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1.01 INTRODUCTION

LEGALEASE, an add-on module to "Sight" Survey, Survey 4.0 and Survey Lite, is designed to provide professional land surveyors with a tool to assist in fast and efficient preparation of legal descriptions from their surveying data.

1

Section

Getting Started

Combining a completely menu-driven format with an extensive use of templates and built-in safeguards, LEGALEASE will quickly prepare description after description in a clear, concise and consistent format. And, because LEGALEASE operates within your Simplicity COGO program, you know the results will be accurate. *When working within "Sight" Survey, you can even run LEGAL-EASE completely in the background. When running in this "seamless" mode, your description will be loaded automatically into your usual word processor without the LEGALEASE screens even being displayed on your monitor!*

The heart of LEGALEASE is its ability to recognize each geometrical condition that it encounters and then replaces the raw numbers with appropriate phrasing containing any necessary and/or desired numerical data. The actual numerical data may be presented in a variety of ways including spelled out numbers, digits, or combinations thereof. The geometrical conditions recognized by LEGALEASE are:

- Commencing at the start of a line;
- Commencing at the start of a curve;
- Commencing at the start of a line which is also the Point of Beginning;
- Commencing at the start of a curve which is also the Point of Beginning;
- A Point of Beginning at the end of a line;
- A Point of Beginning at the end of a curve;

2 Section 1 - Getting Started

- A Point of Beginning at the point of curvature of a tangent curve;
- A Point of Beginning at the point of curvature of a nontangent curve;
- A Point of Beginning at a point continuing along a previously described curve;
- A Point of Beginning at the point of curvature of a compound curve;
- A Point of Beginning at the point of curvature of a reverse curve;
- Proceeding along a tangent curve;
- · Proceeding along a non-tangent curve;
- Proceeding along a compound curve;
- Proceeding along a reverse curve;
- · Continuing along the previously described curve;
- Proceeding along a line;
- Continuing along the previously described line;
- Closing to the Point of Beginning, (closed traverse), and adding an area;
- Closing to a Point of Ending, (open traverse).

After completing each description, LEGALEASE also allows you to edit, save and print your work. Files are saved in a standard ASCII text format for compatibility with other programs. You can even import your description into Draftsman DXF, "Sight" Survey or Generic CADD for placement on your drawings.

1.02 THE REFERENCE MANUAL

This LEGALEASE manual is designed to provide information in a clear, convenient format, and is arranged in accordance with the structure of the LEGALEASE Main Menu. The program's monitor prompts are shown in **Bold Style Helvetica** letters in the left column of the page and are followed by detailed instructions for each needed response. In cases where the manual indicates a specific

response, the response is printed in **Bold Style Courier** letters. You will also occasionally see KEYCAP responses which indicate that you should press the key or keys shown. When you see keycaps in combination, but not with an *Enter* key such as ATE, press the first key and hold it down while pressing the second key. When a combination includes an *Enter* key, such as *E Enter*, press and release the keys shown in succession. Please note that even though the responses may be shown in capital letters, lower case data entry is acceptable.

You might also notice that the instructions for many of the routines will look somewhat repetitious. Often, certain instruction sequences are repeated often to eliminate needless searches in the manual.

1.03 READ ME FILES

Quite often, software manufacturers will place a file on their disk(s) that contains information regarding software features not described in the manual. These files are typically named README.DOC or just READ.ME. It is a good idea to always directory your software to determine if the disk contains a read me type file. *Any LEGALEASE file will be named README.LGL.*

The easiest way to read a read me file is to load the file into your word processing program. You may also view a read me file with the DOS **TYPE** command. In describing the use of the **TYPE** command, let's assume that the disk containing the file is in drive **A**, and the file name is **README.LGL**. Enter the command:

TYPE A:README.LGL -Enter

If you want a printed copy, modify the command to look like:

TYPE A:README.LGL >PRN -Enter

Be sure that your printer is *On* and *On Line* or a **DEVICE TIMEOUT** error will occur.

1.04 SOME BASIC INSTRUCTIONS

Throughout this manual, you will see a variety of instructions for answering all of the various types of prompts. Some prompts will

	require a YES or NO answer, while others will be accompanied by instructions to ENTER your response. Still others will contain instructions for you to PRESS a key in response to a given prompt. In an effort to simplify your operation of this program, the following guidelines shall apply to all of the prompt responses for all LEGALEASE routines.
ENTER vs. PRESS	When you encounter an instruction that requires you to ENTER data, the program expects you to press Cene after the data has been entered. When you encounter the word PRESS , the program is indicating that it is expecting a single key press, or a series of key presses, in response. In these cases, do not press Cene after your response.
YES or NO	This type of prompt requires only that you PRESS \heartsuit to answer in the affirmative, or \aleph to answer in the negative. To facilitate entry from the numeric key pad, all Yes answers may be indicated by substituting 1 for \heartsuit . Likewise, all No answers may be indicated by substituting $\textcircled{1}$ for \aleph .
Using Your Mouse	You may also use your mouse to answer any Yes or No question. To answer Yes , point at the word Yes in the prompt and press either mouse button. To answer No , point at the word No in the prompt and press either mouse button. You may also simply press a mouse button WITHOUT pointing at either Yes or No . Press the Left mouse button for Yes and the Right mouse button for No .
Function Key Entries	In many cases, your data entry may be completed by pressing a function key on your keyboard. These keys are numbered [F1] through [F12] across the top of an enhanced 101-key keyboard. When using a function key, the distinction between Enter and Press is built into the key. Do not press effet after pressing a function key.
Menu Basics	The LEGALEASE menus are all similar in function. When a menu opens, a menu item will be highlighted. Select another item by moving the highlight bar to that item. To move the highlight bar, press 1, 1 or space Bar, or click the left mouse button on the desired item. To select a highlighted item, press enter or click the right mouse button on the desired item.



2.01 MINIMUM SYSTEM CONFIGURATION

To function, LEGALEASE must be installed on a computer containing "Sight" Survey, Survey 4.0 or Survey Lite, and as such is subject to the same hardware requirements as those programs. (Please refer to the "Sight" Survey or Survey 4.0 manual for further information on their specific hardware requirements.)

2.02 DO YOU NEED A SITE LICENSE?

Your purchase of LEGALEASE is nothing more than a license to run the LEGALEASE program on a single computer. You may need an additional site license if you plan to:

- Install LEGALEASE on more than one computer at your place of business;
- □ Install LEGALEASE on a home computer;
- □ Install LEGALEASE on a field computer;
- Install LEGALEASE on a network computer or server;
- Have LEGALEASE available at temporary field office sites within your company.

The best rule to follow is: *If you needed a site license to run "Sight" Survey or Survey 4.0 on a particular computer, you will need a site license to run LEGALEASE on that computer as well!*

Additional guidelines for site licensing may be found in Section 2.02 of your "Sight" Survey or Survey 4.0 manual.

Site Licensing FeesA site license granting you permission to install an additional
copy(s) of this software is available at a cost of 50% of the full
version price, *per computer licensed*. The license cost including a
manual and disk furnished by Simplicity Systems is 65% of the full

Section 2

Installing LEGALEASE

version price, *per computer licensed*. (Costs are rounded up to the nearest dollar.) Prices are subject to change without notice. Call for verification.

2.03 INSTALLING LEGALEASE

"Sight Survey, Survey 4.0 or Survey Lite must be installed on your computer prior to installing LEGALEASE.

To install LEGALEASE, you must begin at a DOS prompt, such as C:> or A:>. To simplify the installation instructions, we will assume that you are logged to drive C:> and your floppy disk is drive A:>.

STEP 1. Place the *original* **LEGALEASE Disk** into your floppy drive and type **A:INSTALL .**

STEP 2. Select which COGO program you will be using. Press S for *Survey 4.0* or *Survey Lite*, Z for *"Sight" Survey (Zak)*, or B for *Both Survey 4.0 and "Sight" Survey*.

STEP 3. Specify the drive and directory where you would like to install LEGALEASE. If a default directory is shown after the prompt, we recommend pressing *end* to accept it. If you will be using LEGALEASE with Survey 4.0 or Survey Lite, you must install LEGALEASE into the same directory as Survey 4.0 or Survey Lite, or it will not run. Even if you will be using LEGALEASE with "Sight" Survey in addition to Survey 4.0 or Survey Lite, LEGALEASE must still be installed into the same directory as Survey 4.0 or Survey 4.0 or Survey Lite.

The remaining installation steps will vary depending upon which COGO program you chose in STEP 1. If you are not prompted for the items discussed in the following steps, just skip the step and continue with the next one.

STEP 4. If prompted, specify the drive and directory where you would like to install the LEGALEASE configuration files. Again, if a default directory is shown, we recommend pressing Ferer to accept it.

STEP 5. If prompted, specify the drive, directory, and file name for the word processing program that you wish to use to review, edit and format your legal descriptions once they have been processed by "Sight" Survey and LEGALEASE. The installation will attempt to search your hard drive and suggest a default, however, if you have more than one word processor or text editor on your hard drive, you may need to change this to the one you prefer. You must specify the exact drive, directory, and executable file name for your word processor in order for the installation program to continue. If the default program is acceptable to you, simply press --Enter to accept it. If you are unable to enter a valid file name, try entering C:\WINDOWS\WRITE.EXE or NONE.

STEP 6. If your responses to all prompts are correct, press \heartsuit to continue the installation.

STEP 7. After the installation is complete, store the original LEGALEASE disk in a safe place.

If LEGALEASE has been installed as a demo, you'll need to go through the upgrade procedure to be able to print or save your legal descriptions. Upgrading is a fast, easy procedure that can be done by pressing ① when the LEGALEASE Main Menu is displayed on your monitor. (If you press ① at the Main Menu and nothing happens, it simply means that your copy of LEGALEASE has already been registered as a full-working program.) LEGAL-EASE will display the following screen:

This LegalEase program is presently functioning in DEMO mode.

If this has occurred in error, we apologize for the inconvenience. Please call us at (218) 773-8917 or (218) 773-7966 so that we may correct this situation for you. If you have not purchased the program and would like to do so, please have your credit card ready when you call us. You will be asked for the UPGRADE CODE which is: 2764597

You will be given an activation number to enter to unlock this program. You get 3 attempts. Important: You must be at this screen when you call. Enter the activation number:?

2.04 PRODUCT REGISTRATION

After upgrading the program, you will be asked to provide or verify your name, company name, address and telephone number. This information, or at least portions of it, must be provided before you can continue using LEGALEASE. The information is used to prepare your product registration form for you.

Product registration is important for many reasons. It provides us with updated information so that we can contact you with upgrade information, etc. But perhaps most important is this: *We will not provide support for unregistered software.*

When the upgrade/registration program has finished running, it will produce a completed registration form for you to sign, fold, stamp and mail in. It's a quick and simple task that you are strongly urged to complete.

1. The Registration Form will only print out on printers that are connected to parallel port LPT1. If your printer does not match this setup, select the option to save your Registration Form to a disk file, then print it out later using your word processing program. The file is saved in the LEGALEASE program directory and is named REGISTER.LGL.

2. If you upgrade LEGALEASE within the program instead of from the Main Menu, you will need to manually run the **LE-REG** program from DOS in order to complete your registration form. **LE-REG.EXE** is located in the LEGALEASE program directory.

2.05 UN-INSTALLING LEGALEASE

To un-install LEGALEASE, you must be at a DOS prompt in the directory that contains your LEGALEASE software. Type **LE**-**RETRN** we to load the un-install routine. You must fill out a Return Form and enter an RMA number regardless of whether or not you are returning the program. If you are just un-installing LEGALEASE to remove it off the computer, simply enter **9999** when prompted for the RMA number. *However, if you are un-installing LEGALEASE to return the program to Simplicity, you must call our support office at 218-773-7966 for an appropriate RMA number and return authorization.*



3.01 THE MAIN MENU

Section 3 The LEGALEASE Main Menu

Each LEGALEASE session begins at the **Main Menu**, as shown in Figure 3-1. This menu screen consists of three main areas: the Main Menu item list; the Function box; and the message area that is the blank portion of the screen, below the two boxes.



The Main Menu Screen: Figure 3-1

When you first enter the Main Menu, notice the highlight bar on item number one. To select any item, simply press the corresponding number or move the highlight bar using [1], [1], or the Space Bar, to that item and press Fine. If you have a mouse, simply point to the item and press the right mouse button. As you move the highlight bar, you will notice that the description of the highlighted item will appear in the Function window.

If you forget how to move the highlight bar or select an item, press [f] for Help. This toggles a help message in the message area. To exit the program at any time, press [f]. Throughout the remainder of this section, we will address each of the Main Menu items in the order that they appear on the menu.

3.02 PROCESS A JOB

The option to **Process a Job** is used to prepare a legal description from a legal data file (as compiled by the **LF** routine in either "Sight" Survey or Survey 4.0), in accordance with the parameters set in the Configuration Menu and the geometrical phrase definitions on file.



Process a Job: Figure 3-2

The edit line into which you enter file names is a fully scrollable input line. In other words, don't panic if your file name is longer than the space allotted, the line will scroll to the left as needed.

Moving about the input line is an easy task using the standard editing keys. These are:

Home End Insert

Delete

To move to the beginning of the line;

- To move to the end of the line;
- To insert characters at any point;
- To delete characters at any point;

Process File

Bk Spc	To backspace and delete characters;
← & →	To move within the line;
Alt C	To clear the line;
Alt R	To restore the contents of the line;
- Enter	To accept the line;
Esc	To exit the section.

Description File

After you have entered the name of the Process File, an input line will appear for the name of the **Description File**. If offered, a default file name having the same root name as the Process File will appear in the window. Notice however, that the file name extension is different, now being **.DSC**.

If no default file name is offered, or if you want to change one that is, simply enter a file name of your choice including the drive and directory and press *Etem*. Do not enter a file name extension at this time, since LEGALEASE will change whatever you might enter to a .**DSC** file name extension anyway.

If a file name with the specified Description File name exists, you will be prompted in the **Status Window**:

A file with that name from 01/30/93 @ 08:05pm already exists on the target path. Want to DELETE it? (Yes/No)

Of course the date and time included in the prompt will be indicative of the actual file. To delete the file, press [Y], (1), or click a mouse button on the word **Yes**. Otherwise, press [N], (0), or click a mouse button on the word **No**. If you choose to delete the file, a backup file with a file name extension of **.LBK** will be left in place of the original file. If you choose not to delete the file, you will be returned to the **Description File** prompt line.

Upon the successful entry of your file names you will briefly see a message in the **Status Window** reading:

Scanning for Point of Commencement and P.O.B. If you have not selected an active caption you will be asked to do so after the file has been scanned and the previous message disappears. (See Section 3.04 beginning on page 19.)

Your description will now be processed automatically in accordance with your configuration and phrase instructions. Sit back, relax, blink twice and it's done. It's that fast! In a moment, an edit window will open for you to review, edit and print your finished description. Refer to Sections 3.09 and 3.12 for further instructions.

The **Configuration Menu** is used to define operating parameters, either on a semi-permanent or temporary basis. Generally, most of the LEGALEASE operating parameters will be set only once. Some however, will be adjusted from time to time.



The next several pages contain a listing of the Configuration Menu items. Each item is accompanied by a brief description of its function and available settings. To select any item, use 1, 4, or Space Bar to highlight the item and press -Enter. Mouse users may select an item by clicking the right mouse button on the item.

Each time you select an item, the setting cycles to the next available setting. In most cases there are only a few choices, so cycling hrough the settings is not cumbersome. From time to time, you will see notes entitled:



These notes offer some insight into the configuration settings to assist you in proper selection.

When you have finished making changes, exit the **Configuration Menu** by pressing (or clicking your left mouse button on) **Esc** and

3.03 CONFIGURE LEGALEASE

your changes will be automatically saved for use in future work sessions.

Angle Format (Primary)	The primary angle format is used to place angular data into your description. The available settings as shown by example are:
	N 00° 00' 00" E North 00° 00' 00" East North 00 degrees 00 minutes 00 seconds East Fully spelled out
	The final value, " Fully spelled out ", is just what it says. For example, a bearing of N 12° 07' 10" E would be written as:
	" North twelve degrees seven minutes ten seconds East "
Angle Format (Secondary)	The secondary angle format is used to place alternate angular data parenthetically into your description. The available settings as shown by example are:
	N 00° 00' 00" E North 00° 00' 00" East North 00 degrees 00 minutes 00 seconds East Fully spelled out No secondary reference
	For example, suppose your primary selection was "Fully spelled out" and your secondary selection was "North 00° 00' 00" East". A bearing of N 12° 07' 10" E would be written as:
	" North twelve degrees seven minutes ten seconds East (North 12° 07' 10" East)"
	The final value, " No secondary reference ", should be used when you do not want any parenthetical secondary reference.
Distance Format (Primary)	The primary distance format places distance data into your de- scription. The available settings as shown by example are:
	87.65'

87.65 feet eighty seven and 65/100 feet For example, suppose your primary selection was "**eighty seven** and **65/100 feet**". A distance of 425.15 feet would be written as:

"... four hundred twenty five and 15/100 feet ..."

HOW LEGALEASE WORKS

LEGALEASE is not a conversion program. It cannot be used to convert metric units to English units and vice versa. The **Dis**tance Units setting controls the use of the words "feet" and "meters".

Distance Format (Secondary)

The secondary distance format places distance data parenthetically into your description. The available settings as shown by example are:

87.65' 87.65 feet eighty seven and 65/100 feet No secondary reference

For example, suppose your primary selection was "**eighty seven** and 65/100 feet" and your secondary selection was "87.65 feet". A distance of 425.15 feet would be written as:

"... four hundred twenty five and 15/100 feet (425.15 feet) ... "

The final value, "**No secondary reference**", should be used when you do not want any parenthetical secondary reference.

Directions - Approximate

Approximate directions describe the direction of travel in general terms, for example: "... *thence continuing southeasterly* ...". The available settings as shown by example are:

north / south / east / west North / South / East / West northerly / southerly / easterly / westerly Northerly / Southerly / Easterly / Westerly

Only partial listings are shown on the menu. Option one includes: northeast; southeast; southwest; and northwest. Option two includes those same directions, but with the first letter capitalized. Option three includes: northeasterly; southeasterly; southwesterly; and northwesterly. And option four includes the third option's directions, but with the first letter capitalized.

Directions - Cardinal	Cardinal directions describe the direction of travel in absolute terms, for example: " <i>thence South 27° 32' 15" East</i> " or " <i>thence South</i> ". The available settings as shown by example are: as bearing or azimuth North / South / East / West due North / due South / due East / due West
	If you elect to have your cardinal directions as (due) North / South / East / West , your directional calls will be written as bearings (or azimuths) except when the direction is exactly North, South, East, or West. Generally, you will set cardinal directions to "as bearing or azimuth" , so your cardinal calls are consistent with all other absolute directional calls within your descriptions.
Precision - Angular	Angular precision sets the decimal format for the reporting of angular data. You may set your angular precision for anywhere from zero to three decimal places while in a <i>degrees</i> mode, or from zero to six decimal places when operating in a <i>grads</i> mode.
Precision - Distance	Distance precision sets the decimal format for the reporting of distance data. You may set your distance precision for anywhere from zero to six decimal places.
	HOW LEGALEASE WORKS LEGALEASE reads a data file that is essentially a disk based copy of a COGO printout. Consequently, with all precision settings, you should not select a precision setting higher than your Survey 4.0 or "Sight" Survey COGO settings or the distances and bearings in

your legal description will appear to have more precision than they actually do. However... the precision that was used when a legal file was created in "Sight" Survey (but not in Survey 4.0) is stored inside the legal file. LEGALEASE will automatically lower the bearing and distance precision of LEGALEASE to match the "Sight" Survey legal file, if necessary.

Precision - Area (P)	Primary (P) area precision sets the decimal format for the reporting of enclosed areas. You may set your distance precision for anywhere from zero to six decimal places. This setting affects only the <i>primary</i> area report.
Precision - Area (S)	Secondary (S) area precision sets the decimal format for the par- enthetical reporting of enclosed areas. You may set your distance precision for anywhere from zero to six decimal places. This set- ting affects only the <i>parenthetical secondary</i> area report.
Units - Angular	The angular units option sets the angular units as either Degrees or Grads . If set as <i>degrees</i> , you may set your angular precision for up to three decimal places. If set for <i>grads</i> , you may set your angular precision for up to six decimal places.
	HOW LEGALEASE WORKS LEGALEASE is not a conversion program. It cannot be used to convert metric units to English units and vice versa. The Angular Units setting controls the use of the words "degrees" and "grads".
Units - Area (Primary)	The area units option specifies area output values as English or metric units. Your primary area choices are: Square Feet
	Acres Square Meters Hectares Cuerdas

Units - Area (Secondary)	The secondary area units option specifies the parenthetical secon- dary area output values as English or metric units. Your secondary area choices are:
	Square Feet Acres Square Meters Hectares Cuerdas No secondary reference
	The final value, " No secondary reference ", should be used when you do not want any parenthetical secondary reference.
Units - Distance	The distance units option specifies that your distances are either in feet or in meters . No conversion of the incoming data is performed; the data is simply reported just as it is read in.
	HOW LEGALEASE WORKS LEGALEASE is not a conversion program. It cannot be used to convert metric units to English units and vice versa. The Dis- tance Units setting controls the use of the words "feet" and "meters".
Text Case	The text case option allows you to apply capitalization as needed, or apply capitalization to the entire description.
Output Degree Symbol	The degree symbol option allows you to specify which character symbol you want to use as your degree symbol in your legal de- scription file. Your options are:
	Windows Symbol (Alt + 176) DOS Symbol (Alt + 248) Use from Survey 4.0 Config Menu
	If you are using LEGALEASE with "Sight" Survey, you should se- lect the Windows Symbol option. This will ensure that your

degree symbols appear correctly when imported into "Sight" Survey and/or your Windows word processing program.

If you are using LEGALEASE with Survey 4.0, but you will be importing your descriptions into a Windows-based word processing program, you should select the **Windows Symbol** option.

If you are using LEGALEASE with Survey 4.0 and you will be printing your legal descriptions from the LEGALEASE built-in editor, you should use one of the last two options, depending upon how your printer handles the degree symbols.

If the **Degree Symbol** option on your Survey 4.0 Configuration Menu is currently set to °, then you should select the **DOS Symbol** option. However, if your Survey 4.0 **Degree Symbol** is set to anything else, you should select the **Use from Survey 4.0 Config Menu** option. This instructs LEGALEASE to use the same degree symbol that works with your printer in Survey 4.0.

When the **Degree Symbol** is set to **Windows Symbol**, LEGALEASE will place an **Alt +176** character in the output/saved files, but will still use the normal DOS degree symbol on the LEGALEASE screen and when printing from the built-in editor.

Word Wrap ON/OFF: The word wrap option tells LEGALEASE whether or not to place a hard carriage return at the end of each paragraph line.

When word wrap is **ON**, LEGALEASE **will not** place a hard carriage return at the end of each line in your paragraphs. Most word processing programs now support word wrap. This means that when they load a file which does not contain hard carriage returns, they will automatically format the paragraph lines to match the margins that you have defined within your word processor. This allows you to simply redefine your margins and the word processor will automatically reformat your entire document accordingly. When word wrap is **OFF**, LEGALEASE **will** place a hard carriage return at the end of each line in your paragraphs. LEGALEASE typically breaks the lines every 70-78 characters, depending upon when it encounters the end of a word. When a file which contains hard carriage returns is loaded into a word processor, the end of each line is determined by the position of the hard carriage returns.

This means that regardless of how wide you make the margins within your word processor, the paragraph lines will not get any longer.

If all of your descriptions will be printed from the LEGALEASE built-in editor, you should set this item to **OFF (Use hard Carriage Returns)**.

1. Some word processors and text editors have an option that lets you turn word wrap on and off. The Windows Notepad, for example, has a Word Wrap toggle on its Edit pulldown menu.

2. If you create a description using Word Wrap **OFF**, but later decide that you want the hard carriage returns removed, simply change your LEGALEASE configuration to Word Wrap **ON**, and then load the description back into the LEGALEASE editor using option **<8> Review & Edit a Description**. Make a slight change to the file, such as deleting and retyping one character, then press so and save the file. The file will be saved without the hard carriage returns. This method also works in reverse.

3.04 REVIEW, EDIT & SELECT CAPTIONS

The **Caption Menu** is used for two purposes: to define and edit up to five standard captions; and to select the **Active Caption**.

When running LEGALEASE within "Sight" Survey in "automatic" mode using the **Process a LEGALEASE File (PL)** routine, only the first caption will ever be used. Instead of assigning captions in LEGALEASE, it is better to store them as word processing files. (Refer to Section 3.13 beginning on page 38 for more information.)

To view any caption, move the highlight bar to the desired caption. As you move the bar, you will notice that any caption already defined will be displayed in the message area below the menu boxes. Because of space constraints, large captions will only be partially displayed. To edit or create a caption, press — free or F2 and an edit window will open at the bottom of the screen.

LegalEase Description Process	or - S/N 9302	08-4-1649 <	F1> Help	<f10> Quit</f10>
EDIT CAPTION M	ENU		ELECTED CAPT	ION
$\langle 1 \rangle$ Caption 1		Ac	tive Caption:	is:
<pre>< 2 > Caption 2 < 3 > Caption 3</pre>			No Caption	
$\langle 4 \rangle$ Caption 4 $\langle 5 \rangle$ Caption 5			NO OUPTION	-
$\langle E \rangle EXIT$				
		Press	; <f8> to Act</f8>	
			Caption Numb	er
<f2> Edit <f3></f3></f2>	Clear (E	8> Activate	<f5> Last</f5>	
		o/ netivute	NO/ LUST	

Review, Edit & Select Captions: Figure 3-4

THE EDIT WINDOW

The edit window is described in more detail in Section 3.12 beginning on page 35.

When you have finished editing, press **Esc** to close the edit window.

To activate a caption *before* you process a legal file, press **F8** to cycle through the available captions until the **Selected Caption** window shows the number of the caption you wish to use. *Note: Pressing F8 simply cycles through the caption numbers sequentially, it does <u>not</u> activate the <u>highlighted</u> caption.*

To exit the **Caption Menu** and return to the **Main Menu**, press **Esc** or **F10**.

E CAPTION RULES

Captions may contain any information you want, but they **may not** contain variables. (See Section 3.11, beginning on page 30, for more information on variables.) Captions may be of any length, subject to the 1500 line limit (22+ single spaced 66 line pages) of the whole description.

3.05 REVIEW & EDIT COMMENCING PHRASES

The **Commencing Phrase Menu** is used to define and/or edit any of the commencing phrases LEGALEASE offers. LEGALEASE recognizes four geometrical conditions for the Commencement Point. You may edit or accept the default phrase offered by LEGALEASE, or you may change the phrase entirely.

LegalEase Description Processor - S/N 930201 COMMENCING PHRASE MENU < 1 > At the start of a Line < 2 > At the POB & the start of a Line < 3 > At the start of a Curve < 4 > At the POB & the start of a Curve < 4 > At the POB & the start of a Curve < E > EXIT	-4-1616 <fi> Help <fi0> Quit VARIABLES (BNC> Arc Length (BNC> Brg/Angle/Azimuth <cb> Chord Bearing <chd> Chord Length <clp> Curving Left/Right <cdn> Concave Direction <cps> Center Point Bearing <din> Direction of Travel <din> Direction of Iravel <din> Distance (on a line) <nme> Name of Point <rad> Radius Length</rad></nme></din></din></din></cps></cdn></clp></chd></cb></fi0></fi>
Commencing at the <nme> <f2> Edit <f3> Clear <f4></f4></f3></f2></nme>	· Default - <f5> Last</f5>

Review & Edit Commencing Phrases: Figure 3-5

The four geometrical conditions for the Point of Commencement, and their respective default settings, are:

<1> At the start of a Line	"Commencing at the <nme>"</nme>
< 2 > At the POB & the start of a Line	"Commencing at the <nme>, said point being the POINT OF BEGINNING"</nme>
< 3 > At the start of a Curve	"Commencing at the <nme>, said point being the beginning of a curve, concave to the <con>, having a radius of <rad>, a central angle of <ca>, and a chord of <chd> bearing <cb>"</cb></chd></ca></rad></con></nme>
< 4 > At the POB & the start of a Curve	"Commencing at the <nme>, said point being the POINT OF BEGINNING, and the beginning of a curve, concave to the <con>, having a radius of <rad>, a central angle of <ca>, and a chord of <chd> bearing <cb>"</cb></chd></ca></rad></con></nme>

To view any commencing phrase, move the highlight bar to the desired phrase. As you move the bar, you will notice that any commencing phrase already defined will be displayed in the message area below the menu boxes. Because of space constraints, large phrases may only be partially displayed. To edit or create a commencing phrase, press **...** and an edit window will open at the bottom of the screen. When you have finished editing, press **...** to close the edit window.

Eimportant!

1. The bracketed items within the phrases are variables. As *LEGALEASE* encounters these variables, it substitutes the actual description data. For further information on the use of variables, please refer to Section 3.11 of this manual.

2. The edit window is described in more detail in Section 3.12 beginning on page 35. For edit window instructions specific to the use of variables, please refer to Section 3.11 of this manual.

3. The leading and trailing quotation marks ("") are **not** a part of the phrase, and should not be included when you edit a phrase.

3.06 REVIEW & EDIT P.O.B. PHRASES

The **P.O.B. & Ending Phrase Menu** is used to define and/or edit any of the Point of Beginning phrases LEGALEASE offers. LEGALEASE recognizes seven geometrical conditions for the Point of Beginning. You may edit or accept the default phrase offered by LEGALEASE, or you may change the phrase entirely.

To view any beginning phrase, move the highlight bar to the desired phrase. As you move the bar, you will notice that any beginning phrase already defined will be displayed in the message area below the menu boxes. Because of space constraints, large phrases may only be partially displayed. To edit or create a beginning phrase, press **Finer** or **F2** and an edit window will open at the bottom of the screen. When you have finished editing, press **Esc** to close the edit window.

P.O.B. & ENDING PHRASE MENU VARIABLES < 1 > POB @ the end of a Line <arc> Arc Length < 2 > POB @ the end of a Curve <are> Area < 3 > POB @ the PC of a Tangent Curve <cb> Chord Bearing < 4 > POB @ the PC of Non-Tangent Curve <chd> Chord Length</chd></cb></are></arc>
< 1 > POB @ the end of a Line <are> Area < 2 > POB @ the end of a Curve <cr> Central Angle < 3 > POB @ the PC of a Tangent Curve <cb> Chord Bearing < 4 > POB @ the PC of Non-Tangent Curve <chd> Chord Length</chd></cb></cr></are>
<pre>< S > POB @ point on a Continuing Curve < 6 > POB @ the PCC of a Compound Curve < 7 > POB @ the PRC of a Reverse Curve < 8 > Closed Traverse Ending < 9 > Open Traverse Ending < E > EXIT</pre> <pre></pre> <pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre><pre></pre></pre>
to the POINT OF BEGINNING;
<pre><f2> Edit <f3> Clear <f4> Default <f5> Last</f5></f4></f3></f2></pre>

Review & Edit P.O.B. Phrases: Figure 3-6

The seven geometrical conditions for the Point of Beginning, and their respective default settings, are:

" to the end of the curve, said point being the POINT

" to the POINT OF BEGINNING; said point being the beginning of a tangent curve, concave to the <CON>,

" to the POINT OF BEGINNING; said point being the

beginning of a non-tangent curve, concave to the <CON>, having a radius of <RAD>, a central angle of <CA>, and a chord of <CHD> bearing <CB>; thence <DIR> along said curve, a distance of <ARC>"

having a radius of <RAD>, a central angle of <CA>, and a chord of <CHD> bearing <CB>; thence <DIR> along said

" to the POINT OF BEGINNING"

curve, a distance of <ARC>"

OF BEGINNING"

< 1 > POB @ the end of a Line < 2 > POB @ the end of a Curve

< 3 > POB @ the PC of a Tangent Curve

< 4 > POB @ the PC of a Non-Tangent Curve

< 5 > POB @ point on a

" to the POINT OF BEGINNING; thence continuing <DIR> along said curve, a distance of <ARC>"

Continuing Curve

< 6 > POB @ the PCC of a Compound Curve	" to the POINT OF BEGINNING; said point being the point of curvature of a compound curve, concave to the <con>, having a radius of <rad>, a central angle of <ca>, and a chord of <chd> bearing <cb>; thence <dir> along said curve, a distance of <arc>"</arc></dir></cb></chd></ca></rad></con>
< 7 > POB @ the PRC of a Reverse Curve	" to the POINT OF BEGINNING; said point being the point of curvature of a reverse curve, concave to the <con>, having a radius of <rad>, a central angle of <ca>, and a chord of <chd> bearing <cb>; thence <dir> along said curve, a distance of <arc>"</arc></dir></cb></chd></ca></rad></con>
	IMPORTANT! 1. The bracketed items within the phrases are variables. As LEGALEASE encounters these variables, it substitutes the actual de- scription data. For further information on the use of variables, please refer to Section 3.11 of this manual.
	2. The edit window is described in more detail in Section 3.12 beginning on page 35. For edit window instructions specific to the use of variables, please refer to Section 3.11 of this manual.
	3. The leading and trailing quotation marks ("") are not a part of the phrase, and should not be included when you edit a phrase. However, since the phrase does not begin a sentence, the space immediately following the opening quote mark must be included.
3.07	

3.07 REVIEW & EDIT GEOMETRIC PHRASES

The **Geometric Phrase Menu** is used to define and/or edit any of the geometric condition phrases LEGALEASE offers. Geometric phrases are those phrases that occur within the body of the description.

LEGALEASE recognizes seven geometrical conditions. You may edit or accept the default phrase offered by LEGALEASE, or you may change the phrase entirely.

<pre>< 1 > Along a Tang < 2 > Along a Non- < 3 > Along a Comp < 4 > Along a Reue < 5 > Continuing a < 6 > Along a Stra</pre>	PHRASE MENU ent Curve Tangent Curve ound Curve rse Curve long Same Curve	CARC> (SBNG> (CBA) (CBA) (CBA) (CLR> (CON) (CLR> (CON) (CDR) (CDR) (CDR) (CDR)	VARIABLES Arc Length Bng/Angle/Azimuth Central Angle	ng

Review & Edit Geometric Phrases: Figure 3-7

The seven geometrical conditions and their respective default settings, are:

<1>	Along a Tangent Curve	" to the point of curvature of a tangent curve, concave to the <con>, having a radius of <rad> and a central angle of <ca>; thence <dir> along said curve, a distance of <arc>"</arc></dir></ca></rad></con>
<2>	Along a Non-Tangent Curve	" to the point of curvature of a non-tangent curve, concave to the <con>, having a radius of <rad>, a central angle of <ca>, and a chord of <chd> bearing <cb>; thence <dir> along said curve, a distance of <arc>"</arc></dir></cb></chd></ca></rad></con>
<3>	Along a Compound Curve	" to the point of curvature of a compound curve, concave to the <con>, having a radius of <rad>, a central angle of <ca>, and a chord of <chd> bearing <cb>; thence <dir> along said curve, a distance of <arc>"</arc></dir></cb></chd></ca></rad></con>
< 4 >	Along a Reverse Curve	" to the point of curvature of a reverse curve, concave to the <con>, having a radius of <rad>, a central angle of <ca>, and a chord of <chd> bearing <cb>; thence <dir> along said curve, a distance of <arc>"</arc></dir></cb></chd></ca></rad></con>
< 5 >	Continuing along the	"; thence continuing <dir> along said curve, a distance</dir>

	Same Curve	of <arc>"</arc>
< 6 >	Along a Straight Line	"; thence <bng>, a distance of <dst>"</dst></bng>
<7 >	Continuing along the Same Line	"; thence continuing <dir> along said line, a distance of <dst>"</dst></dir>
		To view any geometric phrase, move the highlight bar to the de- sired phrase. As you move the bar, you will notice that any geo- metric phrase already defined will be displayed in the message an

metric phrase already defined will be displayed in the message area below the menu boxes. Because of space constraints, large phrases may only be partially displayed. To edit or create a geometric phrase, press *etener* or *F2* and an edit window will open at the bottom of the screen. When you have finished editing, press *Esc* to close the edit window.

EIMPORTANT!

1. The bracketed items within the phrases are variables. As LEGALEASE encounters these variables, it substitutes the actual description data. For further information on the use of variables, please refer to Section 3.11 of this manual.

2. The edit window is described in more detail in Section 3.12 beginning on page 35. For edit window instructions specific to the use of variables, please refer to Section 3.11 of this manual.

3. The leading and trailing quotation marks ("") are **not** a part of the phrase, and should not be included when you edit a phrase. However, since the phrase does not begin a sentence, the space immediately following the opening quote mark **must** be included. **However, in phrases 5, 6, and** 7, the space should be preceded with a semi-colon since the phrase is a new leg and not a part of the previous call.

3.08 REVIEW & EDIT ENDING PHRASES

The **P.O.B. & Ending Phrase Menu** is used to define and/or edit any of the ending phrases LEGALEASE offers. LEGALEASE recognizes two geometrical conditions for the ending point. You may edit or accept the default phrase offered by LEGALEASE, or you may change the phrase entirely.



Review & Edit Ending Phrases: Figure 3-8

You have undoubtedly noticed by now that the **P.O.B. & Ending Phrase Menu** looks strangely familiar. Well, you're right, we used it before. We just thought the ending phrases would be lonely on a menu all to themselves so we gave them some company and put them on the P.O.B. Menu.

The two ending conditions and their respective default settings are:

screen. When you have finished editing, press **Esc** to close the edit

<8 > Closed Traverse Ending * to the POINT OF BEGINNING; said described tract containing <ARE>, more or less." <9 > Open Traverse Ending * to the POINT OF ENDING." To view any ending phrase, move the highlight bar to the desired phrase. As you move the bar, you will notice that any ending phrase already defined will be displayed in the message area below the menu boxes. Because of space constraints, large phrases may only be partially displayed. To edit or create an ending phrase, press ended or F2 and an edit window will open at the bottom of the

window.

E important!

1. The bracketed items within the phrases are variables. As LEGALEASE encounters these variables, it substitutes the actual description data. For further information on the use of variables, please refer to Section 3.11 of this manual.

2. The edit window is described in more detail in Section 3.12 beginning on page 35. For edit window instructions specific to the use of variables, please refer to Section 3.11 of this manual.

3. The leading and trailing quotation marks ("") are **not** a part of the phrase, and should not be included when you edit a phrase. However, since the phrase does not begin a sentence, the space immediately following the opening quote mark **must** be included.

3.09 REVIEW & EDIT A DESCRIPTION

Review & Edit a Description is the routine that you may use to edit an existing description. It is automatically called at the end of the description processing session.



Review & Edit a Description: Figure 3-9

When called by either means, a large window opens into which your description is placed. You are now free to scroll through your description, adding and/or deleting content at your discretion. When you have finished editing the description to your satisfaction, press [50].

	THE EDIT WINDOW The edit window is described in more detail in Section 3.12 be- ginning on page 35.
Save the Description? (Yes/No)	If you want to save your description file, even if you have not made any changes, press [Y], [1], or click your mouse on the word Yes. Otherwise, press [N], [0], or click your mouse on the word No. If you have not edited the file, your description has already been saved and you can answer No to this prompt.
Print the Description? (Yes/No)	If you want to print a description at this time, press \mathbb{Y} , \mathbb{I} , or click your mouse on the word Yes . Otherwise, press \mathbb{N} , $[0]$, or click your mouse on the word No . <i>If you are running within Windows, do not answer</i> Yes <i>to this prompt unless you are sure that your printer is attached to parallel port LPT1.</i>
Issue a Form Feed? (Yes/No)	If you elected to print the file and you are running LEGALEASE from within Survey 4.0, you will be asked whether or not you want to issue a form feed. If you choose to do so, the printer will advance to the top of the next page before printing your legal description. <i>If you are running LEGALEASE from within "Sight" Survey, this prompt will not appear because your printer would normally be set at the top of a new page.</i>
	After answering these two prompts, your description will be saved and/or printed as you have instructed. Be sure to have your printer " On " and " On-Line " and set to the top of your form before answering the final question. After printing/saving, you will return to the Main Menu .
3.10 EXIT	The Exit option is used to quit the program and return to COGO. All phrases and configuration items are saved, your COGO data

All phrases and configuration items are saved, your COGO data and screen are restored. In Survey 4.0, you will be returned to a **Select Routine** prompt. In "Sight" Survey, either your description will be loaded into your usual word processor, or you will be returned to the last-used routine, most likely the **Inverse** routine.

3.11 EDITING PHRASES & USING VARIABLES

One of the features of LEGALEASE is that it allows you to customize phrases to match your normal description style. You have already seen the default phrases that LEGALEASE offers to satisfy various descriptive conditions. It is likely that you'll want to change some, or perhaps even all, of them to insure consistency with your normal style.

Editing phrases and using variables is really quite simple, but you must follow a few rules to guarantee success. First, let's discuss some important time saving tools.

When a phrase editing menu is shown, four function key assignments stand ready to assist you. They are:

- **F2** Used to place the current phrase into the edit window.
- **F3** Used to clear the current phrase and automatically open the edit window for a new assignment.
- **E4** Used to replace the existing phrase with the default phrase (as it is printed in this manual).
- **E**5 Used to replace the edited phrase with the phrase as it existed prior to editing.

These keys may be used anytime a phrase editing menu is shown on your display. The phrase editing window does not need to be open to use them, although it may be.

Another event takes place when you open any phrase menu except the Caption Menu. The display window on the right, labeled as the **Variable** window, becomes filled with a reference listing of the variables that you may use in your LEGALEASE phrases. The variables, not all of which appear on every menu, are:

ARC	Arc Length	
ARE	Area	
BNG	Bng/Angle/Azimuth	
CA	Central Angle	
СВ	Chord Bearing	
CHD	Chord Length	
	-	
CLR	Curving Left/Right	
-----	-----------------------------------	--
CON	Concave Direction	
CPB	Center Point Bearing	
DIR	Direction of Travel (approximate)	
DST	Distance (on a line)	
NME	Name of Point	
RAD	Radius Length	

So just how is a variable used? Well, suppose you have a course that is a straight line. Your straight line phrase might read:

"...; thence proceeding <BNG> for a distance of <DST>..."

When LEGALEASE encounters this particular course and inserts this phrase into the description, the variable **<BNG>** is replaced by the actual bearing and the **<DST>** variable is replaced by the actual distance.

E RULES YOU MUST FOLLOW

1. When you use a variable in a phrase, you must place the variable between "Less Than" and "Greater Than" brackets. For example **<DST>**. If you don't, LEGALEASE won't know that it's a variable!

2. With the exception of the area variable **<ARE>**, all variables must be placed into phrases using the exact notations shown above. The area variable may also be entered as **<AREA>**. Upper case text is not required.

The Variable window also suggests to you which variables might be used in certain phrases. When you press **F2** to open the Edit window, certain variables in the Variable window will be dimmed, strongly suggesting to you that you do not use them. You can of course, but your final description may not accurately reflect your intentions.

Certain Phrases Require Certain Variables Certain phrases must have certain variables present in order for LEGALEASE to function. LEGALEASE knows what phrases require what variables and it will refuse to let you enter a phrase lacking the proper minimum information. The phrases and their required variables are listed on the next page. On all references to **any type of curves**, you must have at least one of the following combinations:

Central Angle <CA> & Arc Distance <ARC>; Central Angle <CA> & Radius <RAD>; Radius <RAD> & Arc Distance <ARC>.

On all references to **non-tangent curves**, you must also have at least one of the following combinations:

Chord Bearing <CB> & Direction of Concavity <CON>; Chord Bearing <CB> & Curving Left or Right <CLR>; Center Point Bearing <CPB> & Direction of Travel <DIR>; Center Point Bearing <CPB> & Curving Left or Right <CLR>.

On all references to **tangent curves**, you must also have at least one of the following combinations:

Chord Bearing <CB> & Direction of Concavity <CON>; Chord Bearing <CB> & Curving Left or Right <CLR>; Center Point Bearing <CPB> & Direction of Travel <DIR>; Center Point Bearing <CPB> & Curving Left or Right <CLR>; Direction of Travel <DIR> & Direction of Concavity <CON>; Direction of Travel <DIR> & Curving Left or Right <CLR>.

On all references to **continuing along the same curve**, you must have at least one of the following combinations:

Arc Distance <ARC> & Direction of Travel <DIR>; Arc Distance <ARC> & Curving Left or Right <CLR>;

On all references to **any type of line**, you must have the following information:

Distance <DST> & Bearing (or azimuth) <BNG>.

On all references to **continuing along the same line**, you must have at least the following information:

Distance <DST>.

Important info about obtuse curves

1. When LEGALEASE encounters an obtuse curve (delta angle greater than 180 degrees), it will issue a "caution" message along with information about the curve and the computed curve direction. You can accept the computed curve direction by pressing Fine, or you can simply type in the direction you wish to use.

2. If you are running LEGALEASE in seamless mode with "Sight" Survey, when an Obtuse Curve is encountered, your system may appear to lock up. Actually, your system is just fine, all you need to do is press encountered or double click on the LGLEASE icon and answer the Obtuse Curve prompt. You may or may not need to close the LGLEASE window when the program has finished running.

When LEGALEASE encounters an obtuse curve (delta angle greater than 180 degrees), it will issue a "caution" message along with information about the curve and the computed curve direction. You can accept the computed curve direction by pressing *enter*, or you can simply type in the direction you wish to use.

A Word About The Point Name Variable <NME> Well actually two words... *Use Caution!* The point name variable can be a tricky one. You have to remember what point name is actually going to be in there, which is not always going to be easy. Generally speaking, the point name variable will hold the name of the last accessed point, unless that point was an arc center point.

For example, when you start at a point, the <NME> variable holds that point's name. After LEGALEASE has digested the next leg, say a bearing and distance call, the <NME> variable now holds the name of the upcoming point. But suppose the next leg is a curve? In that case, the <NME> variable will hold the name of the curve ending point.

If LEGALEASE cannot find specified point names in the legal data file, your description will contain the message ***** NO POINT NAME ON FILE ***** in place of any name not found. When your description is loaded into the edit window you can replace these messages with the actual point names or desired descriptions. The ***** NO POINT NAME ON FILE ***** message will also appear when you have created your legal file in Survey 4.0 with the **Print Point Names** option set to **OFF**. To avoid this, be sure to set **Print Point Names** to **ON** before you begin the **Legal File** routine in Survey 4.0. This will not be a concern when using "Sight" Survey, as that program automatically sets the **Print Point Descriptions** setting to **ON** before writing the legal file.

A Word About Spaces And Punctuation

Generally, LEGALEASE doesn't care about your spacing and punctuation, but you do need to know what it expects from you. As you look at default phrases, notice that unless the phrase starts with some form of punctuation, such as a semi-colon or comma, it always starts with a space. Why? As LEGALEASE inserts phrases into your description, each phrase is obviously added to the previous text in memory. LEGALEASE expects to add each phrase immediately, without having to determine if a space is needed. Therefore, it is up to you to provide the correct initial character, whether it be a space or some punctuation mark. Unless a phrase starts a sentence, it should probably begin with either a space or a semi-colon.

And what about ending spaces? Well, you don't need to worry about them. They are not needed, and if LEGALEASE finds them lurking around, it clips them off before the phrase is added to the file.

EEDITING HINT

You can insert a hard carriage return (to begin a new paragraph) into your phrases. To do this, bring the phrase you want to edit into the phrase editing window and position the cursor at the location you want to insert a carriage return. Press Shift 6 to insert a caret character ^. (Do not use the numeric pad 6).

You will not actually see a carriage return in the phrase, other than its location being marked by a ^. However, when your descriptions are processed, a hard carriage return and a blank line will replace the ^ character. This can be used to format your phrases in such a way that each "thence" call of the description will start a new paragraph.

3.12 USING THE BUILT-IN LEGALEASE EDITOR

The LEGALEASE editor is a simple text processor that is included with LEGALEASE as a utility for viewing and editing your legal descriptions. The editor has a maximum capacity of 64K, or approximately 1500 lines of text. Only LEGALEASE legal description files can be loaded into the editor.

Upon accessing the **< 8 > Review & Edit a Description** item from the Main Menu and entering a valid file name, the LEGAL-EASE built-in editor will appear on the screen as shown in Figure 3-9 on page 28. The edit window opens (almost) full-screen, unless you are running in demo mode, in which case it would only display 5 lines of text at a time. It features on-line help (available by pressing [F1]), full mouse support, word-wrap, screen scrolling, and block operations to insert, delete and copy text. All of the standard editing keys are supported.

The name of the file that you are editing is displayed above the edit window. The cursor's row and column location is displayed in the lower left of the edit window and a flashing underscore (_) visually shows that position in the file. The cursor is moved around in the file using standard cursor movement keys, explained later in this section. When the cursor destination is outside the current edit window, the file will be scrolled to keep the cursor visible.

IMPORTANT

If you attempt to load a file into the LEGALEASE editor that is too large for it to handle, you will receive a message telling you that the file is too large to load. If this happens, your description will still be created, but you will just need to load it into another word processor or text editor in order to view, edit or print the file.

Moving the Cursor and Scrolling the File

The following tables list the cursor movement and file scrolling commands:

To move cursor to:

Line above current line Line below current line Character to left

Press:	
Î	
Ŧ	
F	

Character to right	→
First character in current line	Home
Last character in current line	End
First character in file	Ctrl Page Up
Last character in file	Ctrl Page Dn
First line of edit window	Ctrl Home
Last line of edit window	Ctrl End
First character of previous word	Ctrl 🗲
First character of next word	Ctrl →

To scroll text:

Up one window full Down one window full To the beginning of file To the end of file Press: Page Up Page Dn Ctrl Page Up Ctrl Page Dn

The following table lists the common tasks for entering and deleting text:

<u>To:</u> Enter text Insert text

Type over existing text

Copy text to the clipboard Copy text from the clipboard Delete text to left of the cursor Delete text at the cursor position Delete a block of text Delete the current line Insert a new blank line Cancel all editing & start over Insert a carriage return at end of line

Do this: Type the text

Place cursor at insert point and type the text to be inserted Place cursor over the first character to be replaced, press Insert, type the new text, press Insert again to cancel the overtype mode Press Shift Insert Press Bk Spc Press Delete Mark block, press Delete Press Ctrl Y Press Ctrl N Press Esc then N N Place cursor at end of the line, press -Enter -Enter

Insert, OverType, Copy and Delete The **Shift** key combined with any of the cursor movement keys will

allow you to mark blocks of text. Marked blocks of selected text will appear *highlighted* on your monitor. To select text, place the cursor at the beginning or end of the text you want to select and press the Shift key. If the text that you want to highlight is to the right of the cursor, press the \square key while continuing to hold down the Shift key. Likewise, if the text is to the left of the cursor, press the 🖻 key while holding down the Shift key. Refer to the following table for additional commands for selecting text. To select text: Press: To the left of the cursor Shift 🔶 To the right of the cursor Shift → To the beginning of the line Shift Home To the end of the line Shift End To the beginning of the file Shift Ctrl Page Up To the end of the file Shift Ctrl Page Dn In a column format Shift → then Shift \downarrow until the block is selected. Several full lines at once Shift \downarrow until the last line is selected.

Marking Blocks

Regardless of which marking mode you use, the block will be copied to the clipboard as soon as any non-marking key has been pressed. (A non-marking key is any key that isn't used in any of the processes to mark or select text. For example, *enter* is a nonmarking key.) If either *Delete* or *Shift Delete* is pressed, the block will first be copied to the clipboard and then deleted from the file. To paste the block from the clipboard into the file, place the cursor where you want the text located and press *Shift 1*. *Please note that the "clipboard" used by the LEGALEASE editor is <u>not</u> the <i>Windows clipboard. Text placed on this LEGALEASE (DOSbased) clipboard can only be accessed by the LEGALEASE editor.*

Mousing Around If you have a mouse, you may use it to select and scroll text. To scroll text to the left or right in the edit window, click the left mouse button on the scroll bar at the bottom of the screen. To scroll text up or down in the edit window, click the left mouse but-

ton on the scroll bar at right edge of the edit window. Or, press and hold the left button on the arrow icon in either of the scroll bars to move the desired direction. (The arrow icons are found at the top and bottom of the right scroll bar and at the far left and right of the bottom scroll bar.)

To select text in a column format, simply press and hold the left mouse button while moving the mouse first to the right and then downward. To select full lines of text all at once, press and hold the left mouse button while moving the mouse downward first.

Saving Your Changes When you have finished viewing or editing a file, simply press to exit the editor. If you have made any changes to the file, you will be given an option to save them.

3.13 USING LEGALEASE WITH "SIGHT" SURVEY

When working within "Sight" Survey, you can run LEGALEASE completely in the background using the **Process a LegalEase** File (PL) routine.

When running in this automatic/seamless mode, your description will be processed "in the background" without the LEGALEASE screens even being displayed on your monitor. When the description has been written, your normal word processor will pop-up on top of the "Sight" Survey screen and your description will be loaded for you to review, edit or format to your preference. If your word processor is already running when "Sight" Survey issues the command to start your word processor and load the legal file, you may end up with two instances of your word processor loaded into Windows. This may or may not occur, depending upon which word processor you use.

"Sight" Survey uses the **LEEditor=** setting in the **COGO.INI** file (located in "Sight" Survey's **Program** sub-directory) to determine which word processor to load. If you wish to change the word processor, simply edit this setting in the **COGO.INI** file and it will take effect the next time you run LEGALEASE. If you prefer to not load the description files into a word processor, simply edit this line to say **LEEditor=FALSE**.

	NOTE Before you attempt to run LEGALEASE in "automatic" mode, you must first run LEGALEASE the "regular" way, using the Legal- Ease Processor (LE) routine to setup LEGALEASE's configura- tion settings, custom phrases and captions to your preferences.
Captions	When running LEGALEASE in automatic mode, if you have as- signed a caption to Caption 1 , it will be added to the beginning of every description. Because you will be using your own word processor, it is best for you to save your captions and certificates as word processing files, and then merge them into the description once it has been loaded into your word processor. (You would normally use your word processor's Copy and Paste functions to do this.)
Lock-ups	Even though you don't actually see the LEGALEASE program when you are running in automatic mode, it is still running in the back- ground as a reduced icon. If your computer appears to lock-up when running in automatic mode, simply press Fine (once) or double click on the LGLEASE icon to display the LEGALEASE screen. The program may be prompting you for the curve direction of an obtuse curve, or an error condition may exist. In addition, if you are running Windows in Standard mode (WIN /S), you will need to press Fine (once) or double click the icon to give Windows the "jump start" it needs to switch programs. You may or may not need to manually close the LGLEASE window afterwards.
	The description file output <i>(filename.DSC)</i> from LEGALEASE can be loaded into the "Sight" Survey Text Output Window using the File [Import] Text menu option.
	The description file output <i>(filename.DSC)</i> from LEGALEASE can also be loaded into the "Sight" Survey Drawing Window using the Draw Supplemental ASCII Text File menu option.

So, are you ready to try your first description? Yes?

Then turn the page!

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Section 4 A Sample Session Using Survey 4.0

If you are using "Sight" Survey for Windows as your COGO program, please skip Section 4 and go directly to Section 5 A Sample Session Using "Sight" Survey.

4.01 IN SURVEY 4.0 OR SURVEY LITE

The LEGALEASE program disk contains a Survey 4.0 coordinate data file named *Sample.Dat*, along with corresponding files *Sample.Job* and *Sample.Fig*. If you wish, you may copy those files to your hard disk (*into your Survey 4.0 data directory*), or you can run this example problem from the floppy disk, although it will run somewhat slower.

We will assume that you are running the job from floppy drive A:, no directory. If your setup is different, make the appropriate drive and directory substitutions when you enter the file names.

Start Survey 4.0 and load the job file *A:SAMPLE*. The data file contains 21 points, numbered from 1 to 21. The figure file contains the actual tract (points 3 through 21) as **ODD LOT**, named for its improbable shape as shown below.



Survey 4.0 View Screen of SAMPLE - ODD LOT: Figure 4-1

ESURVEY 4.0 CONFIGURATION

This example requires the following Survey 4.0 configuration settings in order for your legal description to match this example:

	Option	Required Setting
	Angular Output	Bearings
	Angular Units	Degrees
	Area Units	Acres & Square Feet
	Printed Precision - Area	4
	Printed Precision - Bearings	0
	Printed Precision - Distances	2
	Print Point Names	On
Sumary 4.0		
Survey 4.0: Select Routine		
Select Routine	Type LF to start the Legal File routin	ie. This is the routine used
	to write a legal description data file.	
Legal Description Interface	Type SAMPLE <i>—Enter</i> to set the name o	f the output file to Sample .
Enter a LEGALEASE filename	Do not add a file name extension.	1 F
Start at	Press 1 <i>et al.</i> to set the starting point a	s point 1.
In the second		
Inverse from 1 to	Type - 3 <i>Enter</i> to inverse through point	2 and on to point 3.
Inverse from 3 to	Type ST <i>—</i> Enter to set the True Point of	Beginning.
	51	
Start at	Press 3 Enter to set point 3 as the True	Point of Beginning.
Calant Davidina		
Select Routine	Type IF to select the Inverse Figure	
	Survey Lite, instead of Survey 4.0, typ	
	routine. Then enter the point string: 4	
	12*13,14,15*16,17*18,19*20),21,3AR)
Inverse Figure	Type ODD LOT -Enter. After the area i	s printed the legal data file is
	automatically closed.	s prince the legal data file is
	automatically crosed.	
Select Routine	Type LE to select the LEGALEASE rou	ıtine

4.02 IN LEGALEASE

LegalTass Description Processor S/N 931201-0 WDIN RAW International Systems C = 2 process mode Solar Systems C = 3 configure LegalTass Solar Systems C = 5 configure LegalTass Solar Systems	-1616 <pre> <fid: ouit<="" th=""></fid:></pre>

The LEGALEASE program has now been loaded and you will see either the **Configuration Menu**, or the **Main Menu**. If you are at the **Main Menu**, press 2 — to go to the **Configuration Menu**. Verify that the choices match those shown in Figure 4-2.

Bist: Format (Erimary);	stubty Seven and 65/100 feet
Birsctions - Continat Presision - Distance Presision - Brea (P) Presision - Brea (P)	A method block
Units - Grea (Friendwry); Units - Brea (Feriendwry); Units - Bistance; Tewt Case; Output Case; Word Wrag OPCOFF;	addorfs Feet Fact Dest Dest Dest Dest Dest Dest Dest Des

The LEGALEASE Configuration Menu: Figure 4-2

After verifying your configuration, press **Esc** to return to the **Main Menu**, then press **1 ...** to select the **Process a Job** option. If this is the first time you have run LEGALEASE, you may receive the message:

No phrases have been found or loaded. You must configure phrases before you can process a description.

In a moment, you will return to the **Main Menu**. To install the default phrases, access each menu and then exit it. This is done very quickly by pressing: 3 "Enter Esc, 4 "Enter Esc, 5 "Enter Esc, 6 "Enter Esc, 7 "Enter Esc. You will not need to do this again. Now, back at the **Main Menu**, press 1 "Enter to **Process a Job**.

In the **Process File** window, you should see the data path displayed. Type the name **SAMPLE.LGL** and press <u>rener</u> to confirm this file as the incoming legal data file. When you do, the **Description File** window will open showing a default file name of (data path) **SAMPLE.DSC**. Press <u>rener</u> to confirm this name.

Upon the successful entry of your file names you will briefly see a message in the **Function Box** reading:



Scanning for Point of Commencement and P.O.B.



iditing	C:\SIMPLCTY\S	URVEYS\LGLTEST.DS	c		
Commer Range nine c East), degree Hest), BEGINM second (500.0	cing at the N 50 West of th Jegrees thirty , a distance o s twenty thre , a distance o (ING:: thence is West (South Mg ⁺) to the po	2 Bit State	f Section 35. 1 Meridians: the seconds East (cet (700.00') to et (500.00') to s twenty three , a distance of of a tangent cu	ownship 152 M ncc South 89° 36' thence South 30' (South 8° 23 the POINT OF minutes fifty five hundred rve, concave	orth, 1 1ty 199" 299" 51" one feet to the
centra 00"): thirts twents	il angle of ei thence southw nine and 63/ three minute	ghty degrees zero westerly along sai 180 feet (139.63 is fifty one secon windred feet (108.	minutes zero s d curve, a dist); thence South ds West (South	econds (80° 0 ance of one h eighty degree 80° 23′ 51° W	andred ss sst),

after which the **Caption Menu** will appear, *because we have not yet activated any caption.* For this example, we have not assigned any captions, so we won't activate one. You may often find this to be the case, and you can always manually add any caption in the **Edit** window once your description is displayed. Press **Esc** to exit this menu.

Now look back at your monitor. If your data was on the hard drive, your description should already be waiting for you in the **Edit Window**. If your data was on a floppy, your description should already be waiting for you in the **Edit Window** by the time you finish reading this sentence.

All that remains is to edit the file. If you want to add a caption, place the cursor at the beginning of line one and just start typing. After you finish your caption, add an extra line space by pressing <u>-Enter</u>. For this example, we will not add a caption, but we will expand on the name of the **Commencing Point**.

Using your mouse or arrow keys, place the cursor on the W in NW in the first line of the description. Press Delete and type orthwest. Now move the cursor to the - after the **36**. Press Delete and type , Township 152 North, Range 50 West of the Fifth Principal Meridian. Now press Delete six times until the semi-colon is right behind the word Meridian. That's it! We're done! Press Esc to quit.

Save the Description? (Yes/No) Print the Description? (Yes/No) These final two responses are up to you, but to save you some time, we have reproduced the final description in Section 5.04 beginning on page 56. After you answer these questions you will be returned to the **Main Menu**. Return to **Survey 4.0** by pressing **Esc**.



Section 5 A Sample Session Using "Sight" Survey

If you are using Survey 4.0 as your COGO program, please go back to Section 4 *A* Sample Session Using Survey 4.0.

5.01 IN "SIGHT" SURVEY

If you elected to install the **Sample Files** during your "Sight" Survey installation, you will have two sample data files in the "Sight" Survey data directory. These two files are named *LE-Sample.Zak* and *LESample.Drg*. The ("Sight" Survey) installation may also have placed a special *CustInfo.Dta* file into the "Sight" Survey *Program* directory. This file contains the setup information for your **User Customizable Toolbar** (the vertical toolbar at the left of the **COGO Entry Window**). If the bottom item on the toolbar does not show as **LF** then you do not have the special *CustInfo.Dta* file. The macro commands needed to manually assign this button are shown in Section 5.03 on page 50.

If for some reason you did not install the **Sample Files** when you installed "Sight" Survey, you will need to re-run "Sight" Survey's **Setup** program and install them before you can proceed with this example. (In Windows 3.1, run the **Setup** program from the **Program Manager** by clicking on the **"Sight" Survey Setup** icon in the **Simplicity Systems** group. In Windows 95, run the **Setup** program from the **Start** menu by selecting the **Programs** folder, then the **Simplicity Systems** group folder, then selecting the **"Sight" Survey Setup** icon.)

Start "Sight" Survey and open the file *LESample.Zak*. This file contains 21 points, numbered from 1 to 21. After loading the file, your display should appear similar to the screen shown in Figure 5-1 on the next page:



"Sight" Survey screen after loading LESAMPLE.ZAK file: Figure 5-1

First, you will need to configure "Sight" Survey for this example. Type **CM** to display the **Configuration Menu**. Check your configuration settings against those listed below. Make any changes as necessary. (If you need help making these changes, please refer to the **Configuration** section in your "Sight" Survey manual.)

I "SIGHT" SURVEY CONFIGURATION

This example requires the following "Sight" Survey configuration settings in order for your legal description to match this example:

Option	Required Setting
<u>Text Output: Printed Precision - Area</u>	4
<u>Text Output: Printed Precision - Bearings</u>	s 0
<u>Text Output: Printed Precision</u> - Distance	es 2
<u>Text Output: Print Point Descriptions</u>	On
<u>G</u> eneral: Area <u>U</u> nits A	Cres & Square Feet
<u>A</u> ngle Setup: Angular Units	D <u>e</u> grees
<u>A</u> ngle Setup: Angle Output	<u>B</u> earings

Configuration Menu: Af

After making any necessary changes to your "Sight" Survey configuration, press *Enter*, or click on the *LK* button to save the changes and return to the main "Sight" Survey screen.

Traverse: From Point

Traverse: From Point

Save As: File Name: Type LF *Enter* (or Alt M, G W) to start the <u>Write a Legal File</u> routine. This routine is used to write a legal description data file.

Press **Ener** to accept the default file name of **LESample.LGL**. This name becomes the output file name for the data inversed by the **Write a Legal File** routine. The name will also be given to your description file when it is processed by the LEGALEASE program. When entering a name, you do not need to specify a file name extension as "Sight" Survey will automatically place a **.LGL** extension on the file name. If you do enter an extension, "Sight" Survey will delete your extension and use **.LGL** anyway.

EREMEMBER

A File Name cannot be longer than 8 characters. If you need additional help entering the file name, please refer to The File Menu - Saving Files section of your "Sight" Survey manual.

- Save As		
	G:\ZAK\LESAMPLE.LGL This file already exists.	
•	Replace existing file?	
[Yes	

If this example has been previously run, you will receive a message telling you that the LESample.LGL file already exists. Either click on $\underline{\vee}$ to overwrite the existing file, or click on $\underline{\vee}$ and type in a different file name for your legal file.

If the **File Name** defaults to ***.lgl** instead of **LESample.LGL**, it means that you have not loaded the **LESample.Zak** COGO file. You must load that file before you can proceed with this example.

The command string for inversing around the sample file's odd shaped lot has been assigned to the last button on the **User Customizable Toolbar**. This toolbar is on the left of the **COGO Entry Window**, as shown in Figure 5-1 on page 46.)

If your toolbar doesn't have **LF** on the last button, please skip to *Section 5.03 What Really Happens* and either assign the appropriate commands to a toolbar button, or manually enter the inverse routines as shown in that section.

Start At Point: Point

Click on the **LF** button at the bottom of the **User Customizable Toolbar**. "Sight" Survey will read the commands associated with that button and automatically inverse around the figure to create the legal file. When the legal file has been created, "Sight" Survey will display the following message:

	"Sight" Survey		
0	Your legal file has been written! Type LE to go to the LegalEase editor, or you can automatically process your file now. Would you like to automatically process your file now?		
	<u>Y</u> es <u>N</u> o		

Since this is probably your first session with LEGALEASE, you will need to configure the program. Click on the button or press Art N. However, keep in mind that once LEGALEASE has been configured to your liking, you will simply press with a this prompt to automatically process your legal file and load the description directly into your word processor. *It's that simple!*

Select Routine

5.02 IN LEGALEASE

Logal Face Description Processor - S/N 938201-6 • WOLN MERU • WOLN MERU • 2 > Configure 1 englishte • 2 > Configure 1 englishte • 2 > Configure 1 englishte • 2 > Roview 8 Edit Concerning Phrases • 6 > Roview 8 Edit Concerning Phrases • 6 > Roview 8 Edit Concerning Phrases • 8 > Roview 8 Edit Concerning Phrases • 8 > Roview 8 Edit I concerning Phrases • 8 > Roview 8 Edit I concerning Phrases • 8 > Roview 8 Edit I concerning Phrases • 8 > Roview 8 Edit I concerning Phrases • 8 > Roview 8 Edit I concerning Phrases • 8 > Roview 8 Edit I concerning Phrases • 8 > Roview 8 Edit I concerning Phrases	-1616 <f1> Help <f10> Quit FUNCTION Processes a LegalFase data file into a legal description.</f10></f1>

The LEGALEASE program has now been loaded and you will see either the **Configuration Menu**, or the **Main Menu**.

Type **LE** to select the **LEGALEASE** routine.

If you are at the **Main Menu**, press 2 - Enter to go to the **Configu**ration Menu. Verify that your choices match those shown in Figure 5-2 on the next page.

After verifying your configuration, press **Esc** to return to the **Main Menu**, then press **1 ..Entry** to select the **Process a Job** option. If this is the first time you have run LEGALEASE, you may receive the message:

No phrases have been found or loaded. You must configure phrases before you can process a description.

The LEGALEASE Configuration Menu: Figure 5-2

In a moment, you will return to the **Main Menu**. To install the default phrases, if necessary, access each menu and then exit it. This is done very quickly by pressing: 3 "Enter Esc, 4 "Enter Esc, 5 "Enter Esc, 6 "Enter Esc, 7 "Enter Esc. You will not need to do this again. Now, back at the **Main Menu**, press 1 "Enter to **Process a** Job.

In the **Process File** window, you should see the data path and **LESAMPLE.LGL** file name displayed. If both the data path and file name are shown, simply press *-Enter* to confirm this file as the incoming legal data.

If the file name is not shown, type in the name **LESAMPLE.LGL** and press <u>Fine</u>. The **Description File** window will open showing a default file name of (data path) **LESAMPLE.DSC**. Press <u>Fine</u> to confirm this name.

Upon the successful entry of your file names you will briefly see a message in the **Function Box** reading:

Scanning for Point of Commencement and P.O.B.



after which the **Caption Menu** will appear, *because we have not yet activated any caption*. For this example, we have not assigned any captions, so we won't activate one. You may often find this to be the case, and you can always manually add any caption in the **Edit Window** once your description is displayed. Just press **Esc** to exit this menu.

Now look back at your monitor. If your data was on the hard drive, your description should already be waiting for you in the **Edit Window**. If your data was on a floppy, your description





should already be waiting for you in the **Edit Window** by the time you finish reading this sentence.

All that remains is to edit the file. If you want to add a caption, place the cursor at the beginning of line one and just start typing. After you finish your caption, add an extra line space by pressing <u>ender</u>. For this example, we will not add a caption, but we will expand on the name of the **Commencing Point**.

Using your mouse or arrow keys, place the cursor on the W in NW in the first line of the description. Press Delete and type orthwest. Now move the cursor to the - after the 36. Press Delete and type , Township 152 North, Range 50 West of the Fifth Principal Meridian. Now press Delete six times until the semi-colon is right behind the word Meridian.

That's it! We're done! Press **Ess** to exit the LEGALEASE editor.

Save the Description? (Yes/No) Print the Description? (Yes/No)

These final two responses are up to you, but in order to print your description from the LEGALEASE editor within Windows, you must have your printer attached to LPT1. When running inside Windows, it is best to print the description from inside your usual word processor.

To save you some time, we have reproduced the final description in Section 5.03, beginning on page 50. After you answer these questions you will be returned to the **Main Menu**. Return to **"Sight" Survey** by pressing **Esc**.

5.03 WHAT REALLY HAPPENS	When you clicked on the LF button on the User Customizable Toolbar , a series of Inverse and Inverse Curve routines was automatically executed. The macro used to execute the routines is shown below:
Macro Commands	^1 in -3 ST ^3 in 4 ic ^5 6 in 7 ic ^8 9 ic ^10 11 in 12 ic ^13 14 in 15 ic ^16 17 ic ^18 19 ic ^20 21 in 3 AR

If you don't have the **LF** button on your toolbar, you can create your own button following the **Customize Side Tool Bar** instructions in Section 3.03 of your **"Sight" Survey** manual. The above command string should be entered as all one line into the right side of the **Customize Toolbar Window**. (This window appears when you right click on any of the buttons on the **User Customizable Toolbar**. Please refer to your "Sight" Survey documentation for additional information.)

When you create your own legal files using the <u>Write a Legal</u> File (LF) routine, you can either create a macro for your figure or inverse through the points manually. The step-by-step commands for running our **Odd Lot** example file without the toolbar button are shown on the next few pages. (The commands are entered after the legal file name has been accepted.)

RESPONSE / NOTES / ETC.

PROMPT

Start At Point: Point #	Type 1 remains to set the commencing point as point 1.
Inverse: From Point	(1 by default).
To Point	Type - 3 Finer to inverse through point 2 and on to point 3.
Inverse: From Point	(3 by default).
To Point	Type ST to select the Start At routine.

PROMPT	RESPONSE / NOTES / ETC.
Start At Point: Point #	Press Enter to set point 3 as the True Point of Beginning .
Inverse: From Point	(3 by default).
To Point	Type 4 <i>enter</i> to set the next point in the lot.
Inverse: From Point	(4 by default).
To Point	Type IC to select the INVERSE CURVE routine.
Inverse Curve: From Point	(4 by default).
Center Point	Type 5 <i>Enter</i> to set the center point.
To Point	Type 6 Page Dn to set the point number for the end of arc and bypass the last prompt on the screen. (Or type 6 enter enter.)
Inverse Curve: From Point	(6 by default).
Center Point	(5 by default).
To Point	Type IN to select the INVERSE routine.
Inverse: From Point	(6 by default).
To Point	Type 7 <i>Enter</i> to set the next point in the lot.
Inverse: From Point	(7 by default).
To Point	Type IC to select the INVERSE CURVE routine.
Inverse Curve: From Point	(7 by default).
Center Point	Type 8 <i>Enter</i> to set the center point.

PROMPT	RESPONSE / NOTES / ETC.
To Point	Type 9 Page Dn to set the point number for the end of arc and bypass the last prompt on the screen. (Or type 9 -Enter -Enter.)
Inverse Curve:	
From Point	(9 by default).
Center Point	(8 by default).
To Point	Press 1 to access the Center Point prompt.
Center Point	Type 10 Enter to set the center point.
To Point	Type 11 Page D to set the point number for the end of arc and by- pass the last prompt on the screen. (Or type 11 <u>enter</u> .)
Inverse Curve:	
From Point	(11 by default).
Center Point	(10 by default).
To Point	Type IN to select the INVERSE routine.
Inverse:	
From Point	(11 by default).
To Point	Type 12 -Enter to set the next point in the lot.
Inverse:	
From Point	(12 by default).
To Point	Type IC to select the INVERSE CURVE routine.
Inverse Curve:	
From Point	(12 by default).
Center Point	Type 13 Enter to set the center point.
To Point	Type 14 Page Dn to set the point number for the end of arc and by- pass the last prompt on the screen. (Or type 14 <u>enter</u> .)
Inverse Curve:	
From Point	(14 by default).

PROMPT	RESPONSE / NOTES / ETC.
Center Point	(13 by default).
To Point	Type IN to select the INVERSE routine.
Inverse: From Point	(14 by default).
To Point	Type 15 -Enter to set the next point in the lot.
Inverse: From Point	(15 by default).
To Point	Type IC to select the INVERSE CURVE routine.
Inverse Curve: From Point	(15 by default).
Center Point	Type 16
To Point	Type 17 Page D to set the point number for the end of arc and by- pass the last prompt on the screen. (Or type 17 -Enter .)
Inverse Curve: From Point	(17 by default).
Center Point	(16 by default).
To Point	Press 1 to access the Center Point prompt.
Center Point	Type 18 -Enter] to set the center point.
To Point	Type 19 Page Dn to set the point number for the end of arc and by- pass the last prompt on the screen. (Or type 19 - Enter .)
Inverse Curve: From Point	(19 by default).
Center Point	(18 by default).
To Point	Press 1 to access the Center Point prompt.
Center Point	Type 20 - Enter to set the center point.

PROMPT	RESPONSE / NOTES / ETC.
To Point	Type 21 Page D to set the point number for the end of arc and by- pass the last prompt on the screen. (Or type 21 <u>-Enter</u> .)
Inverse Curve: From Point	(21 by default).
Center Point	(20 by default).
To Point	Type IN to select the INVERSE routine.
Inverse: From Point	(21 by default).
To Point	Type 3 Etter to close back to the Point of Beginning .
Inverse: From Point	(3 by default).
To Point	Type AR to print the AREA of the closed lot into the legal file. That's it! "Sight" Survey will display the following message:
	"Sight" Survey
	Your legal file has been written! Type LE to go to the LegalEase editor, or you can automatically process your file now. Would you like to automatically process your file now?

Since this is probably your first session with LEGALEASE, you will need to configure the program. Click on the <u>No</u> button or press <u>Alt</u> N. However, keep in mind that **once LEGALEASE has been configured to your liking**, you will simply press <u>energy</u> at this prompt to automatically process your legal file and load the description directly into your word processor.

Yes

No

It's really that simple!

Select Routine

5.04 THE LEGAL DESCRIPTION

Type **LE** to select the **LEGALEASE** routine and continue this example by following the instructions in Section 5.02 beginning on page 48.

Commencing at the Northwest Corner Section 36, Township 152 North, Range 50 West of the Fifth Principal Meridian; thence South eighty nine degrees thirty six minutes nine seconds East (S 89° 36' 09" E), a distance of seven hundred feet (700.00'); thence South zero degrees twenty three minutes fifty one seconds West (S 0° 23' 51" W), a distance of five hundred feet (500.00') to the POINT OF BEGINNING; thence continuing southerly along said line, a distance of five hundred feet (500.00') to the point of curvature of a tangent curve, concave to the northwest, having a radius of one hundred feet (100.00') and a central angle of eighty degrees zero minutes zero seconds (80° 00' 00"); thence southwesterly along said curve, a distance of one hundred thirty nine and 63/100 feet (139.63'); thence South eighty degrees twenty three minutes fifty one seconds West (S 80° 23' 51" W), a distance of one hundred feet (100.00') to the point of curvature of a tangent curve, concave to the southeast, having a radius of one hundred feet (100.00') and a central angle of ninety degrees zero minutes zero seconds (90° 00' 00"); thence southwesterly along said curve, a distance of one hundred fifty seven and 8/100 feet (157.08') to the point of curvature of a reverse curve, concave to the northwest, having a radius of one hundred twenty five feet (125.00'), a central angle of seventy degrees zero minutes zero seconds (70° 00' 00"), and a chord of one hundred forty three and 39/100 feet (143.39') bearing South twenty five degrees twenty three minutes fifty one seconds West (S 25° 23' 51" W); thence southwesterly along said curve, a distance of one hundred fifty two and 72/100 feet (152.72'); thence North twenty nine degrees thirty six minutes nine seconds West (N 29° 36' 09" W), a distance of three hundred fifty feet (350.00') to the point of curvature of a non-tangent curve, concave to the northeast, having a radius of seventy five feet (75.00'), a central angle of one hundred twenty degrees zero minutes zero seconds (120° 00' 00"), and a chord of one hundred twenty nine and 90/100 feet (129.90') bearing North fifty nine degrees thirty six minutes nine seconds West (N 59° 36' 09" W); thence northwesterly along said curve, a distance of one hundred fifty seven and 8/100 feet (157.08'); thence North zero degrees twenty three minutes fifty one seconds East (N 0° 23' 51" E), a distance of four hundred eighty nine and 36/100 feet (489.36') to the point of curvature of a tangent curve, concave to the southeast, having a radius of three hundred feet (300.00') and a central angle of ninety degrees zero minutes zero seconds (90° 00' 00"); thence

northeasterly along said curve, a distance of four hundred seventy one and 24/100 feet (471.24') to the point of curvature of a compound curve, concave to the southwest, having a radius of one hundred feet (100.00'), a central angle of eighty degrees twenty minutes thirty seconds (80° 20' 30"), and a chord of one hundred twenty nine and 1/100 feet (129.01') bearing South forty nine degrees twenty five minutes fifty four seconds East (S 49° 25' 54" E); thence southeasterly along said curve, a distance of one hundred forty and 22/100 feet (140.22') to the point of curvature of a reverse curve, concave to the northeast, having a radius of one hundred thirty five feet (135.00'), a central angle of eighty nine degrees twenty five minutes thirty five seconds (89° 25' 35"), and a chord of one hundred eighty nine and 96/100 feet (189.96') bearing South fifty three degrees fifty eight minutes twenty seven seconds East (S 53° 58' 27" E); thence southeasterly along said curve, a distance of two hundred ten and 71/100 feet (210.71'); thence South twenty eight degrees fifty eight minutes thirty four seconds East (S 28° 58' 34" E), a distance of one hundred sixteen and 92/100 feet (116.92') to the POINT OF BEGINNING; said described tract containing 515,061.3496 square feet (11.8242 acres), more or less.

5.05 ONE FINAL COMMENT

We're sure you are wondering, Why such a goofy sample file? Well, we realize that you'll probably never have one like it, but we wanted to demonstrate the wide range of conditions, especially curves, that LEGALEASE can handle. This description contains almost everything: tangent and non-tangent curves; reverse curves; compound curves; and even a tangent-compound-reverse curve combination. This page intentionally left blank



6.01 help!

Support Hours

Simplicity Systems, Inc., provides **FREE** (but **not** toll-free) technical support during the software warranty period, provided the user has returned a signed software registration form. Free support is provided with initial purchases of our products; it is not included with revisions or site licenses.

Check the Manual Experience demonstrates that well over 80% of the support calls we receive could be avoided if the caller would first look in the manual. Many long hours have gone into the preparation of this manual in an effort to provide all of the information necessary to the operation of this program. So please check the manual before you call.

Section

Getting Support

6

Technical support is available **ONLY** at the following numbers:

Voice:	1-218-773-7966
Fax:	1-218-773-3849
E-mail:	support@simsystems.com
Web Site:	http://www.simsystems.com

Telephone support hours are 8:00am to 5:00pm (Central time), Monday through Friday, exclusive of holidays. If all support lines are busy when you call for support, you have the option of trying your call again later or leaving a message for a technician to return your call. We will be happy to return the call to your toll-free (800 or 888) number, if you have one. If you do not leave your toll-free number, we will call you back direct, but you will be charged a **\$15 call back fee**. However, if you agree to accept a collect call, you can avoid the call back fee. Please also refer to the **Billing Terms** information in **Section 6.02**.

If at all possible, please be at your computer when you call for support. This way a support technician will be able to step you through the procedure in question, which will save you the frustration of trying to remember our instructions at a later time. It will also be helpful for the technician to know the exact procedural steps you were following when you encountered the problem.

If your question or problem does not require an immediate answer, please write down your problem and mail or fax it to the Simplicity technical support department including printouts, data disks, etc. Include your program serial number, your phone and fax numbers, and the hours/days you may be available. A support technician will solve your problem and provide you with the solution by mail, fax, or telephone.

You are encouraged to become as familiar with the operation of your computer as possible. When helping you, we will often ask you to perform certain functions such as: Copying a disk; Formatting a disk; Checking the contents of a disk or folder; and Copying, Renaming, and Moving files. It is not within the scope of our technical support plans to assist you with, or tutor you on the use of Windows. Therefore, it is to your advantage to be familiar with these commands before you call.

If you are having a problem such as constant input/output (I/O) errors, etc., chances are good that the problem is hardware or media related. Please contact your hardware dealer first.

6.02 SUPPORT PLANS

The subject of charging a fee for technical support is a controversial subject across the software industry. However, when you compare the initial product cost, it appears that many of the companies that do *not* charge for technical support have actually built a prepaid support charge into the price of their software package. If you are like most people, you don't want to pay for something that you may never use.

At Simplicity, we pride ourselves on dependable, practical, and perhaps best of all, *affordable* software solutions. We have not "built-in" a prepaid support charge into the price of our software. You get a great program with well-written documentation and up to 90 days of free support. We do not charge you "up front" for software support that you may never need.

After the initial period of free support, users who feel they will need additional help are encouraged to subscribe to one of our support plans. A technical support order form was enclosed with the shipment of this program. Please refer to this form for prices and updated information on the following support plans.

	REF NOTE
	Customers who do not subscribe to a support plan will be auto- matically transferred to the Basic Service when their free support has expired.
Free Support	Simplicity Systems, Inc., provides FREE (but not toll-free) techni- cal support during the software warranty period, provided the user has returned a signed software registration form. Free support is provided with initial purchases of our products; <i>it is not included</i> <i>with revisions or site licenses</i> .
Call Backs	If all support lines are busy when you call for support, you have the option of trying your call again later or leaving a message for a technician to return your call. We will be happy to return the call to your toll-free (800 or 888) number, if you have one. If you do not leave your toll-free number, we will call you back direct, but you will be charged a \$15 call back fee . However, if you agree to accept a collect call, you can avoid the call back fee.
Billing Terms	We do not maintain an accounts receivable, and as such, we do not normally allow "on receipt" billing terms. If you absolutely do not have or do not wish to use a credit card for support charges, we will invoice your company under <i>Net 10 Days</i> terms (from invoice date) with the addition of a \$10 processing fee. However, if your account is not in good standing, you may be denied future support unless you bring your account up-to-date and place future charges on a credit card.
Basic Support	The Basic Support plan provides technical support at a flat rate of \$45 per incident . You will be charged once for each support incident, regardless of the time required to solve the problem. This is designed for the user who rarely needs support and can use Visa, MasterCard, or American Express for the billing.
One Year Unlimited	The One Year Unlimited plan provides priority technical support for one person for one full year for \$199. A multiple user support plan for one full year is \$279. Any person who calls for technical

support who is not covered under the **One Year Unlimited** plan will be charged the **Basic Support** plan rate, or may be added to the original support plan for \$80.

6.03 UPDATES & UPGRADES

It is Simplicity's policy to regularly maintain and update our software programs. Occasionally, (approximately once each quarter), LEGALEASE may undergo *slight* changes such as minor enhancements, bug fixes, etc. which we refer to as software *revisions* or *updates*.

These changes may or may not result in a change of the internal version number of this program. For example, the first *update/ revision* of LEGALEASE after its initial release will most likely be referred to as LEGALEASE 1.1. The next revision/update would most likely be LEGALEASE 1.2, etc. These changes are available either for a nominal fee or at no charge by subscribing to one of the Unlimited support plans or the Disk Revision Service as explained in Section 6.02.

Much less frequently, this program may undergo *major* changes such as the addition of new routines, etc., which may or may not require the addition of a manual addendum. These changes will always result in the change of the version number. For example, the first *upgrade* of LEGALEASE will most likely be referred to as LEGALEASE 2.0. These changes are available for a fee corresponding to the changes that have been made.

Whether you choose to update and/or upgrade this program is strictly optional. Depending on the changes that have been made during each release, you may choose to purchase every update, or you may choose to "skip" any update and purchase the next one when the changes may be more substantial. Either way, the choice is *yours*.

6.04 returning legalease

 load the un-install routine that will generate the return form. *You also need to call Simplicity at 218-773-7966 for an RMA number.* Follow ALL of the instructions presented in the un-install program. Failure to do so WILL result in the denial of your refund reques