

LANDRAIN

What is LANDRAIN?

LANDRAIN is a computer program which assists the designer of a "tiled" drainage system to quickly and successfully:

1. Layout the network
2. Bury the network
3. Determine the required pipe grades
4. Size the pipe

All in conformity to the terrain, current technology, accepted ASAE specifications and user preferences.

In addition, LANDRAIN. . .

Outputs maps and charts which are easily read and understood by both clients and construction crews.

LANDRAIN Features you will like:

- ▶ Flexible topographical data input from several different sources (Cogo programs, ASCII files, etc.) utilizing easy to comprehend methods.
- ▶ Powerful and flexible data editing techniques employing EASY-TO-USE TEXT EDITING or GRAPHIC EDITING.
- ▶ Simple field boundary definition... and modification if needed.
- ▶ Very accurate modeling of the ground surface based on triangulation... which you can control using "breaklines".
- ▶ Rapid contour mapping which facilitates the layout of the proposed drainage network....using easy layout procedures for defining the drainage network.
- ▶ Powerful Layout Tools, including "*inflow nodes*" for integrating external flow sources into the pipe flow analysis AND "*fixed nodes*" for forcing the new network to match up with an existing network.

- ▶ Graphic burial procedures (of the network) enabling you to rapidly find, diagnose and remedy any potential depth or slope problems with the preliminary network as proposed. *Powerful assistance is rendered to the user by the unique 2-D, 3-D and Profile Viewing capabilities of LANDRAIN.*
- ▶ Flexible flow calculation and pipe sizing capabilities. Allows multiple "n" factors for different size laterals, separate "n" factor for mains, overdesign capability for mains, single or multiple pipe sizes on laterals, and more!
- ▶ Comprehensive output tables listing all burial and flow constraints, pipe installation details, total network costs, and cost per unit for each pipe size.
- ▶ Flexible output to printers, plotters, and CAD programs. Including 2-D or 3-D maps for surface triangulation information, contour maps, surface grid maps, point maps, and of course a host of options for the drainage network.

Options for the network output include:

1. Node markers, node number, depth, inflow, and the distance from last intersection.
2. Pipes, pipe number, slope, length, and size.

Other Features!

- ▶ Triangulated digital terrain model
- ▶ Breakline capabilities
- ▶ Ability to load and save breakline information from/to ASCII files
- ▶ Full featured coordinate editor
- ▶ Powerful 2-D or 3-D interactive graphics
- ▶ English or metric units
- ▶ Capacity for up to 5400 data points
- ▶ Contour line smoothing
- ▶ Dashed contour lines
- ▶ In-line contour labels
- ▶ User specified decimal places for all types of labels
- ▶ Plotter support for CalComp, Hewlett Packard, and Houston Instruments plotters
- ▶ Interfaces with popular CAD programs
- ▶ Plotter spool files