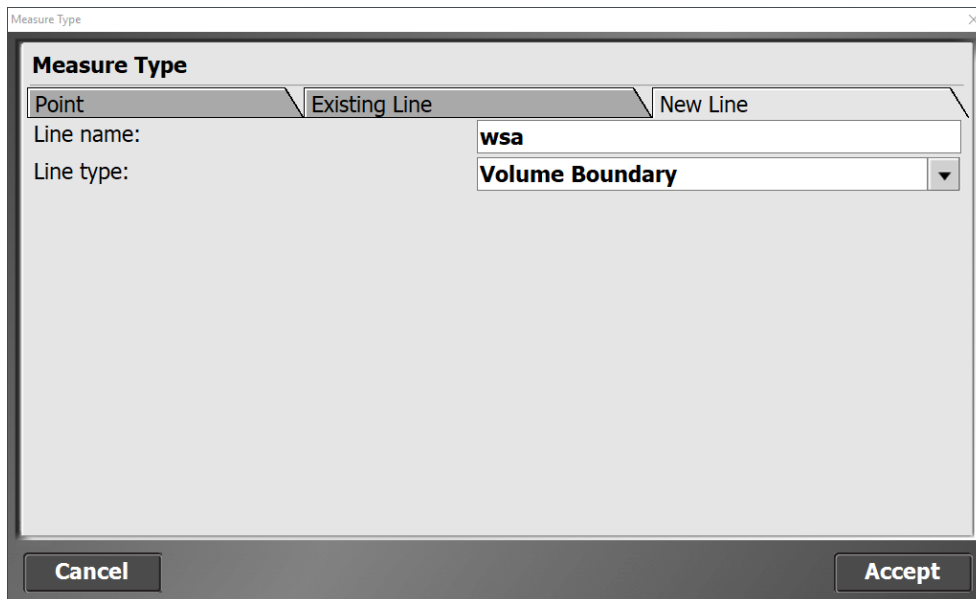
5. Next click measure type navigate to new line tab and mane your volume boundary WSA

6. Click **Line Type** drop down and select **volume boundary click Accept**

7. Next take shots around the base of the stock pile
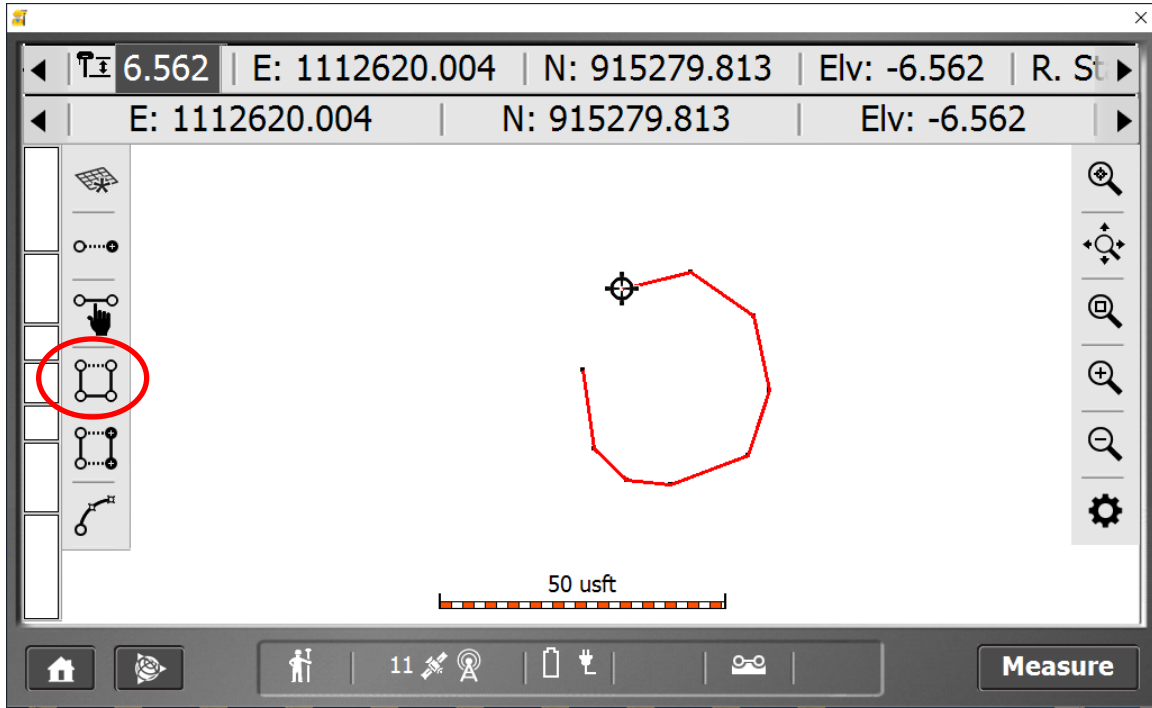
8. Close the volume boundary by clicking the icon shown
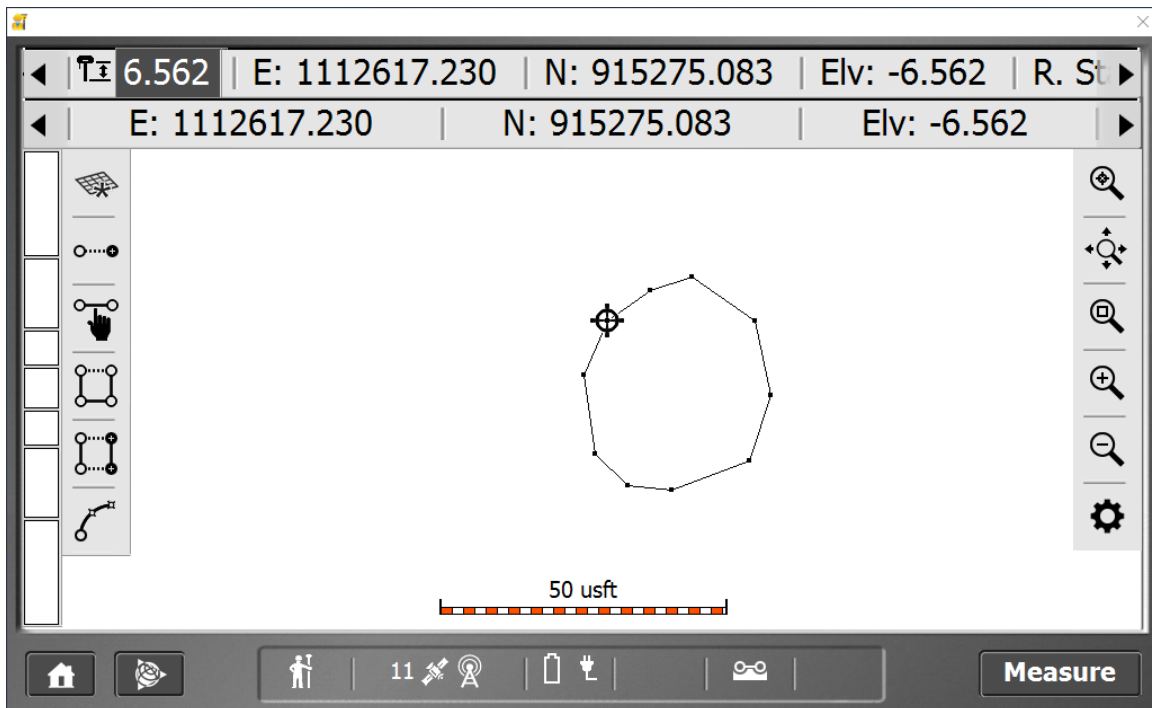
9. Select **Measure Type** and select the **Point** tab and name your points **wsa** and click **accept** when finished
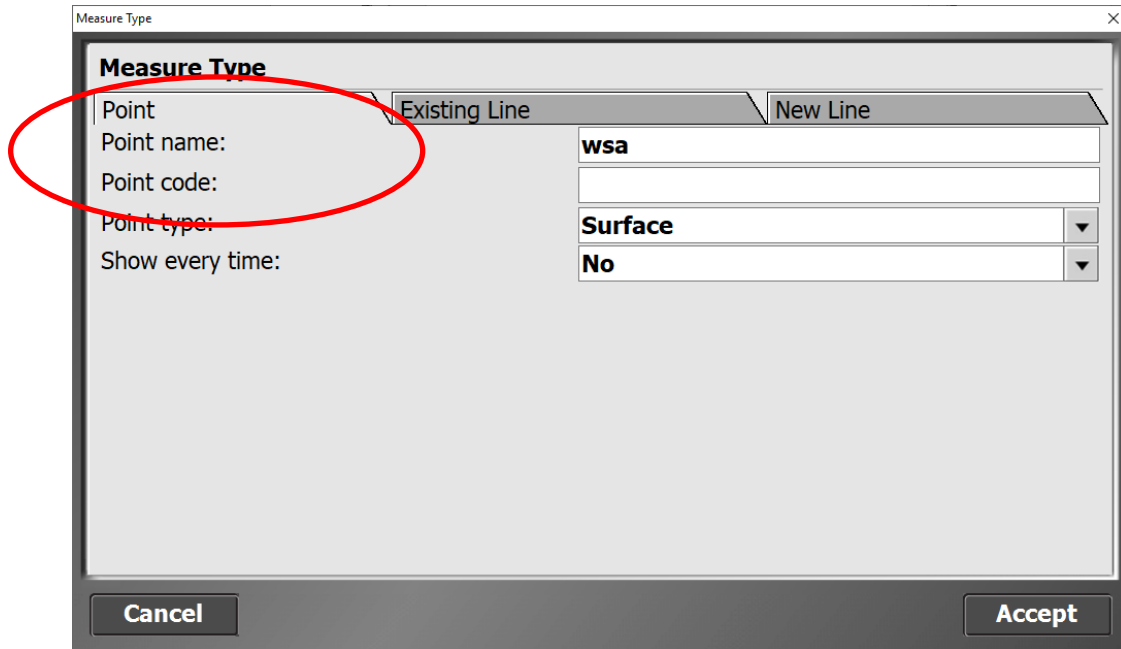
10. Take shots over the pile within the volume boundary

11. Next go to the Home icon and click COGO

12. Click Review and edit data

13. Select the volume boundary created above click Accept
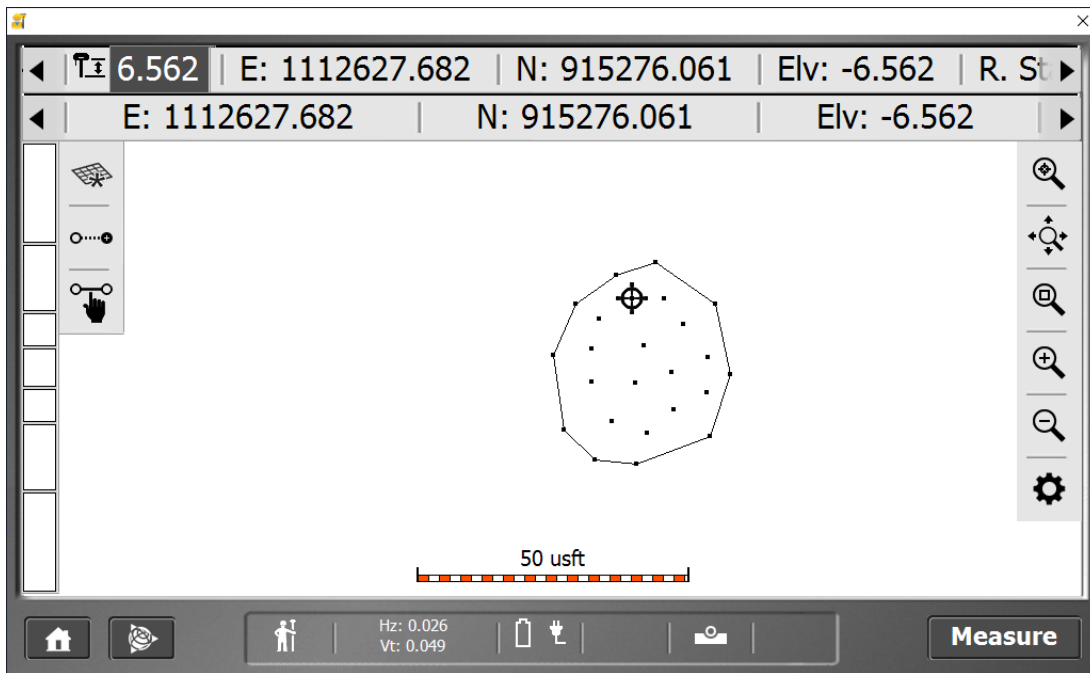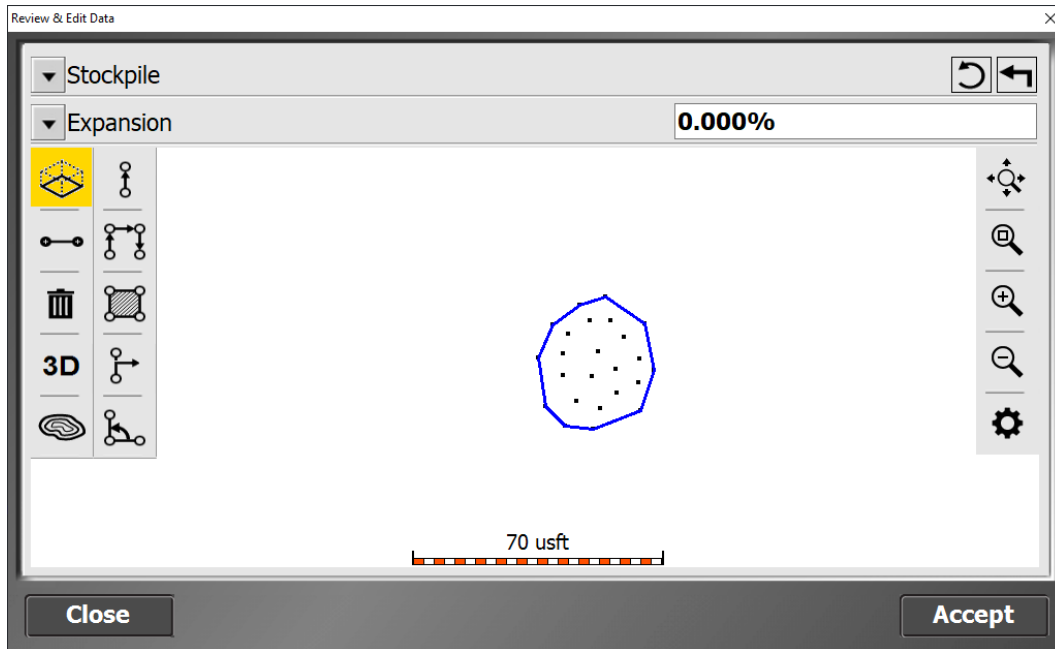

14. Review your calculation

Note: The emulator may not show an answer due to fake coordinates and elevations but in the field, it works great! If there are WSA BINS, shoot a volume boundary around the inside of the bin if there is dirt already in the bin change the rod height to 12.562 to locate the bottom of the bin. Next change the shot type to Point and take several shots all over the pile of dirt. Please ask question during class or call me for support.

Section 4 Creating new Layers and Filters to manage field collected work order data
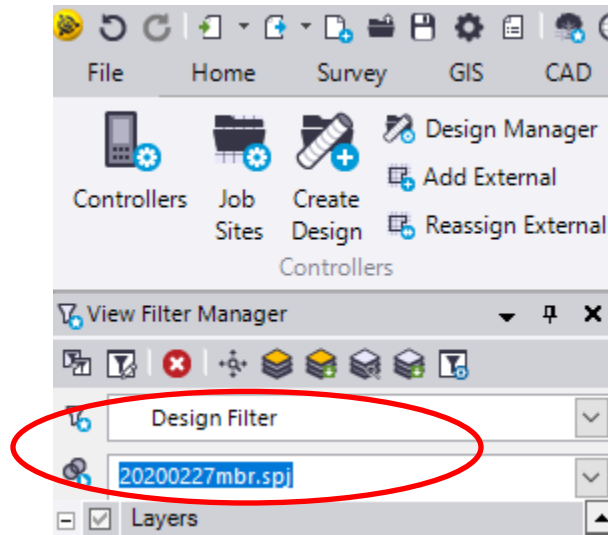
4.1 New Layers

This section will help understand Layers, which are unique characteristics of CAD or field data displayed in the TBC project. In this section, you will see the importance to put each Work order on its own Layer. We will also use Filters, which are Layer driven to allow us to Dimension our field data and or put Text into the CAD project. All these capabilities improve our Reporting capability.

1. Open project
2. Imported Work Order: Display any line work within a work order into the TBCHCE project by clicking the **Import Results** icon
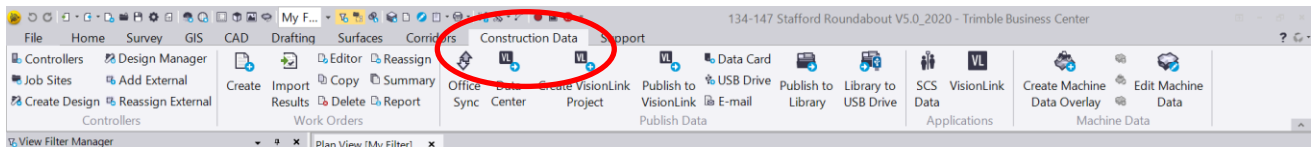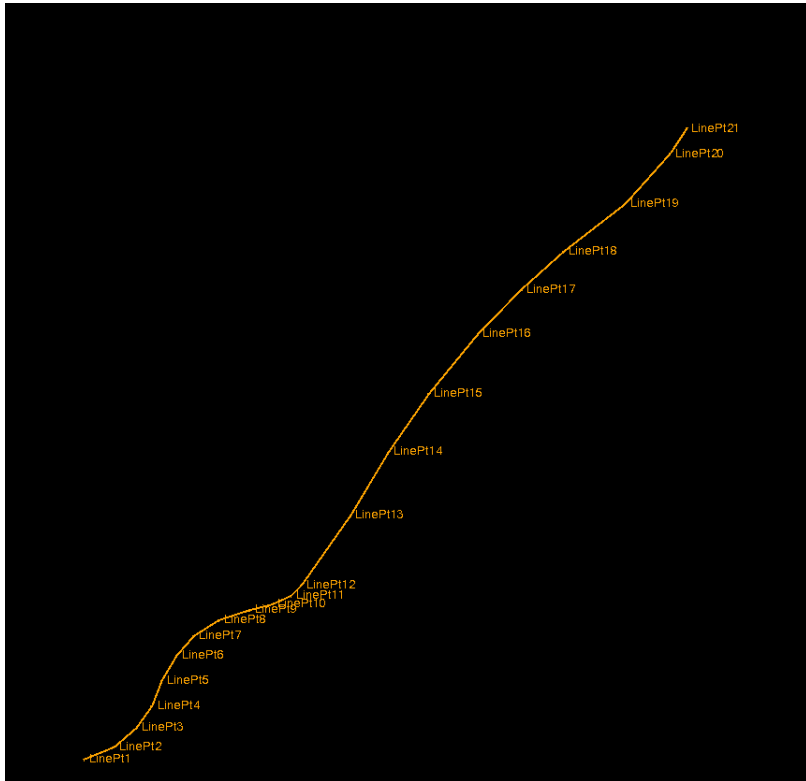

3. The work order data is then selected in the selection set so only the work order is shown on the screen (disregard the name of the example and choose the work order you work on earlier)
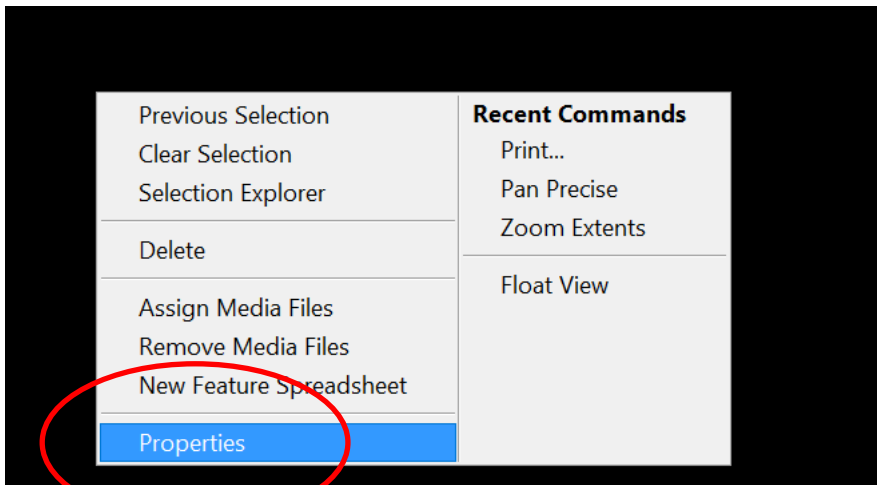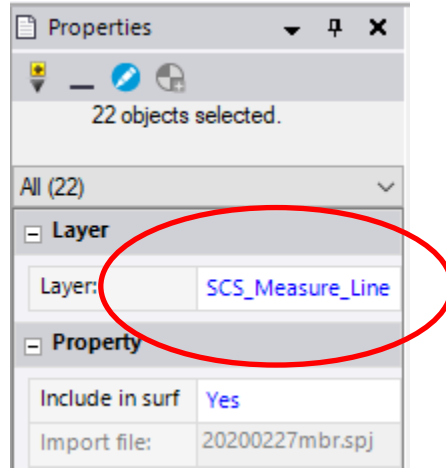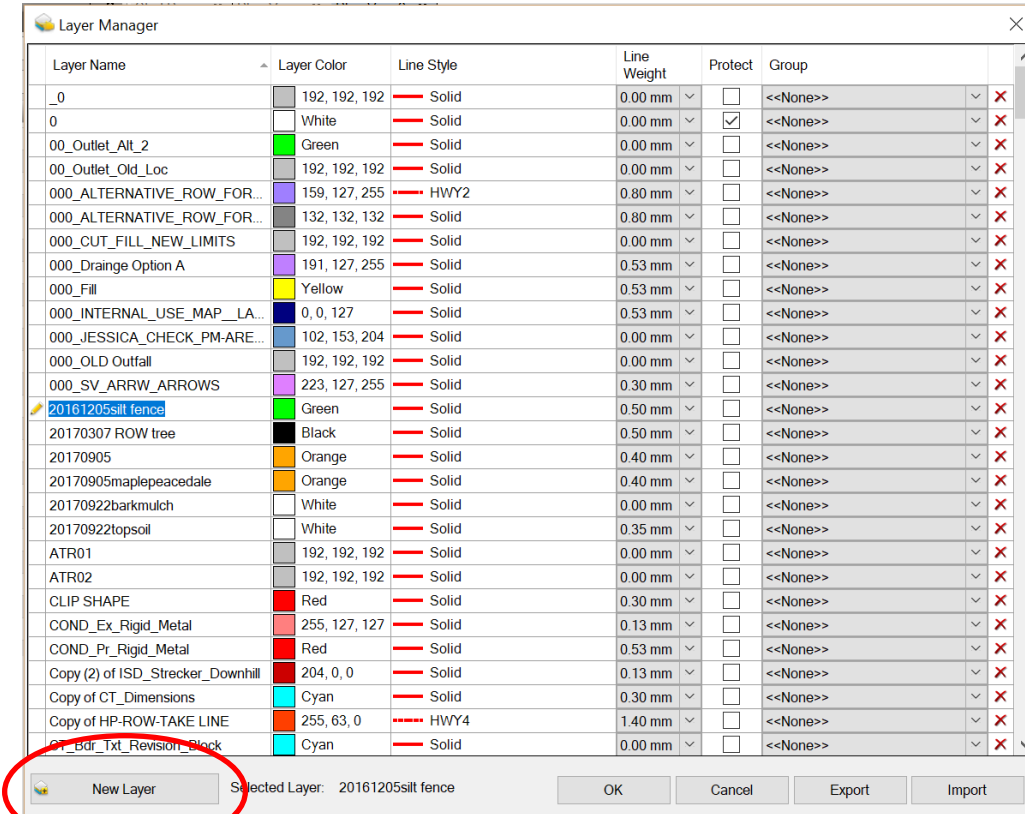
4. Drag a window and select the field data

5. Right click and select properties

6. Click in the layer section

7. Scroll down to the **New Layer**

8. Select New Layer
9. Name it the same as the work order (20200227mbr)
10. Give it a color and thickness of your liking
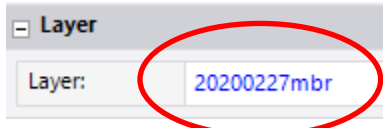
11. Click OK

4.2 New Filters

12. Next go to the filter and change it to All
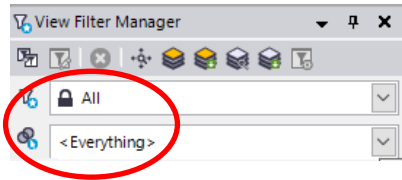
13. Copy the filter and name it the same as the work order
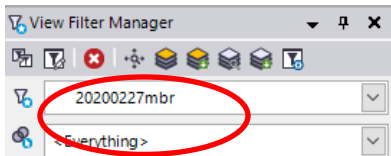
14. The filters are layer driven turn on and off as necessary.
15. This will allow you to dimension and put text into your filter for reporting purposes

16. When you are happy with your filter, lock it!

17. Next, open the report utility, and import the record and follow the next section of this document.

Section 5 Create Record .txt file for reporting using SCS report utility-64

5.1 SCS Report Utility

The SCS Report Utility is an Excel file specifically designed to populate field-collected data from SCS900 field software. We have stan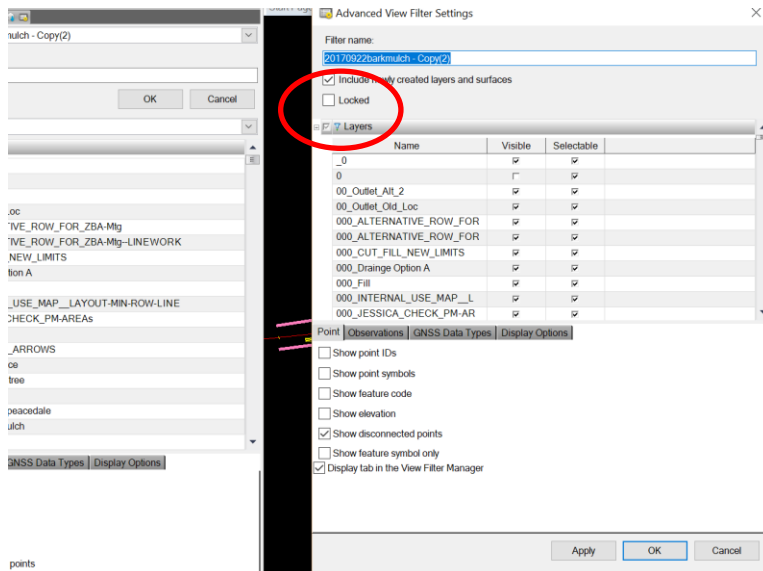dardized on the custom report capabilities shown below but this does not limit the use of other TBCHCE reports that maybe needed. This file can be, opened separately as well as within TBCHCE under the Reporting tab. Due to our state computer restrictions the computer engineering support person will need to access your PC remotely and put the report utility where it belongs. This lab show the manual process but we will also have the file where is belongs on the training PC so you will see both methods.

1. With the TBC project open, navigate to the **Construction Data** and click **Report** within the work order ribbon
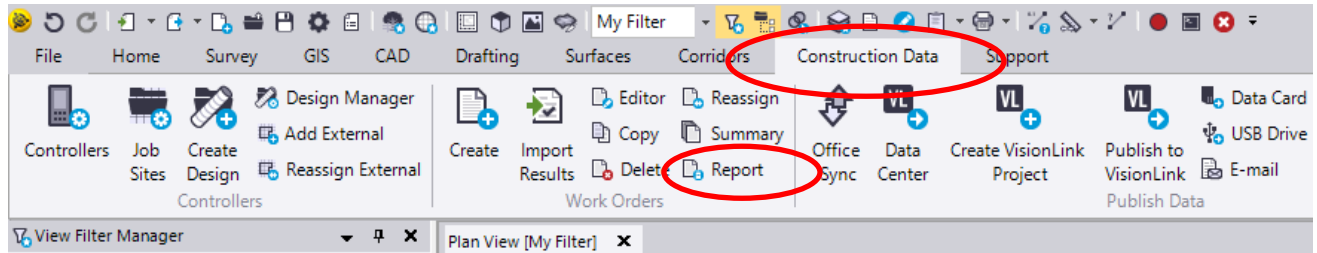
2. Select the work order you want to report
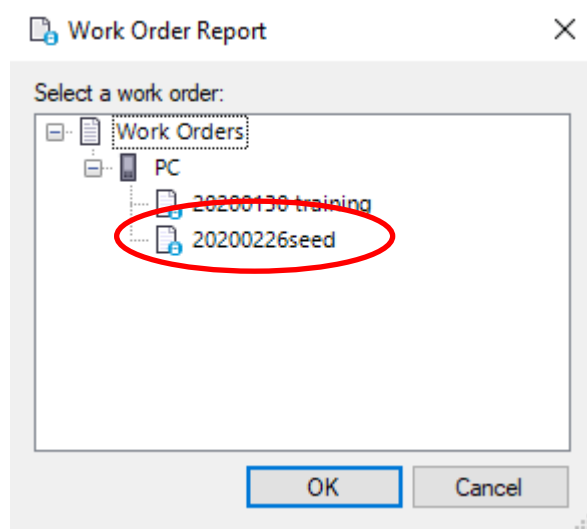
3. The **Report Utility** will open showing all of the field collected data

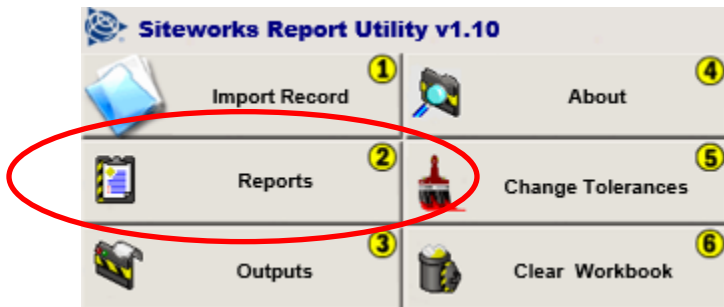4. Next click **No.2 Reports**

5.2 Custom Reporting

5. Go to Custom Reports and select what you want to display
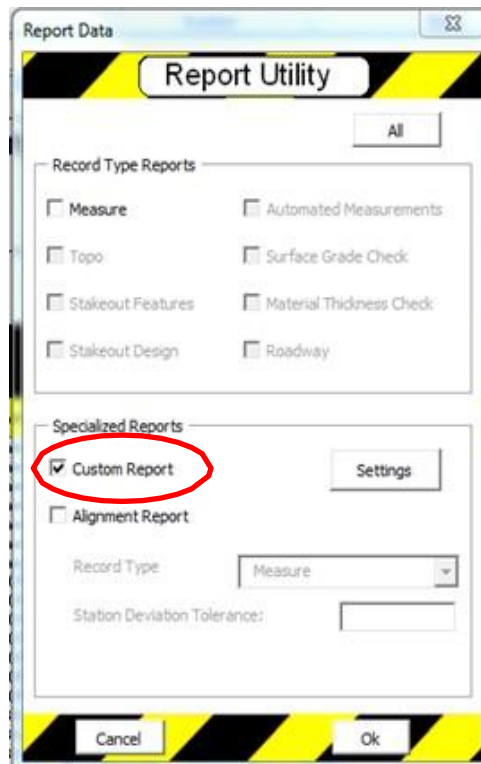
6. Click OK

7. Next go to the Report Tab at the bottom of the report utility

8. Copy and paste the computed value generated from the COGO section of SCS900

Compute Total Distance		
Date		6/30/2014
Time		10:07:11 AM
Description		Compute Total Distance
Total HD		720.371 usft
Total SD		720.371 usft
Net VD		0.000 usft

9. If Business Center is open the project area use the snipping tool to take a graphical snap shot of the CAD graphics and copy/paste into the report utility
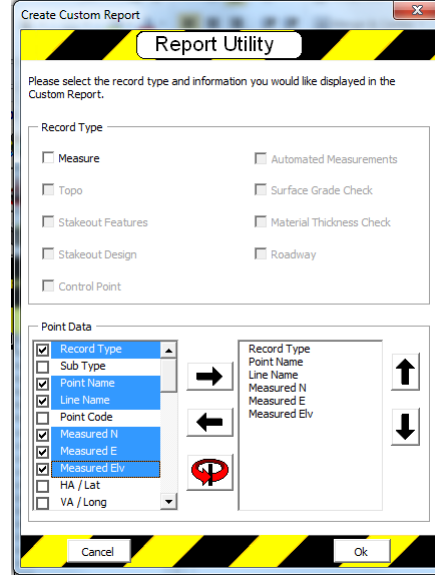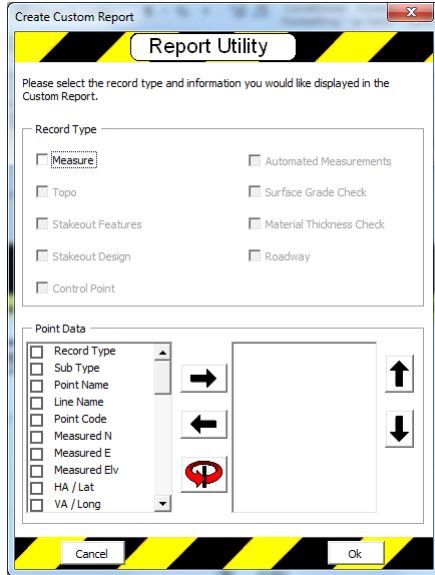
Record Type	Sub Type	Line Name	Measured N	Measured E	Measured Elv	Precision H	Precision V	Measured Station	Measured Offset	Alignment Name
Measure	Point		779382.508	1036069.615	-6.562	0.026	0.049	6+30.754	-10.529	Rt 17A Baseline
Measure	Point		779412.344	1036131.197	-6.562	0.026	0.049	6+95.629	11.238	Rt 17A Baseline
Measure	Point		779488.134	1036174.831	-6.562	0.026	0.049	7+79.830	-12.385	Rt 17A Baseline
Measure	Point		779557.066	1036276.792	-6.562	0.026	0.049	9+00.608	11.268	Rt 17A Baseline
Measure	Point		779698.539	1036376.479	-6.562	0.026	0.049	10+71.856	-12.793	Rt 17A Baseline
Measure	Point		779767.448	1036477.078	-6.562	0.026	0.049	11+91.190	12.250	Rt 17A Baseline
Measure	Point		779856.572	1036528.075	-6.562	0.026	0.049	12+90.253	-14.695	Rt 17A Baseline
Measure	Line	RCP18	779856.556	1036528.081	-6.562	0.026	0.049	12+90.247	-14.679	Rt 17A Baseline
Measure	Line	RCP18	779767.907	1036477.107	-6.562	0.026	0.049	11+91.949	11.949	Rt 17A Baseline
Measure	Line	RCP18	779698.552	1036376.951	-6.562	0.026	0.049	10+72.187	-12.457	Rt 17A Baseline
Measure	Line	RCP18	779557.069	1036277.271	-6.562	0.026	0.049	9+00.942	11.610	Rt 17A Baseline
Measure	Line	RCP18	779489.079	1036174.834	-6.562	0.026	0.049	7+80.494	-13.058	Rt 17A Baseline
Measure	Line	RCP18	779412.367	1036131.653	-6.562	0.026	0.049	6+95.971	11.541	Rt 17A Baseline
Measure	Line	RCP18	779382.019	1036070.554	-6.562	0.026	0.049	6+31.083	-9.523	Rt 17A Baseline
Measure	Line	BCLC	779361.347	1036047.595	-6.562	0.026	0.049	6+00.216	-10.816	Rt 17A Baseline
Measure	Line	BCLC	779434.846	1036122.440	-6.562	0.026	0.049	7+05.115	-10.967	Rt 17A Baseline
Measure	Line	BCLC	779493.203	1036181.285	-6.562	0.026	0.049	7+87.989	-11.492	Rt 17A Baseline
Measure	Line	BCLC	779562.099	1036248.783	-6.562	0.026	0.049	8+84.724	-12.345	Rt 17A Baseline
Measure	Line	BCLC	779627.822	1036310.812	-6.562	0.026	0.049	9+75.380	-12.714	Rt 17A Baseline
Measure	Line	BCLC	779703.612	1036380.190	-6.562	0.026	0.049	10+78.079	-13.548	Rt 17A Baseline
Measure	Line	BCLC	779809.241	1036485.383	-6.562	0.026	0.049	12+26.772	-11.199	Rt 17A Baseline
Measure	Line	BCLC	779875.400	1036552.910	-6.562	0.026	0.049	13+21.101	-10.843	Rt 17A Baseline
Measure	Line	BCLC1	779859.332	1036568.046	-6.562	0.026	0.049	13+20.792	11.230	Rt 17A Baseline
Measure	Line	BCLC1	779768.832	1036475.726	-6.562	0.026	0.049	11+91.233	10.315	Rt 17A Baseline
Measure	Line	BCLC1	779670.534	1036385.226	-6.562	0.026	0.049	10+57.334	12.698	Rt 17A Baseline
Measure	Line	BCLC1	779557.522	1036276.352	-6.562	0.026	0.049	9+00.631	10.635	Rt 17A Baseline
Measure	Line	BCLC1	779463.347	1036187.244	-6.562	0.026	0.049	7+71.358	14.009	Rt 17A Baseline
Measure	Line	BCLC1	779392.620	1036112.360	-6.562	0.026	0.049	6+68.370	12.151	Rt 17A Baseline
Measure	Line	BCLC1	779345.765	1036063.220	-6.562	0.026	0.049	6+00.478	11.250	Rt 17A Baseline

Compute Total Distance		
Date		6/30/2014
Time		10:07:11 AM
Description		Compute Total Distance
Total HD		720.371 usft
Total SD		720.371 usft
Net VD		0.000 usft

10. Save as Adobe PDF and attach into your DWR in Site Manager

Section 6 SCS900 Training exercise: Layers, Filters, Dimensions, Text and Reports

This exercise will help understand **Layers,** which are unique characteristics of CAD or field data displayed in the TBCHCE project. In this exercise, we ask you to put each Work order on its own Layer. We will also use **Filters,** which are Layer driven to allow us to **Dimension** our field data and or put **Text** into the CAD project. All these capabilities improve our **Report**ing capability.

6.1 Training Exercise

1. Collect field data using SCS900 Emulator (preferably a surface or area)
2. Open TBCHCE and import the work order
3. Select the "work order" from within the "selection set" so the work order information is the only data shown on the screen
4. Drag a window and select the field data shown on the screen
5. Right click and select properties
6. In the Layer area select the down arrow to the right and scroll down to Layer Manager
7. Select new layer
8. Name the layer the same name as the work order, doing this will allow you to put the work order in a filter
9. Next Create new Filter and name it the same as the Work order and the Layer
10. This filter can be, locked to prevent changing what is, displayed in the filter, thus keeping the source information secure.
11. At the top left of your TBCHCE project screen, set your selection set to "Everything"
12. Within TBCHCE go to the project explorer, and open the imported data leaf
13. Choose a design or field data by clicking it in the file explorer and then right clicking and click "Select Members" this will high light the file's data
14. Go back to the view filter manager and click the "Hide layers of selected objects", this will turn off bulk layers as you begin to create your filter
15. When you have, the necessary layers off within your filter go to the TEXT icon at the top of the CAD tab and make sure the layer is set to the new layer matching the work order.
16. Dimension or input text as you desire

Section 7 Trimble Siteworks

3.3 Introduction

The Siteworks software is a site measurement tool that streamlines earthworks and surface finishing operations. It enables construction inspectors to measure material volumes, monitor grades and laid material thicknesses, and to perform site measurement tasks such as point, line, and surface stakeout.
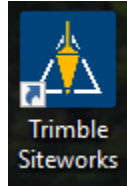
1. Click on the Siteworks Icon

2. Click ok through the Info box explaining the software running in training is only an emulator
3. Next select the same Open Project info as shown in clip below

4. When the project open click no to the calibration message as we are using an emulator for this training.

5. Next click the ☰ and select the alignment you wish to reference your field shots.
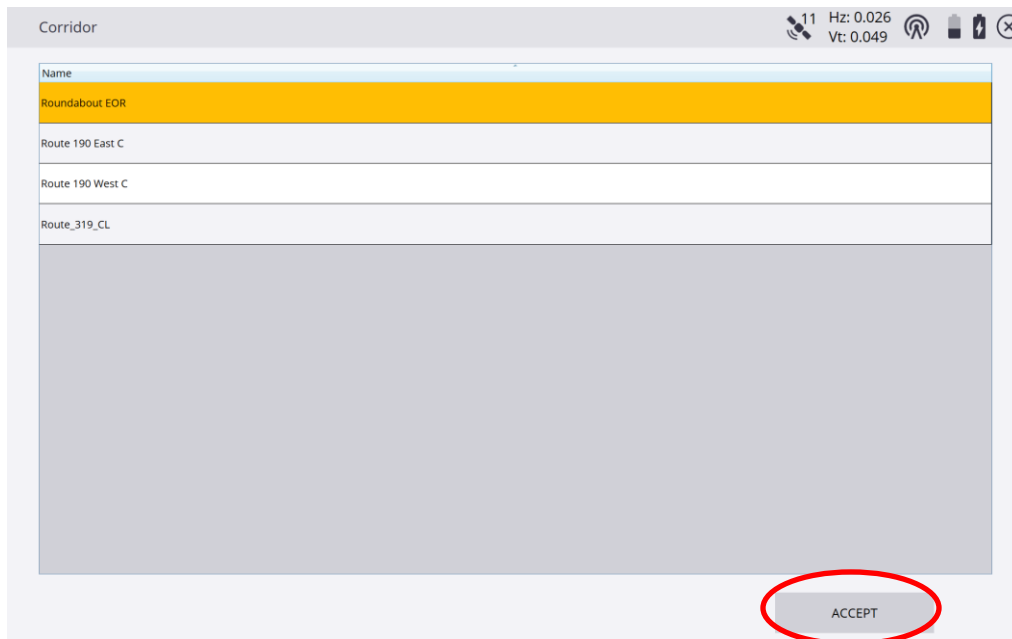
6. Click Accept

7. Click Accept again after you are sure you picked the correct alignment

8. Review the new Siteworks interface, 3 separate screens
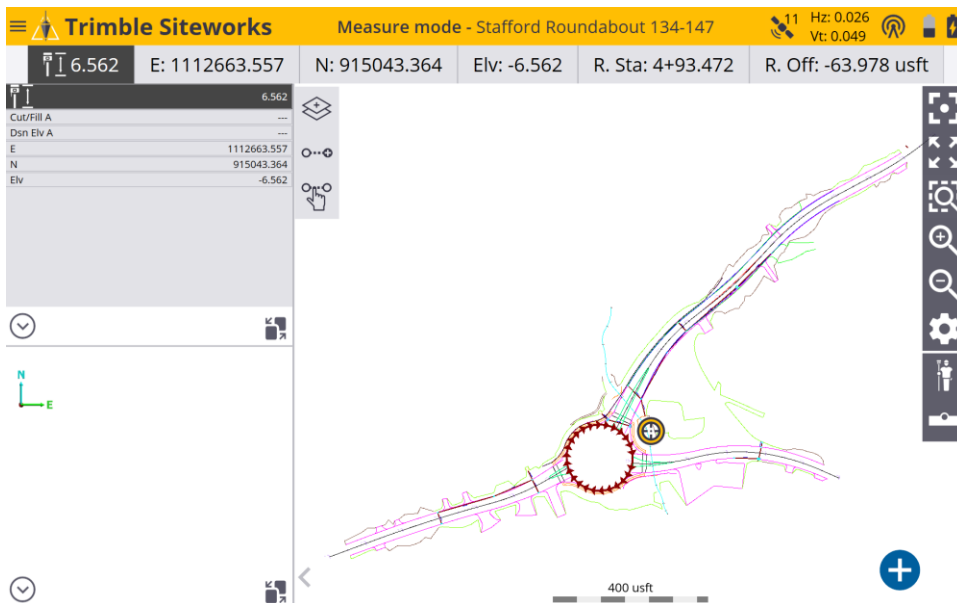
9. Click the measurement type icon

10. In the Measure type box make the **Line name** mbr and the **Line Type** to Line and click **Accept**

11. Click the ⊕ starting at the beginning of the MBR and continue to take shots along the MBR
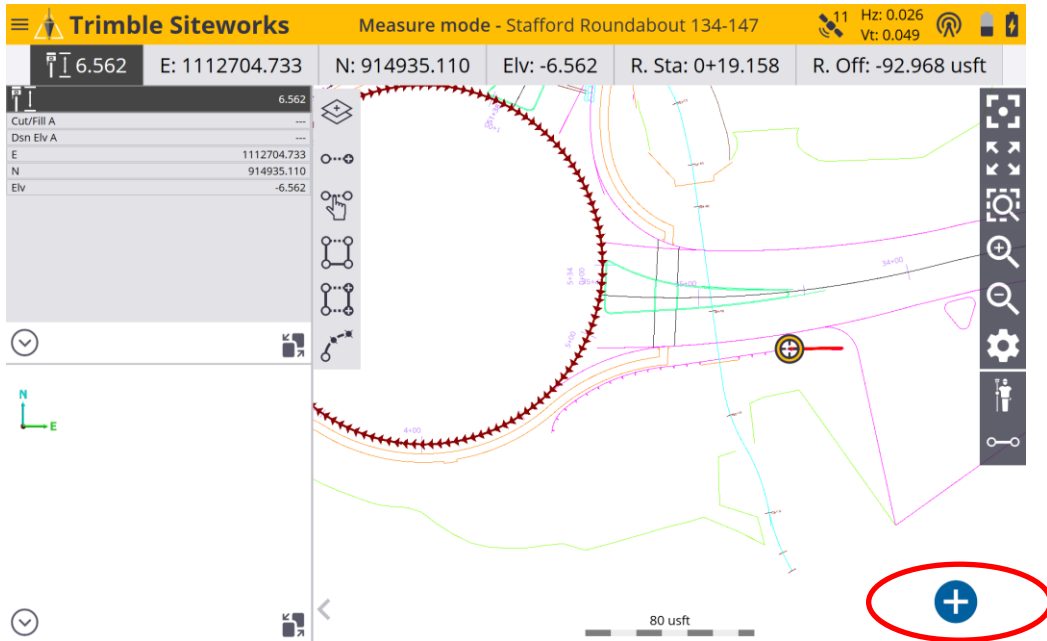
12. Once you have completed your shots click the **Measurement Type** button and select new line to release old line
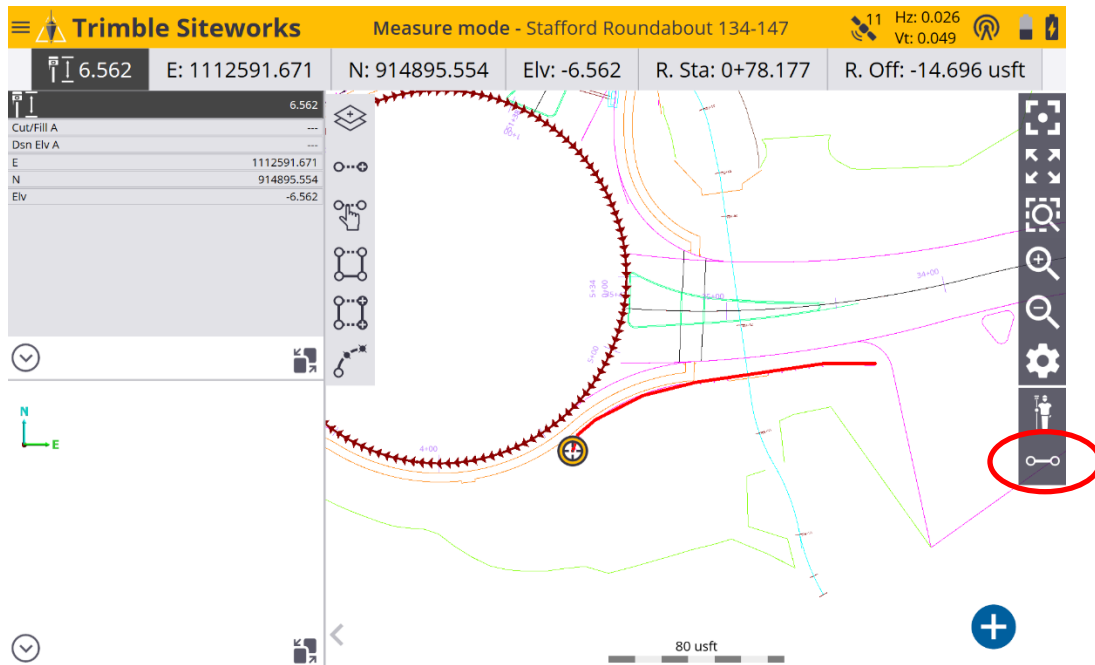
13. The orange line will turn to a thin black line after you select new line
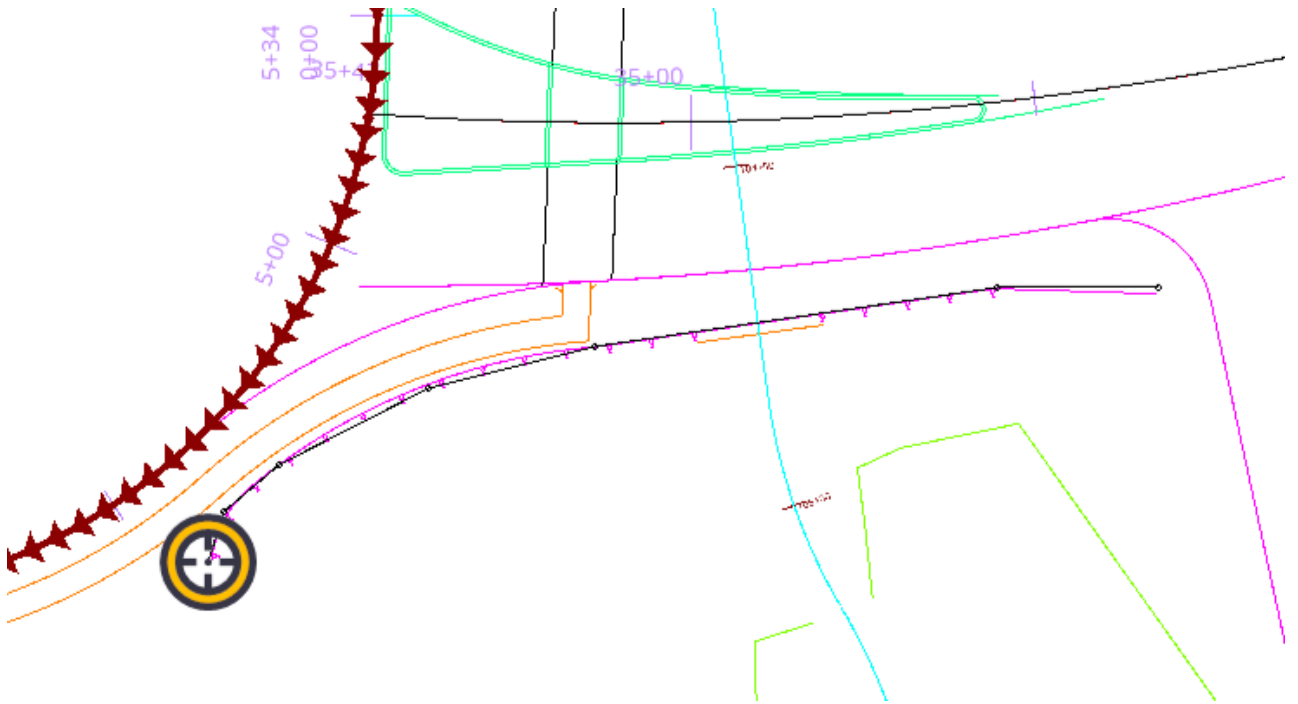
14. Next hold down on the line with the target until the Select option appears select the mbr1
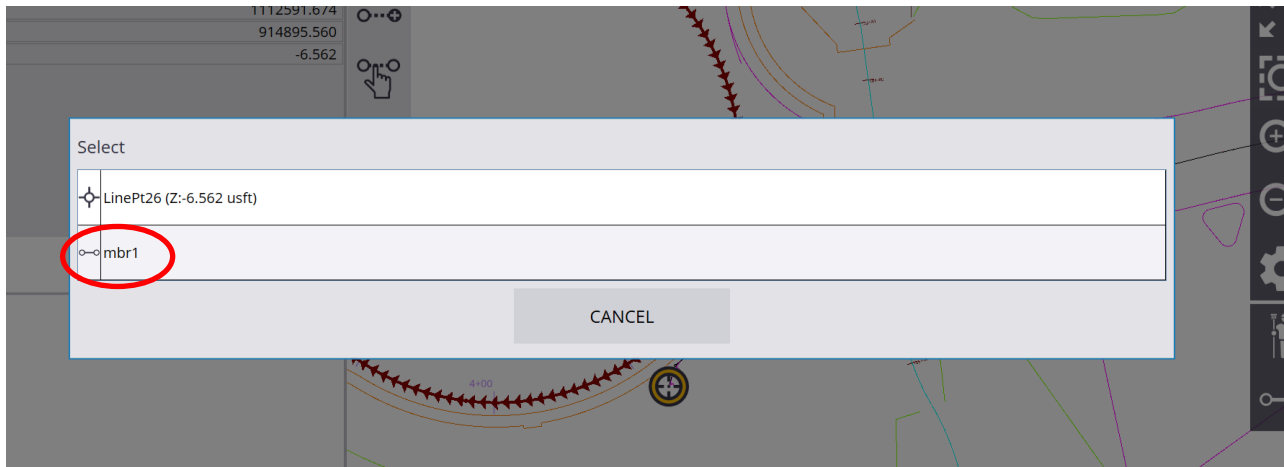
15. Next select Line Information
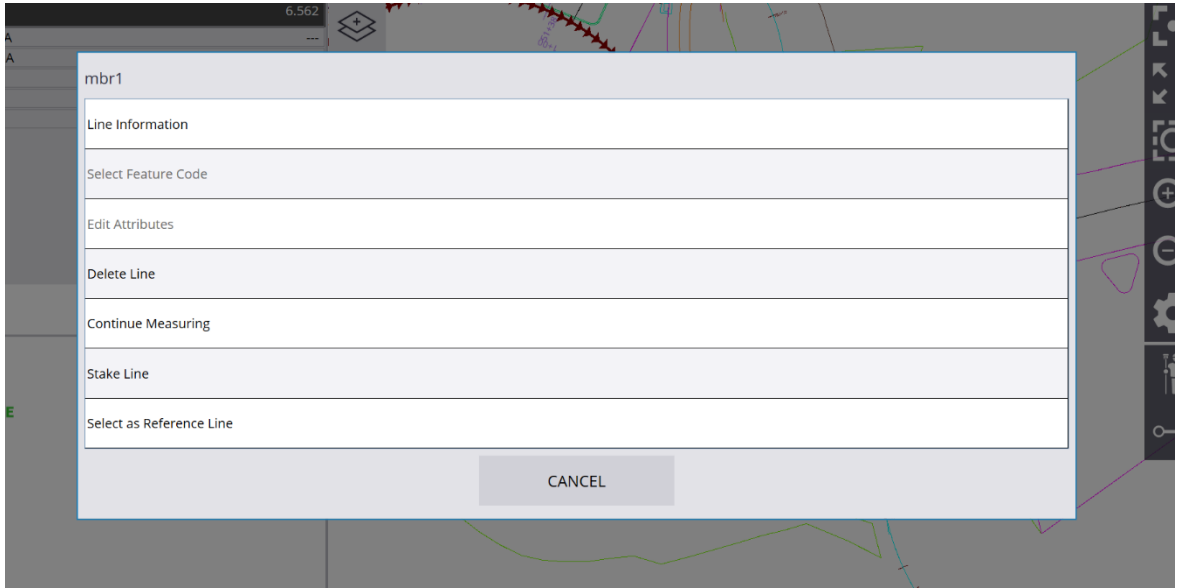
16. Review the MBR line information

17. Many options in Siteworks are the same as SCS900 just in a different interface Please take time to navigate around the software.

Section 8 Trouble shooting TBCHCE & SCS900 for GPS/RTS technology

Specific Issues

SCS 900 Corrupt calibration file

Bad or negative vertical GPS elevations due to corrupt calibration file spread to project data collectors or tablets via the office synchronizer. This could be discovered by doing a system check within the GPS software or by seeing negative elevations.

Solution

Locate and delete corrupt calibration file from both PC and field device. Get back up from Project Wise or DVD and replace corrupt file .CAL file with good file. Do a system check in the field to a known point to verify the problem has been resolved.

SCS 900 Unwanted Surface Triangles

Mistakenly choosing s**urface and break line** to measure a linear construction item such as curbing, which will create a spider web of triangles between each point as well as an additional surface to manage in your TBCHCE project.

Solution

Choose Feature and Line to measure linear features or in the COGO section of scs900 delete the break line and redraw as a line feature

SCS 900 No station and offset data displayed in custom report

Not getting station and offset for field measurements taken in scs900

Solution

Choose a roadway when opening SCS900 project or choose a reference line and assign it a starting station or choose an alignment within the reference line tab

If you have already taken your shots but did none of the above, go to TBCHCE, open project, click project tab, click, Reports, select Station and Offset and Elevation report. Next delete geometry point data which is also included in this report. The surface tool, advanced drafting and data prep module will allow you to use this report capability.

SCS 900 Receiver not seeing handheld

During the receiver setup the hand held device does not recognize the receiver

Solution

Within the receiver setup, scan for device and select the serial number provided which will match the serial number under the GPS receiver. Also make sure the blue tooth is on within the wireless manager

SCS 900 Empty Record file

When creating a report using the SCS report utility the record is empty. This is because the user did not create a record .txt file

Solution

Go back to SCS900 on the tablet, open work order and select the Home key at the bottom left of the screen, click the Import/Export tab, click the measured data tab, select record.txt from the list of options and click Accept and transfer the work order back to the PC you are using TBCHCE and repeat the report

workflow

SCS 900 Volume boundary error

When shooting a volume boundary in the field and you accidently take a bad shot and have to delete it

Solution

Go to the line type icon and select a new line, this will release you from the volume boundary, delete the bad shot, next to back to line type tab and select existing line and the volume boundary will continue where it was left off minus the deleted shot

TBCHCE This layer is not visible in any graphic view

Trying to put text or dimensions in your TBCHCE project but get the yellow dot of doom that says this layer is not visible in any graphic view

Solution

First put the work order data on its own layer, next create a new view filter and select which layers would be displayed or turned off, your work order layer would be on and when trying to do text select that new layer, if the yellow dot is still there this means you have a file selected in your selection set, this all need to be off and the layers managed through the filter, refer to work flow for more information

Tablet Issue Internet not working on hand held device

If you are not getting the internet on your hand held device when using a cell sim card for the first time

Solution

You need to run the cell start program located on the handheld this will activate the sim card, rarely do you have to do this twice

Mifi Issue Mifi Available but not connected

When trying to connect a data collector to a mifi device and the hand held keeps say "available" instead of "connected"

Solution

First make sure the mifi device has not been changed, if it has go to setting and do a factory reset, if it still does not recognize the hand held wireless manager and create a new wifi connection name it the same as the mifi, then try to connect again.

TBCHCE Importing results but not seeing field data

When transferring data from SCS900 to TBCHCE and it does not show up in the TBCHCE project

Solution

Within the TBCHCE project, "Import Results" under the Field data tab in the "work order" section, next turn it on in the "selection set" to view it until you put the data on its own "Layer" and put into its own "View filter"