
**ROWKEEPER
WORK
PLANNING
SOFTWARE**

*High-quality
service using
the latest
technology and
the most
qualified
people.*

For over a century, The Davey Tree Expert Company has been inspired by the credo of our company founder, John Davey, "Do It Right or Not at All." This is the philosophy that guides us as we provide high-quality and cost-effective consulting services to our utility customers throughout the U.S. and Canada. We provide our clients with high-quality service using the latest technology and the most qualified people.

Davey Resource Group has developed software to computerize line clearance work planning operations. Many utilities cannot justify complete inventories, yet the need for accurate information still remains. DRG has developed software that will allow utilities to capture information at a detailed level using normal work planning, notification, and scouting functions.

The ROWKeeper system is designed to be as quick as notification, scouting, and pre-planning functions completed on paper, but results in more accurate and efficient data collection and maps output for line clearance crews.

The benefits of implementing ROWKeeper Work Planning software include:

- * Time-saving maps provided to crews improve efficiency of line clearance operations.
- * Focus placed on utility objectives such as tree removal or customer service.
- * Enables vegetation management crews to concentrate on line clearance rather than customer contact and permissions.

Davey Resource Group



CDCS User Information

DAVEY
RESOURCE GROUP
A Division of The Davey Tree Expert Company

Collector Initials: DW

Work Area: Windsor Hills

Basemap: 488448

Sample Login Screen

- * Improved public relations. Customer contacts made by a courteous, well-spoken professional enhances a utility's image and often results in higher levels of success when obtaining permission for removals or other work desired by the utility.
- * Computerizing data that has historically been collected on paper allows much broader and more efficient use of information for management decisions. Davey Resource Group can equip planners with field computers and the capability to develop work packages for vegetation management crews on both distribution and transmission lines.

Following are several descriptions and screen shots that explain the operations of the software.

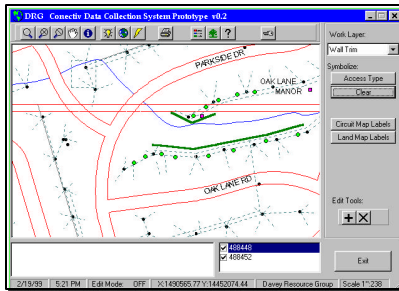
§ LOGIN SCREEN

Notifier enters initials, work area, and associated base maps. Drop-down lists are available for possible entries.

§ WORK SCREEN

In the sample work screen, note that the current work layer is "Wall Trim", as noted in the upper right hand corner. In this project, there are seven possible work layers. Each project/utility is able to define which work layers are required and also the information that is stored for each work layer.

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Sample Work Screen

*Various tool icons
are available
making
ROWKeeper user-
friendly.*

Sample work layers include:

- * Wall Trim
- * Maintenance Trim
- * Danger Trees
- * Removals
- * Brush
- * Wetlands
- * Access Points

The Edit tool, located on the right hand side of the screen, can be used to add information, delete information, and edit information.

Tool icons, located on the top of the screen, can be used to:

- * Zoom in based on point
- * Zoom in 2X
- * Zoom out 1/2X
- * Pan
- * Information display
- * Work layers On/Off
- * Display entire base maps
- * Zoom to current work layer
- * Print
- * Legend
- * About Program
- * Help
- * Change key information

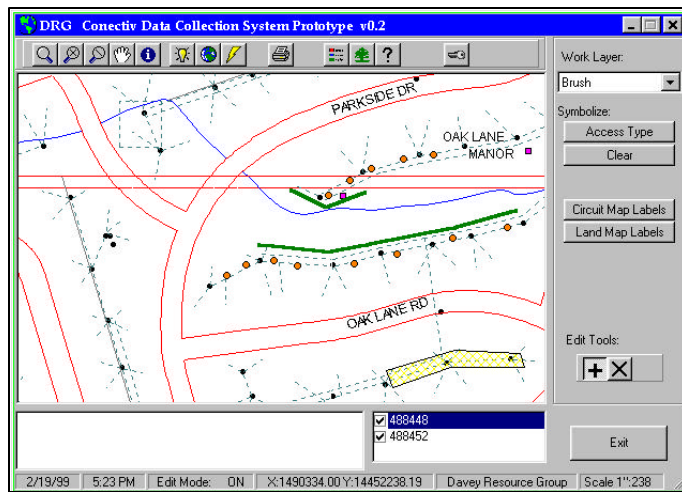
§ DATA ENTRY SCREENS

Each work layer can have its own data entry screen to store data. Sample data entry screens follow for removal, maintenance trim, and brush. Each work layer can be modified to have as many or as few pieces of information as required. This is customized for each individual line clearance operation.

§ LEGEND AND MAP

As base maps which are developed from the data entered into work screens are printed, legends, maps, and tabular data are also printed into a concise package for line clearance crews to complete the work in a time-efficient manner. The following is a sample map.

Sample Data Entry Screens



Sample Map

The information given to the utility manager and crew permits time and administrative cost-saving methods of action.

The next section of this booklet includes a sample work package. This information is automatically generated based on the data compiled in ROWKeeper. This includes some of the information that is given to the utility manager and crew to enable time and administrative cost-saving methods of action.

This work package includes:

- * Circuit Summary
- * Table of Removals
- * Table of Brush Removals
- * Legend Information
- * Sample Maps



*The Circuit
Summary enables
utility managers to
create budgets
and allocate
vegetation
management
resources with
ease.*

ROWKeeper Software

Work Planning

Circuit Summary

Circuit: Sutton Place

Maintenance Trims			
	Number	Hrs/Unit	Hours
Manual Access	153.0	1.25	191.3
Bucket Access	7.0	1.05	7.4
Total	160.0	2.3	198.6

Removals			
	Number	Hrs/Unit	Hours
0-6"	2.0	1.05	2.1
6-12"	14.0	1.55	21.7
12-18"	2.0	1.95	3.9
18-24"			-
Over 24"			-
Total	18.0	4.6	27.7

Brush			
	Number	Hrs/Unit	Hours
Handcut Acres	9.0	1.40	12.6
Trim	-	-	-
Total	9.0	1.4	12.6

Danger Trees			
	Number	Hrs/Unit	Hours
Manual Access	3.0	2.50	7.5
Bucket Access	-	-	-
Total	3.0	2.5	7.5

Wall Trimmings			
	Number	Hrs/Unit	Hours
1 @ 210.5 feet	1.0	1.50	1.5
Total	1.0	1.5	1.5

Total Hours	247.9
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Cost per Hour	\$ 28.55
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Estimated Circuit Cost	\$ 7,078
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ROWKeeper Software

Work Planning

Sutton Place

Removals

ID	NOTES	ACCESS	OWNER	ADDRESS	PERMISSION	TYPE	DBH	INSP	CIRCUIT
151	also 2" stem	Bucket	Lois Folson	103 East Sutton Place	Yes	mulberry	< 6	AL	Sutton Place
152		Bucket	Janna Vandegrift	1805 Oeale Rd	Yes	maple	< 6	AL	Sutton Place
153		Manual	Walters, Richard	2117 Swinnen Dr.	Yes	maple	< 6	AL	Sutton Place
154		Manual	Malcolm Bayinson	2114 Swinnen	Yes	mulberry	< 6	AL	Sutton Place
155		Manual	J. Burton	1111 Sutton Place	Yes	ash	< 6	AL	Sutton Place
156		Manual	J. F. Codjell	1113 Sutton Place	Yes	maple	< 6	AL	Sutton Place
157		Manual	James Walton	11117 E Sutton	Yes	cherry	12 - 18	AL	Sutton Place
158		Manual	James Walton	1117 E Sutton	Yes	sassafrass	< 6	AL	Sutton Place
159		Manual	James Walton	1117 E Sutton	Yes	walnut	< 6	AL	Sutton Place
160		Manual	James Walton	1117 E Sutton	Yes	maple	< 6	AL	Sutton Place
161	loblolly pine growing into wires beside house	Manual	Judy Bloom	112 E. Sutton	Yes	pine	6 - 12	AL	Sutton Place
162	2 Birch Stems	Manual	Judy Bloom	112 E. Sutton	Yes	birch	< 6	AL	Sutton Place
164		Manual	George Palmer	109 E. Sutton St.	Yes	mulberry	< 6	AL	Sutton Place
165		Manual	George Palmer	109 E. Sutton St.	Yes	cherry	< 6	AL	Sutton Place
166		Manual	George Palmer	109 E. Sutton St.	Yes	mulberry	< 6	AL	Sutton Place
167		Manual	George Palmer	109 E. Sutton St.	Yes	cherry	< 6	AL	Sutton Place
168		Manual	George Palmer	109 E. Sutton St.	Yes	maple	< 6	AL	Sutton Place
169		Manual	George Palmer	109 E. Sutton St.	Yes	sassafrass	< 6	AL	Sutton Place

Sample Table of Removals

Detailed removal tables provide utility crews with the means for rapid and efficient removals.

ROWKeeper Software

Work Planning

Sutton Place

Brush Removals

<u>ID</u>	<u>SQUARE FT</u>	<u>NOTES</u>	<u>ACCESS</u>	<u>TREATMENT</u>	<u>INSP</u>	<u>CIRCUIT</u>
70	297.2581		Manual	Hand Cut	AL	Sutton Place
73	46.7349	2-3 Stems	Manual	Hand Cut	AL	Sutton Place
75	42.3569	6-10 stems	Bucket	Hand Cut	AL	Sutton Place
77	27.5138	3-5 stems	Manual	Hand Cut	AL	Sutton Place
78	19.3040	2* mulberry at corner of fence	Manual	Hand Cut	AL	Sutton Place
79	447.8207	9-11 stems	Manual	Hand Cut	AL	Sutton Place
83	73.8838		Manual	Hand Cut	AL	Sutton Place
84	162.1201	4-6 Cherry Stems-only marked stems	Manual	Hand Cut	AL	Sutton Place
85	288.1488		Manual	Hand Cut	AL	Sutton Place

Wall Trimmings

<u>ID</u>	<u>SQUARE FT</u>	<u>NOTES</u>	<u>ACCESS</u>	<u>INSP</u>	<u>CIRCUIT</u>
25	210.4932		Manual	AL	Sutton Place

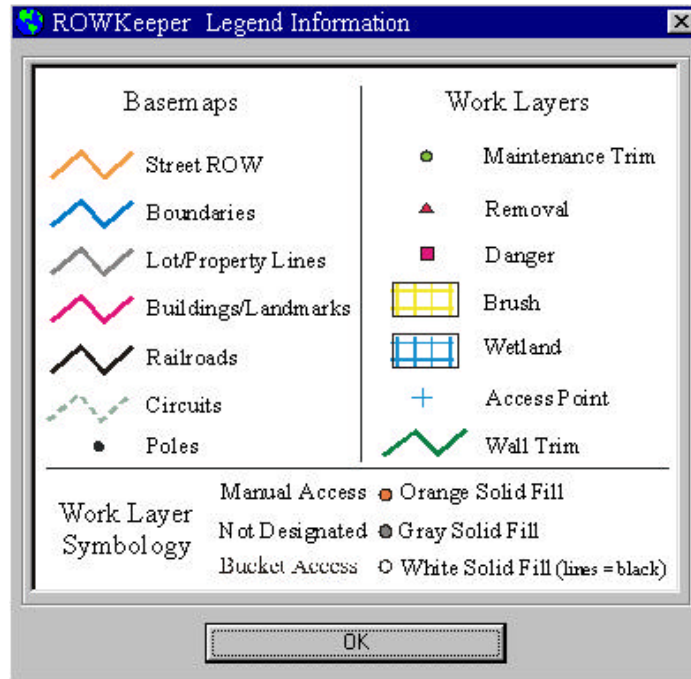
Danger Trees

<u>ID</u>	<u>NOTES</u>	<u>ACCESS</u>	<u>INSP</u>	<u>CIRCUIT</u>
1		Manual	AL	Sutton Place
2		Manual	AL	Sutton Place
3		Manual	AL	Sutton Place

Sample Table of Brush Removals

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Detailed legends
are provided to
allow for simple
interpretation of
maps.



Sample Legend