

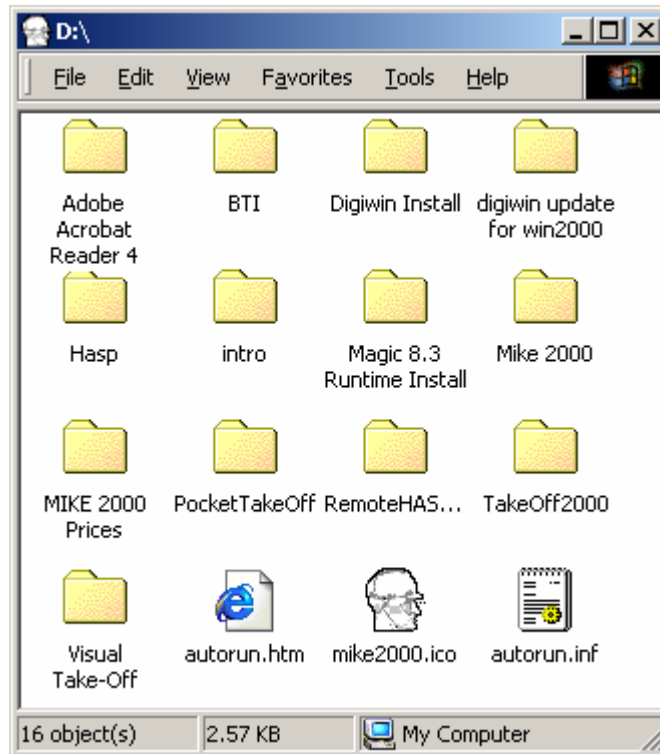
Installing Visual TakeOff+

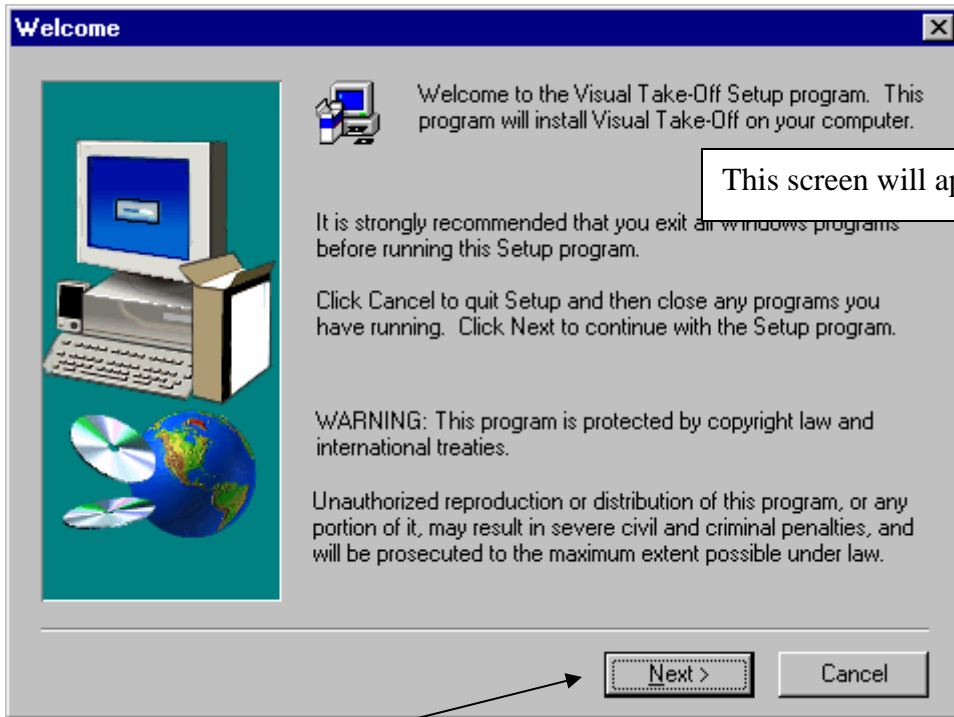
To install and run Visual TakeOff+ your computer must meet the following minimum requirements: a PC compatible computer running windows 98 or higher, a CD ROM drive and at least 10meg of space on your c: drive, (you may need more hard drive space as you begin to added detail take off to your estimates) and a USB port for use with the HASP. (A parallel HASP is available from Comput-Ability, Inc., if your computer has no USB port.) The recommended screen resolution is 1024 x 768.

When you insert your CD into the computer, it will automatically run on most computers. Select the “Browse CD” option on the screen that opened. If your computer did not automatically open this window, browse the CD with “My Computer”. You should see many files and directories on your Comput-Ability CD. Open the “Visual Take-Off” directory, and run “Setup”.



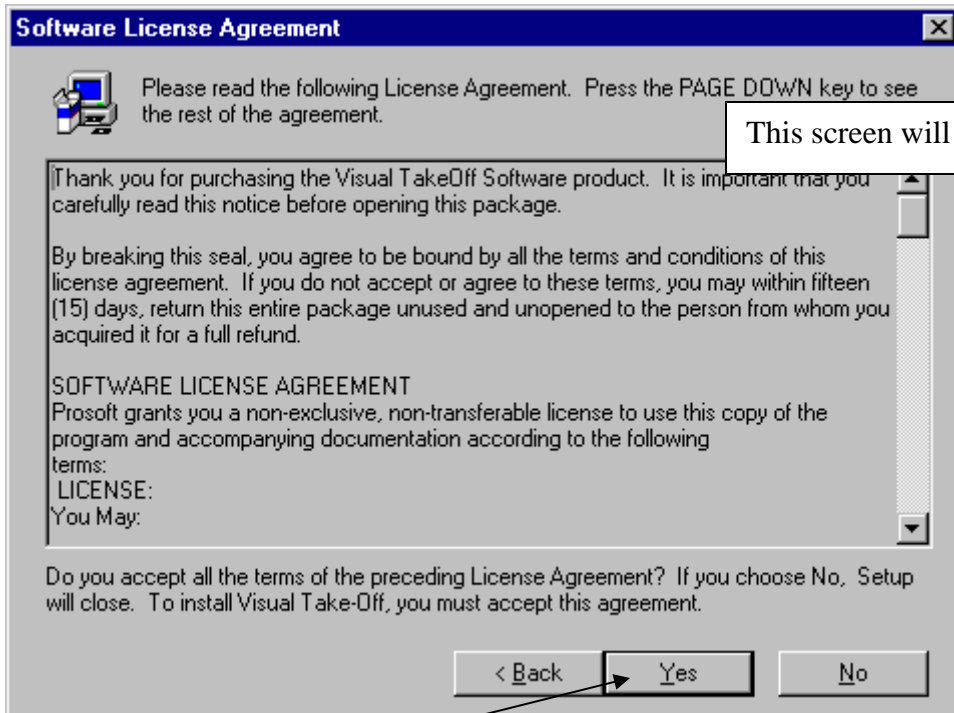
***NOTE: Your CD may have different files and/or directories than the image in this document.**





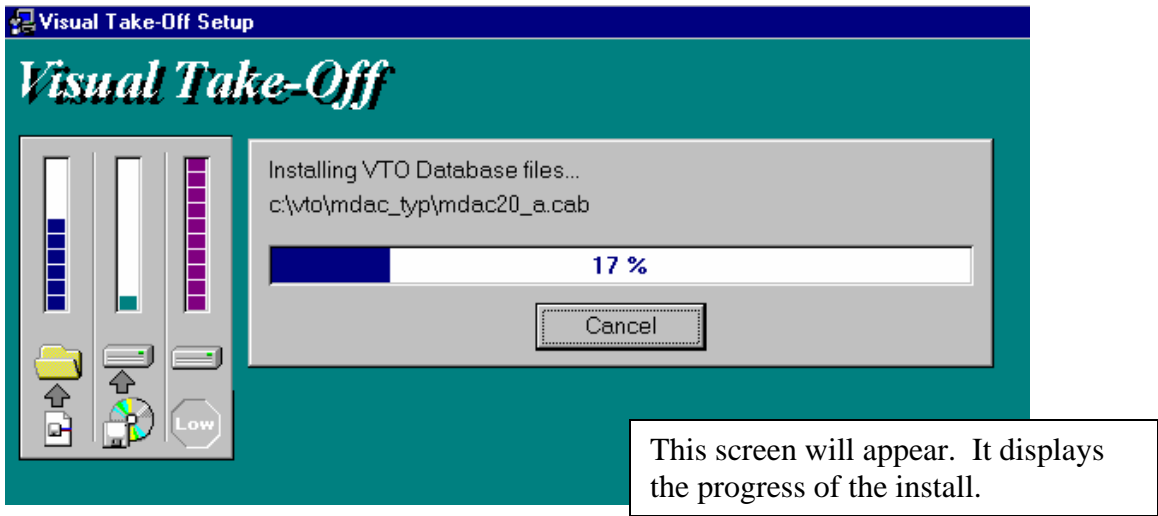
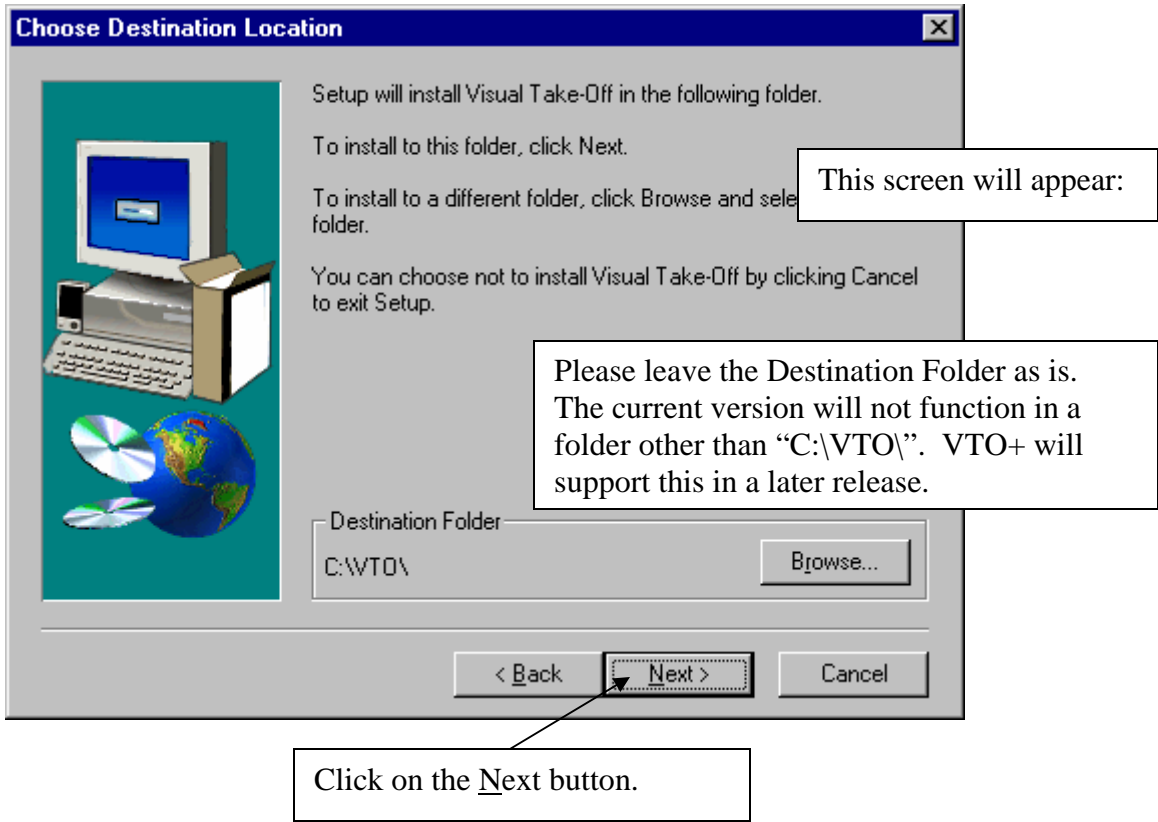
This screen will appear:

Click on the Next button.

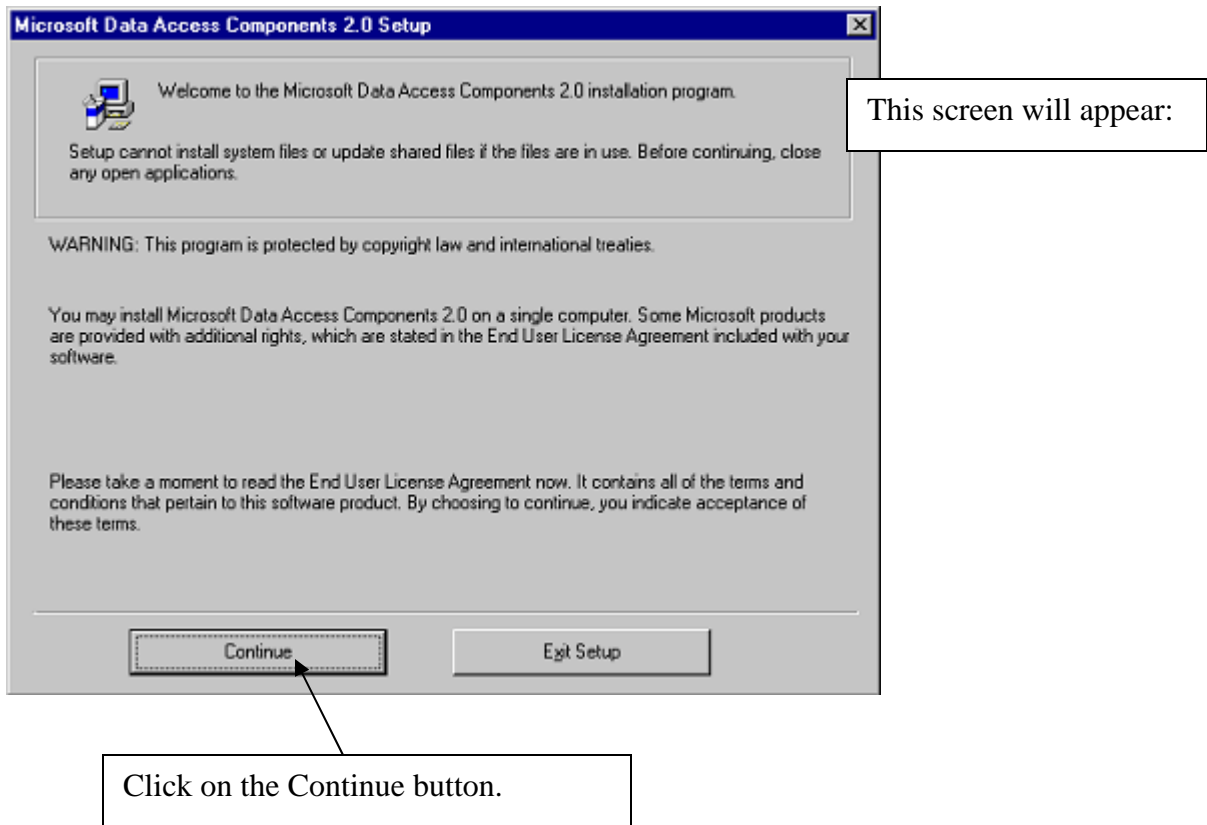
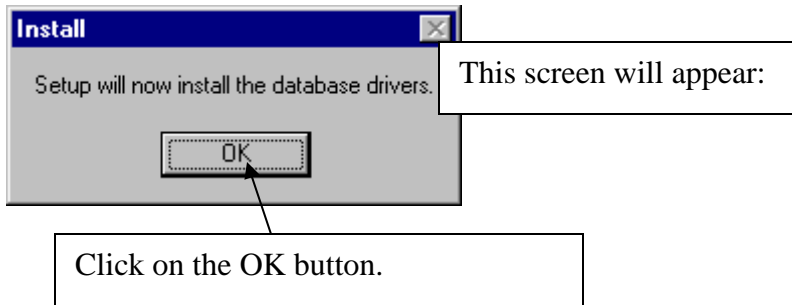


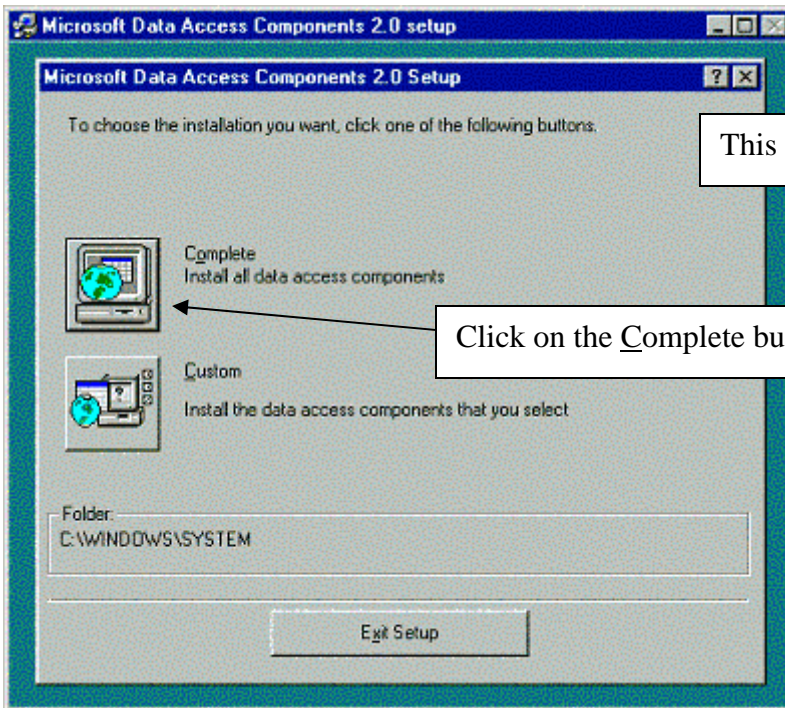
This screen will appear:

Click on the Yes button to accept the software license.



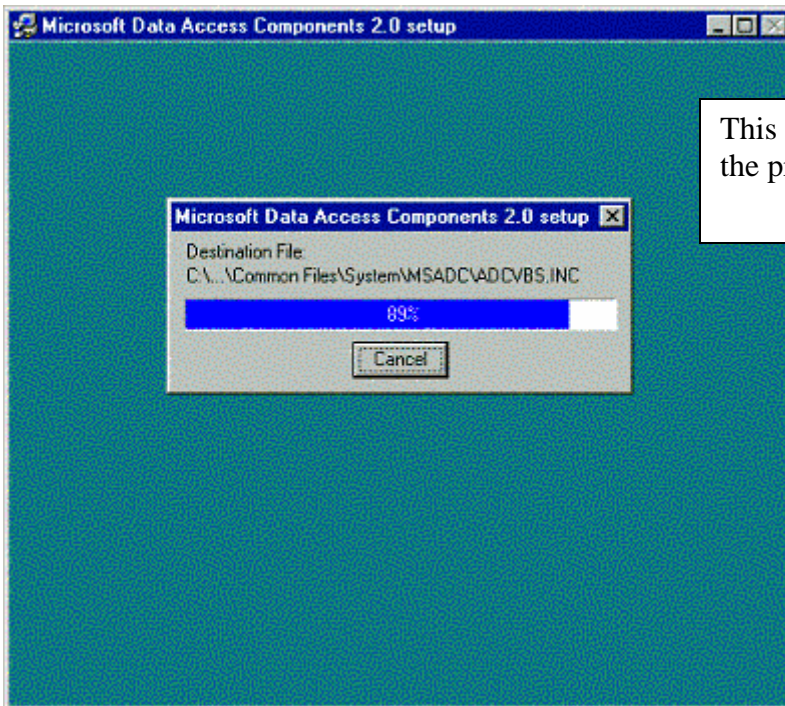
Database Drive Installation



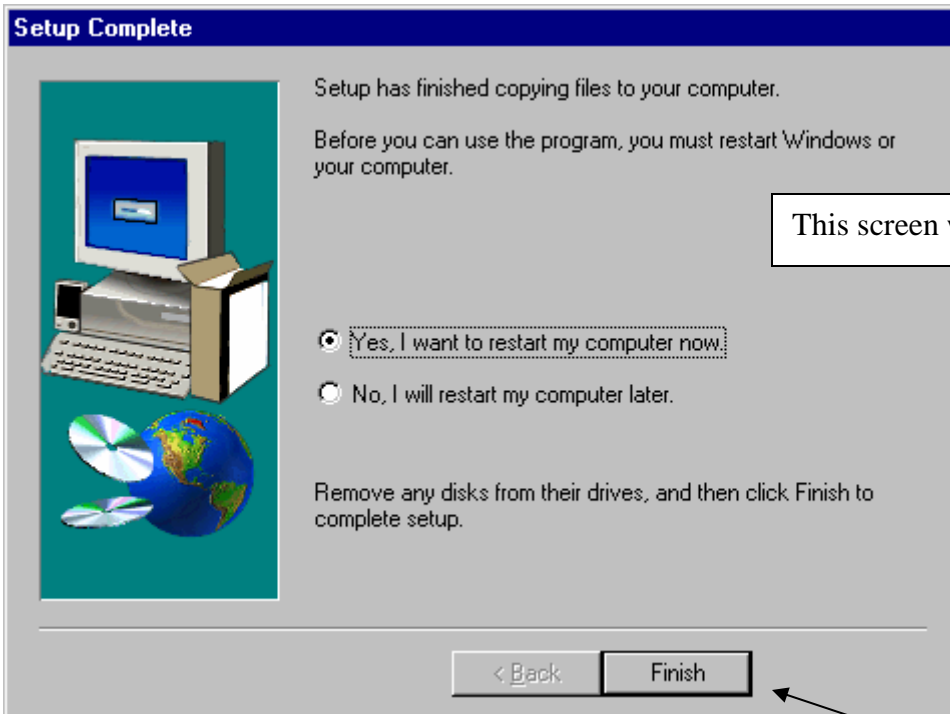
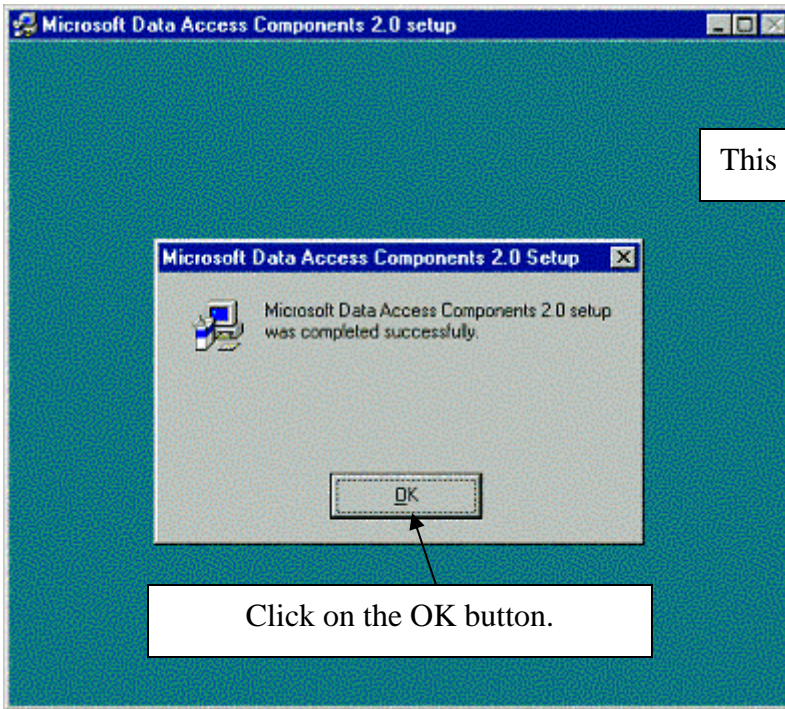


This screen will appear:

Click on the Complete button.



This screen will appear. It displays the progress of the install.



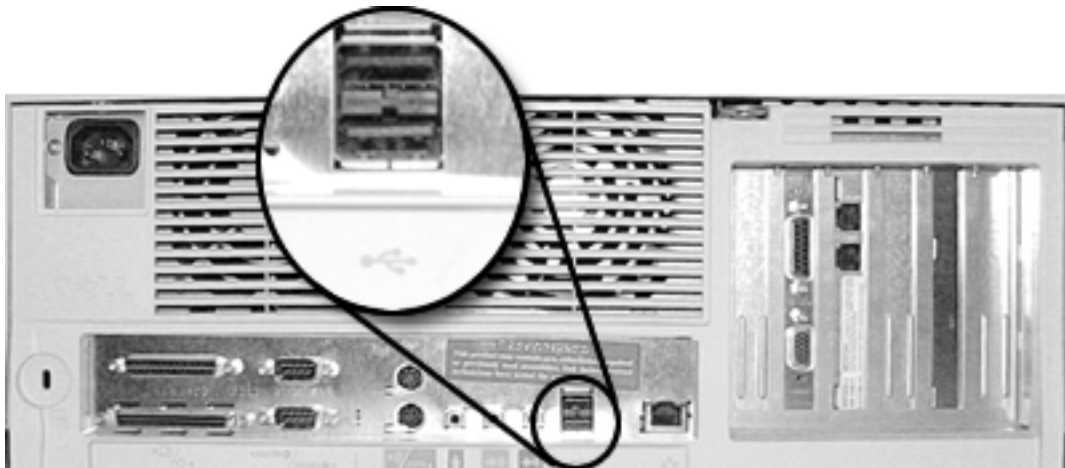
Note: You need to restart your computer before Visual Take-off+ will run correctly.

Connecting the USB Hasp

Do not connect the HASP until you have installed the software. Failing to do so will cause the incorrect driver for the HASP to be installed. If you connected the HASP, you will need to contact Comput-Ability, Inc. for instructions to correct the install.

The HASP uses the USB port on your computer. If you do not have a USB port, a parallel HASP is available from Comput-Ability, Inc. However, a USB HASP is much easier to install and to move from computer to computer. This is useful if you need to take your HASP when working at home, or at a plan room. If you don't have a USB port and you would like one, there are several expansion cards available that you can purchase that insert into your desktop computer. You will also need windows 98 or higher. Windows 95 has limited support for USB, and will not work with the HASP. Also if you run Windows NT, you will need Windows 2000 or higher. There is no support for USB in the earlier versions of NT.

Locate your USB Hasp that was provided to you by Comput-Ability, Inc. It will look like the image shown here. If there is a tag or other marker indicating that you should install the driver first, you can remove it at this point. Locate the USB port on your computer. It may be located in different places on your computer, depending on what make and model you have. It is usually located on the back.



Once you have located the USB port, simply plug in the HASP. The software will do the rest. It will detect the HASP and install the correct driver software.

TIP: There are USB keyboards and other USB devices available. They can provide an easier location to access a USB port. This is useful if you need to move the HASP frequently.

Starting Visual TakeOff+

Visual TakeOff+ does not put an icon on your desktop. It is not an additional application on our computer. It is an additional module to your estimating software. You access Visual TakeOff+ from within the estimate. The access point of Visual TakeOff+ depends on the estimating software you are using. A good rule of thumb is; anywhere in your estimate that you want to make a measurement, you can access Visual TakeOff+. You simply ZOOM on the measurement field in the estimate. This can be done many ways. To name a few, you can fit (F5), double click the field, or click the “ZOOM” option in the lower right portion of the window. This will start Visual TakeOff+ for you, and display it in the foreground. When you return your value, Visual TakeOff+ will remain running in the background. It will reactivate the next time you zoom on a measurement field. The first time you use Visual TakeOff+ it may take a few seconds to load. But an additional use of Visual TakeOff+ will start much more rapidly.

You do not have to shutdown Visual TakeOff+. It will remain running in the background, in case you need it again. It will shut itself down, the next time you restart your computer. Or if you leave it inactive for an extended period of time, it will shutdown. What does this mean to you? You really don't have to worry about starting and stopping Visual TakeOff+. It handles that on its own.

Using Visual TakeOff+

The first step in making measurements on your plans is finding the plan file. There are many sources of electronic or digital plans today. Visual TakeOff+ will read many graphic formats and virtually all of the formats used for digital plans. Regardless of your source of plans, it is recommended that you copy the plans to a location on your hard drive. You can access the drawings from a CD, network drive, or any other drive type. But if you have a laptop and want to work on the road or at home, it's easy to forget the CD at work. It's a good idea to create a folder on your C: drive called “plans”. Then creating folders inside the plans folder for each project. You will have to use the indexing software that came with your plans to find the plans you need. There are many sources of plans and they all have a different format for indexing them, this makes it impossible for Visual TakeOff+ to keep track of them all. Once you have found the plans you are interested in, copy them to your project folder for easy indexing.

Selecting the plan

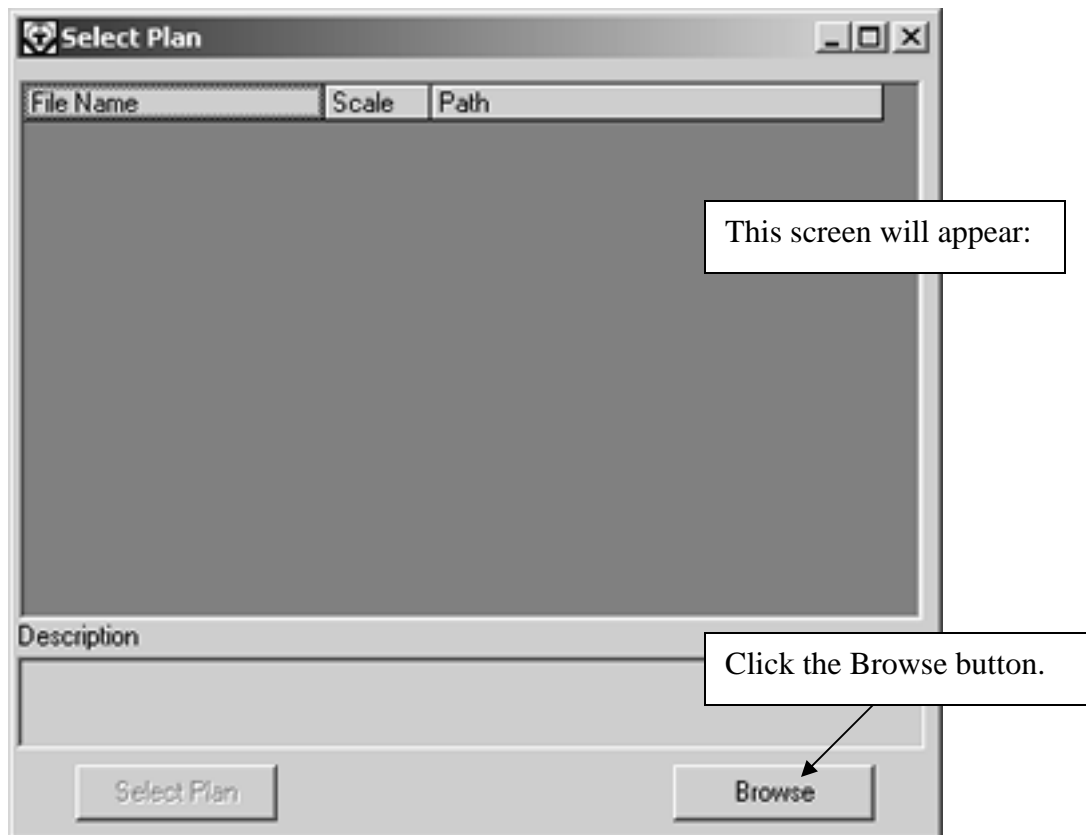
Once you have found all the plans you need, you can begin your takeoff. Start your estimating software, if it isn't already running. Bring up the detail takeoff screen, where you need to make the measurements.

NOTE: The examples in this manual are based on MIKE2000+™ pipe detail take-off. However, the procedure is the same for all Comput-Ability, Inc. estimating software.

1 Estimate		2 Systems		3 Specifications		4 SysSpec Linkage	
Pipe		2 Duct		3 Assign Equipment		4 Build Equip	
Input Order		Type		Size		Single or Double	
↓	Drawing	Floor	System ↓	↓	Thick	↓	Feet 90's 45's Te
1	1234	1st	CHW/A	0.50		150.00	14.00
2	1234	1st	CHW/A	0.75		150.00	12.00
3	1234	1st	CHW/A	1.00		220.00	10.00 0.00

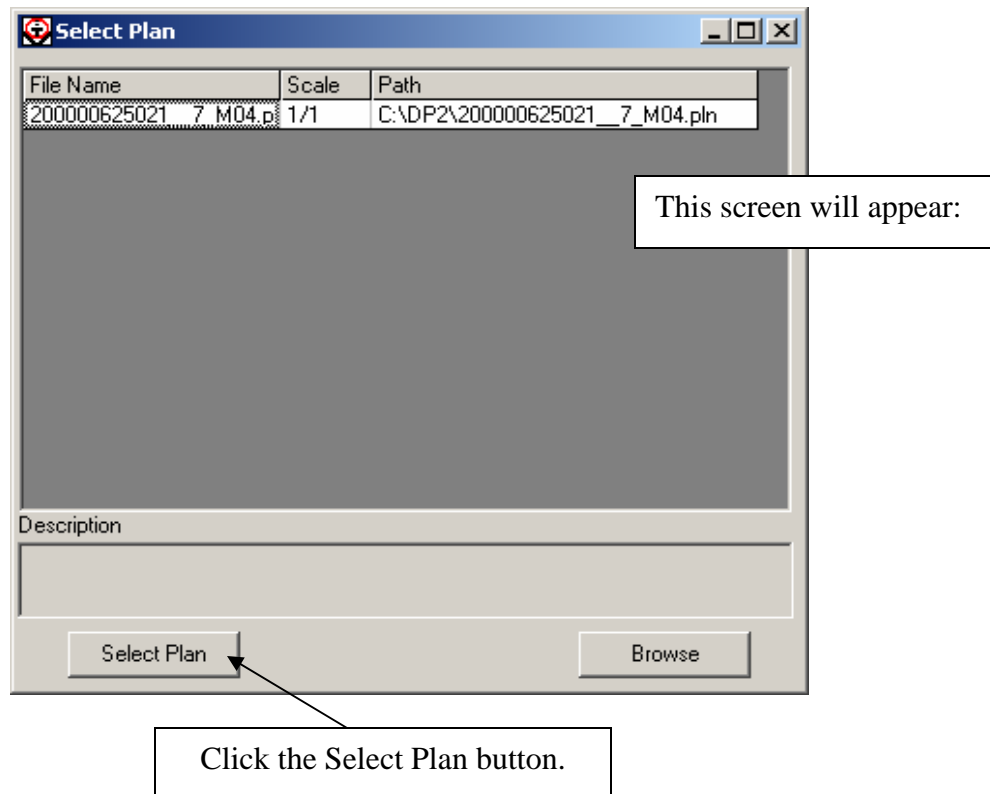
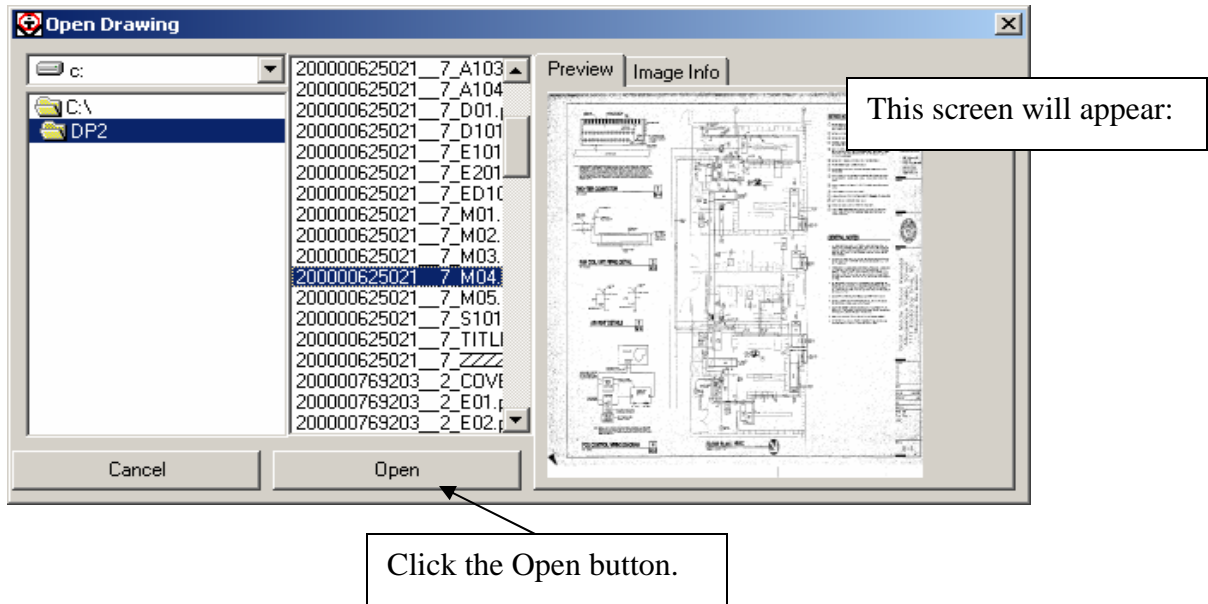
MIKE2000+ Pipe Take-off

Once you are ready to begin measurements, hit the F5 key. You will zoom to Visual TakeOff+. The first time you zoom on a detail record, you will be prompted for the drawing.



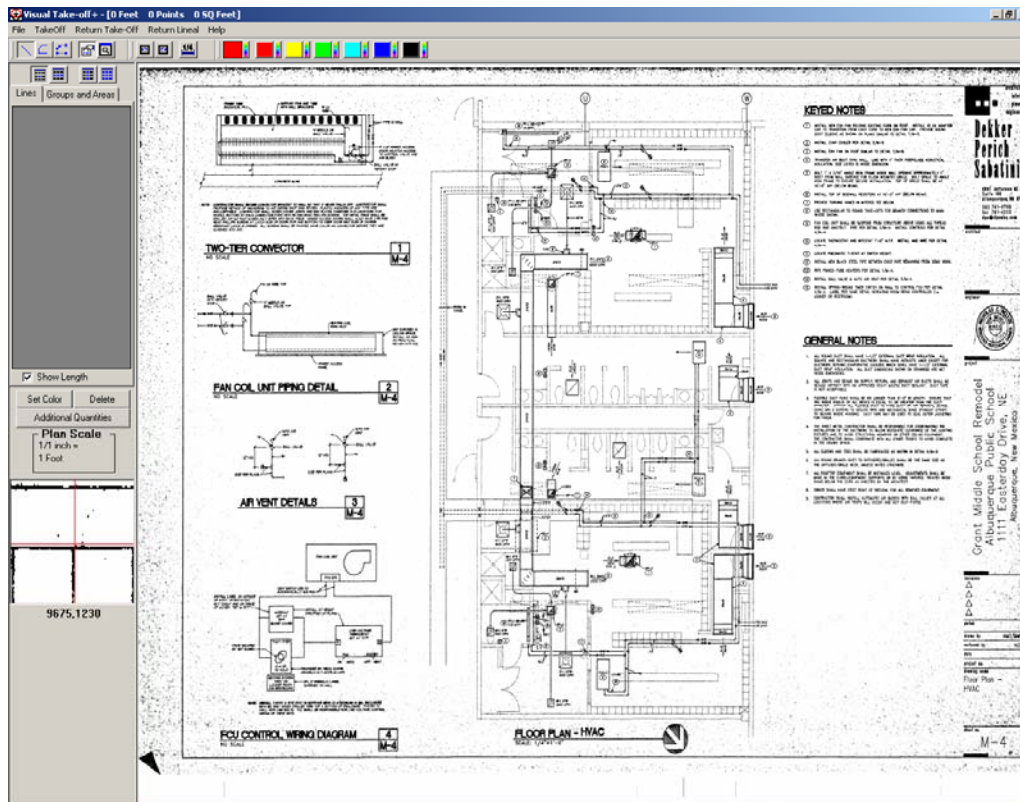
Because this is the first time you have accessed Visual TakeOff+ for this estimate, there are no plans listed. As you bring plans into this estimate, they will be listed in the “Select Plan” window. To bring a plan into the estimate, click the “Browse” button.

It will open the “Open Drawing” window that you use to browse your drive and select the plan you need. Once you have found the plan, click the “Open” button.



Now you will be able to select the plan for takeoff. To do this you simply select the plan from the list, and click the “Select Plan” button.

Your plan should be displayed in the main takeoff area. The scale is 1/1 and the description is blank. You will learn how to change this in the next section.



Now you should have the plan displayed. Most of the plans you receive should display fine but occasionally you have open plans that open up sideways or upside down. You can use the rotate buttons to fix this problem. The left button will rotate the drawing counter clockwise, and the right will rotate it clockwise. Each time you push the button, the plan rotates 90 degrees.

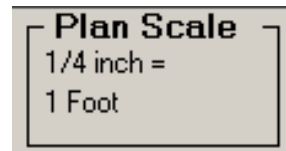
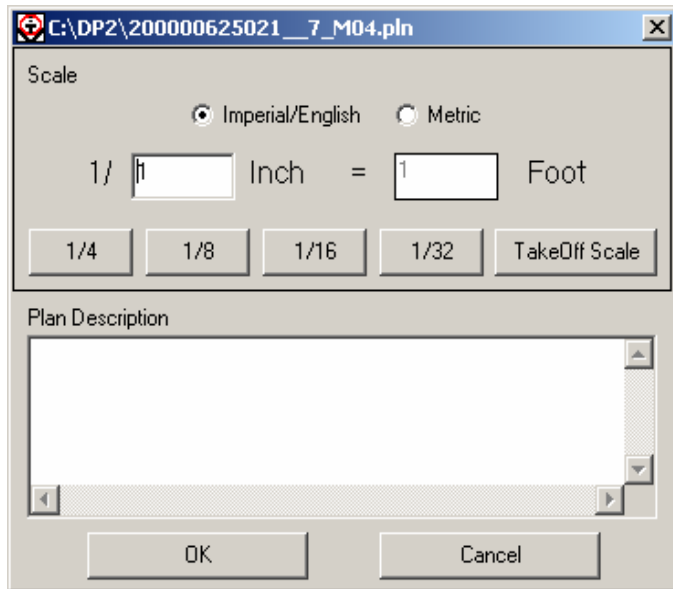


Setting the Plan Scale

To set the scale, click on the scale button. This will open the set scale window. There are a few ways to set the scale. The easiest way is to enter it in directly. But if the scale is unknown or if you don't trust the scan to be correct, you can measure a known length. Visual TakeOff+ will use that length to calculate the scale for you. There are a few online services that will decrease the size of the plan, to speed up the download process. Although this is great for downloading, your scale is now off by the amount the plan was sized down by. To correct this, use the "TakeOff Scale" option button to calculate the scale.

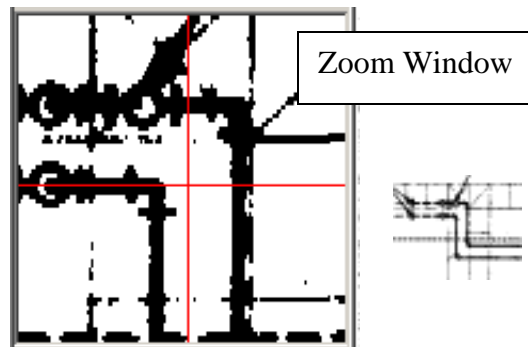


You will also notice that there is a box to enter the plan description. This is for your reference only. It shows up in the “Select Plan” window, and can help you keep track of what the plan is. In this case “200000625021__7_M04” on the title bar is not very descriptive. You may want to give it a better description. Once you are finished setting the scale and the typing in a description, click the OK button. Notice that the scale has now changed for this drawing. The scale that is set for this plan is displayed on the legend, which is located on the left portion of the screen. Now that the scale is set, we can begin the fun part; making measurements on the digital plan.

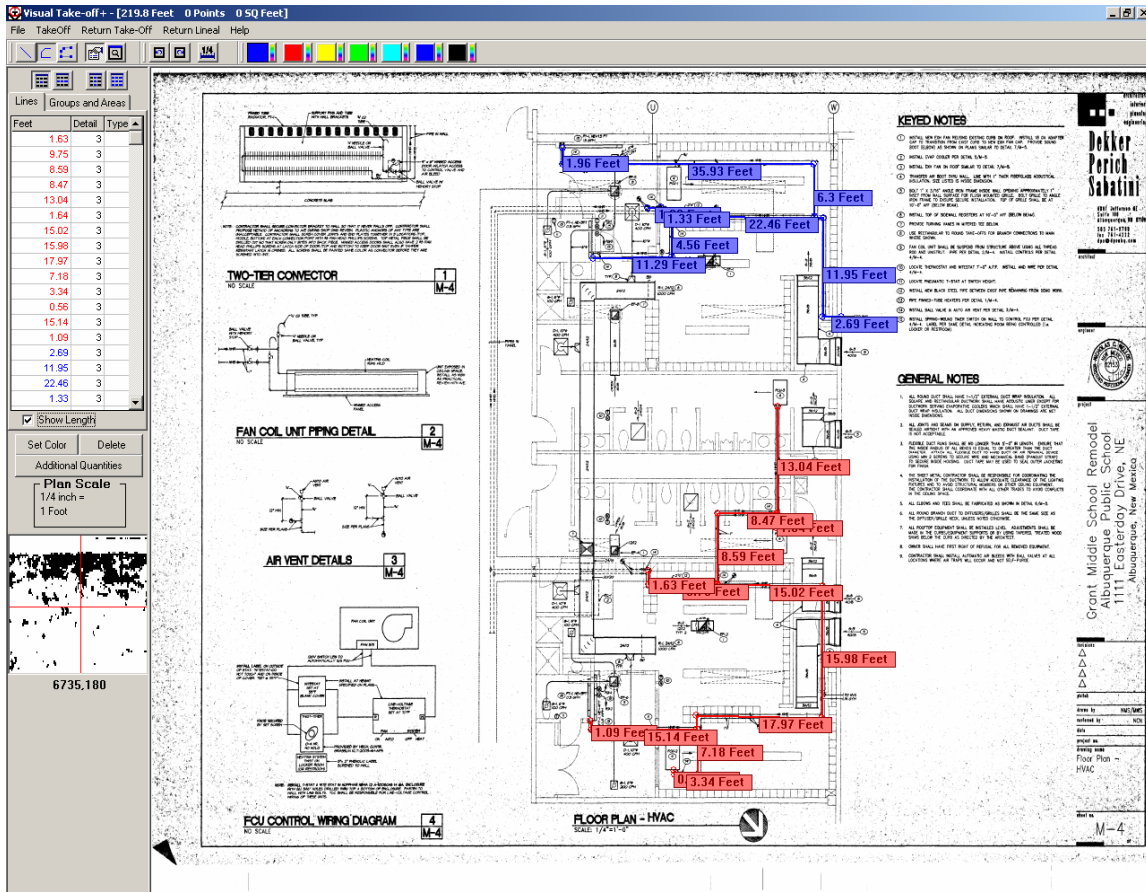


Making Measurements

To make a measurement, hover the mouse pointer over one end of the pipe. Use the zoom window in the legend to help pinpoint the correct location. If your mouse is a little jumpy, try using the arrow keys. Depending on your mouse settings, it may be hard to precisely position over the desired location. Also, if you hold down the shift key the pointer will move by a much larger amount.



When the pointer is where you want it, left click the mouse or hit the enter key. A small circle will be placed on the plan. Now find the other end of the line, and click again. A line will draw on the plan, and a record will be displayed in the legend. That's it, you have made your first measurement. Once you have finished all the measurements for that detail line in MIKE, hit the return lineal button at the top of the window.



There are several options that you can use during takeoff.

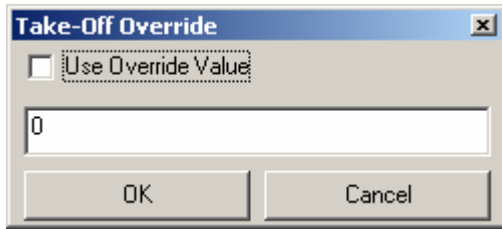
To change the color, you use the color tool bar. The left most button is the current color of takeoff. The rest of the buttons are default colors. The narrow buttons along side the colors, are used to select a custom color. If you already have takeoff that you want to change, first select it in the line list. The line will blink on the drawing, to help you find the lines you are looking for. Once all the lines are selected, click the “Set Color” button. All the selected lines will change to the current takeoff color.

Color Tool Bar



Delete works the same way as set color. You select all the lines you want to delete. Then click the delete button. You will get a conformation window. If you hit the “Yes” button, your line will be permanently deleted. You will have to re-measure the lines, if you deleted them in error.

The “Additional Quantities” button is used to add takeoff that you can’t measure. A good example of this would be drops and risers in a pipe takeoff. This will add a lineal measurement to the total value, but will not display it on the plan. If you need to add takeoff quantities, and would you



like to see them on the drawing. First, take off a line on the plan where you want the additional quantity to show. In the legend there is a

column for “Type”. Click the type column for the additional quantity that you just measured. A window will open that will allow you to enter an override value. This feature is also useful if you have a broken line that you need to represent in your takeoff.

The four buttons on the top of the legend are used to select different views of your detail. The first button will show you only the takeoff for the field in the estimate you zoomed from. The second button will show you all of the takeoff for the line in the estimate you zoomed from. In the MIKE system, this would include all the pipe and fittings. The third button will show you all of the takeoff on this plan for the field you zoomed from, in the entire estimate. And the fourth button will display all the takeoff for this plan in the entire estimate.

The “show length” option just below the line records can be used to hide or display the labels on the plan takeoff. If you have a lot of takeoff in a small area, these labels can make it difficult to find the takeoff points. In this type of situation, you will most likely want to turn off the labels.

Feet	Detail	Type
1.63	3	
9.75	3	
8.59	3	
8.47	3	
13.04	3	
1.64	3	
15.02	3	
15.98	3	
17.97	3	
7.18	3	
3.34	3	
0.56	3	
15.14	3	
1.09	3	
2.69	3	
11.95	3	
22.46	3	
1.33	3	

Show Length

Set Color Delete

Additional Quantities

Plan Scale
1/4 inch =
1 Foot

6735,180

Returning Values

At the top of the Visual TakeOff+ window, you will see two menu options for returning values. Because Visual TakeOff+ knows where you zoomed from in your estimate, **Return Take-Off** **Return Lineal** it also knows what type of data to return. We zoomed from the “LN of Pipe” column in the MIKE system. That automatically put us in lineal takeoff, and set the second menu option to “Return Lineal”. If we had zoomed from “90’s”, it would have said “Return Count”. Most of the time you will use that option to return the takeoff to the estimate. If you need to return the takeoff in a different format, there are more options available under the “Return Take-Off” menu option. This is mostly used with estimating software that has area takeoff. You can use these additional options to return Area and Perimeter, for example. For this situation, the second menu option would be used. Once you hit this option, Visual TakeOff+ will hide itself for later use. The estimate will appear again, and the value will be placed in the field we zoomed from. If you want to look at the takeoff again or make a few changes, you can zoom on that field. Visual TakeOff+ will remember all the takeoff you did, and keep it attached to the field in your estimate. Once you zoom, the plan will automatically reload and the takeoff will redraw. At this point, you can change colors and add or delete takeoff

Types of Measurements

There are three basic types of takeoff - lineal, count, and area.

Visual TakeOff+ will support three different modes of takeoff. The most common is lineal, which has two types of its own. Count and area are the other modes supported. This chapter will give you an overview of these modes. In Visual TakeOff+ you will not have to set the mode. In most takeoff applications, you tell the software what mode you want to use. Because Visual TakeOff+ is integrated with your estimating software, it knows what you want to take off. For example, if you zoom to the takeoff from the “LN of Pipe” field in MIKE2000, Visual Takeoff+ will automatically set the mode to lineal. And like wise, if you zoom from a fitting field, it will be set to count mode.

Lineal Measurements

There are two sub-modes of lineal takeoff; segment and continuous. In segment mode, you have to click both ends of the takeoff. If you are taking off a run that has corners, you will have to click twice in the corner. This is because you measure the segment only. You have to click the end of the first line to end the segment, and then the beginning of the second line to start the next segment. On a continuous run this is the same point. Continuous mode knows that the beginning of the second line is the end of the first line. Most likely, your takeoff will have both types. Visual TakeOff+ defaults to segment mode when you take off a lineal item in the estimate. However you can change modes as many times as you like during the takeoff.



Segment Mode



Continuous Mode

Counting Items

Count mode is the simplest mode to use. When you zoom from 90's in MIKE2000+, for example. Visual TakeOff+ will put you in count mode. You click once on all of the 90's, in this example. Once you are finished counting the items, hit the return count option. Your count will automatically be placed in the field you zoomed from.

Area Measurements

Area takeoff is really continuous takeoff with the ability to close an area. When you zoom from an area field, Visual TakeOff will do a few things for you. First it will be set to use continuous takeoff; also the “Groups and Areas” tab will be selected. A group is all the line you measured, while in the same mode. You can also select a group, and all additional takeoff will be placed in that group. Once you have finished taking off the area, which is just a group of lines. You click on the close area button, and Visual Takeoff+ will place lines where they are needed to close in the area. Then the area and perimeter will be calculated. In this example, the blue group is selected. The group that is selected for takeoff is in bold.

Groups and Areas	
Perimeter	SQ Feet
32.46	56.14
18.8	Group Oper

Select Group
Close Area

Show Area

