



**Survey  
Sections**

Play with sections



**ESurveying Softech (India) Pvt. Ltd.**  
Bringing Survey Community Together

## ESurvey Sections Feature List:

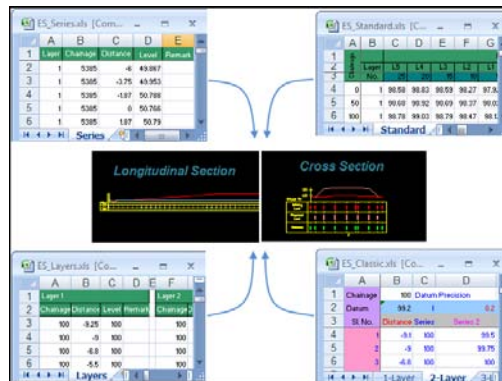
“ESurvey Sections” is a complete Section Creation and Management Solution designed to help engineers, surveyors and designers to create industry standard drawings and to generate instant calculation reports related to Roads / Railway lines / Irrigation Canal / Pipeline design / Sewer Network Project. “ESurvey Sections” comes with two add-ons:

- Topodraw
- Interpolate

### ESurvey Section Module

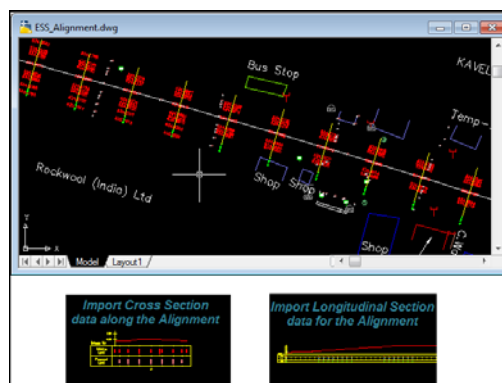
#### Import data from Excel for Generating Cross Section and Longitudinal Section Drawings

The practice of storing Section data in Excel is commonly used. Section data can be managed in different formats with in Excel only. Hence in ESurvey Sections, data can be imported from 4 excel formats for Section Generation.



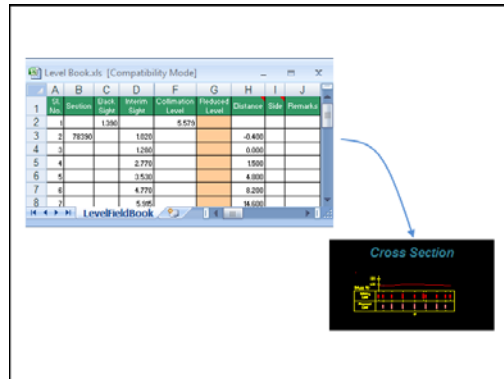
#### Import Alignment data from CAD

The section data in Alignment form in CAD can be directly imported into ESurvey Sections to create cross sections and longitudinal sections.



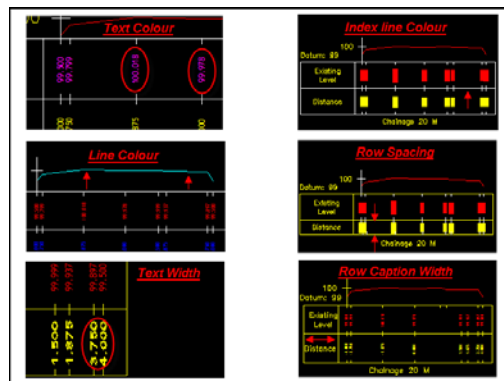
#### Import data from Field Book

Survey for certain projects is done using Field book (Level book). With Collimation Level, Interim Sight and Back Sight, the Reduced Levels are automatically calculated while importing this data to ESurvey Sections for Section generation.



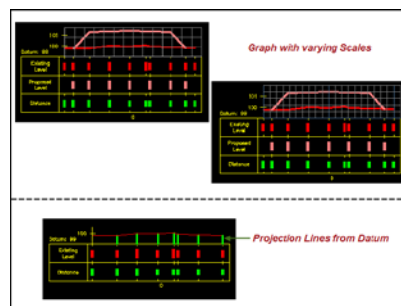
**Change properties like Colour / Height / etc. for all the elements of a section**

ESurvey Sections allows an extensive set of options to change the section properties like the text colour, line colour, text width, index line colour and many more. With so many properties that can be changed, one can present the sections in highly presentable way as per different project requirement.



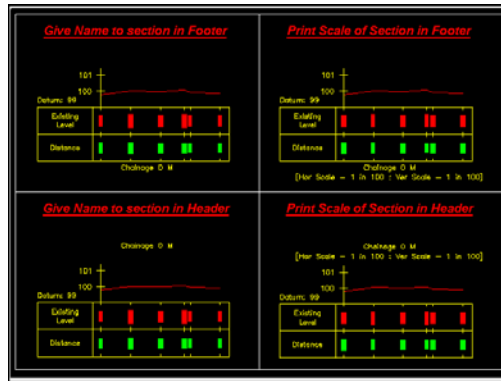
**Print Graph and Projection Lines**

Create Graph lines with specified scale and set different colour for Major and Minor axis. Also, project lines from the section lines to the datum which helps in identifying the elevation on the section line for a particular distance.



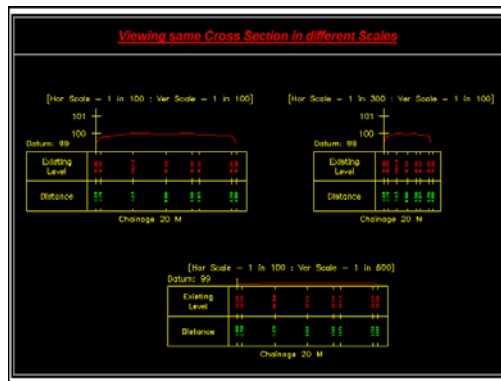
**Print Header / Footer with Scales**

Print chainage numbers along with the prefix and suffix in the header or footer of a section. Also print the horizontal and vertical scale in which the section is being generated.



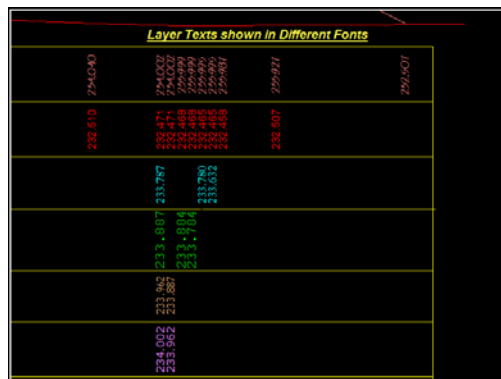
### View Sections in different Horizontal / Vertical Scale

Change horizontal and vertical scale for a section independent of each other for viewing sections and also while printing these sections.



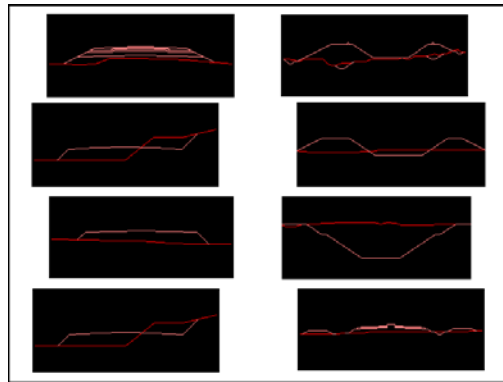
### Font properties for section elements

Change font type for elevation, distance or caption texts in a section.



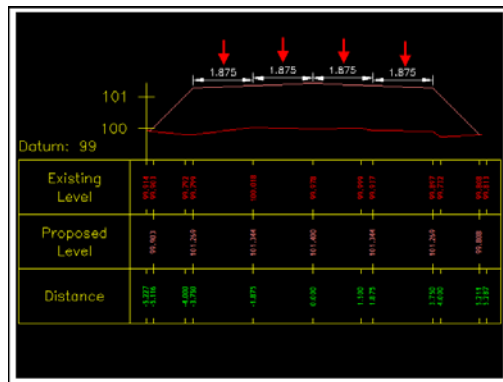
### Design Complicated profiles and shapes for various requirement like irrigation, roads etc.

Designing roads, canals etc. can be done and applied to all the sections. Also, features like Multiple Profiles and Conditional Profiles assist to make complicated profile designs much easier. The Intersect, Restart and Condition profile concepts in ESurvey Sections make the profile design easy and productive.



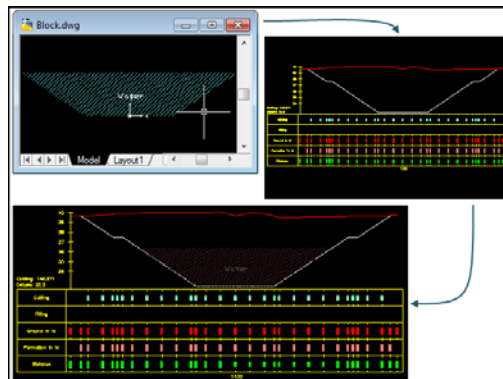
### Dimension Profiles

Profile designed for a project can be dimensioned so that the length of each of the profile entities can be known. Different kinds of dimensioning styles have been provided, which can be used depending on the requirement.



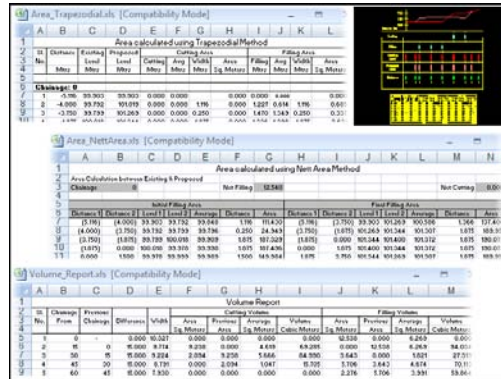
### Inserts CAD blocks

Custom made CAD blocks can be inserted along the profile points. With this exclusive feature, it is possible to insert predefined complicated shapes while generating sections using this feature.

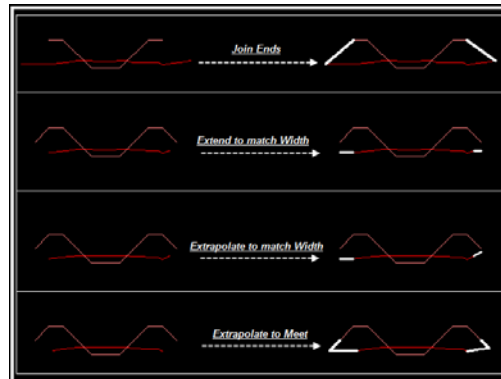


**Generates Area / Volume Reports in Excel and CAD using either of two methods Trapezoidal or Nett Area**

Area calculation or the quantity calculations can be done using two different methods, Trapezoidal or Nett area. These calculations can be exported to excel or CAD for printing.

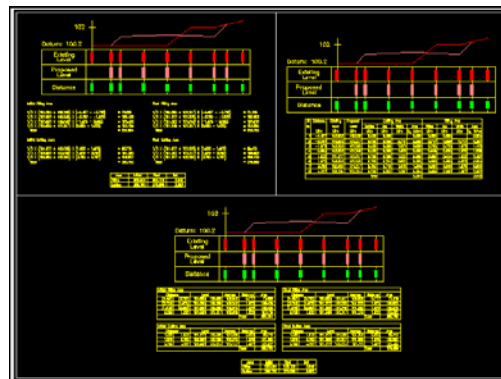


Advanced Area calculation techniques are provided which can be used while calculating the area for a section.



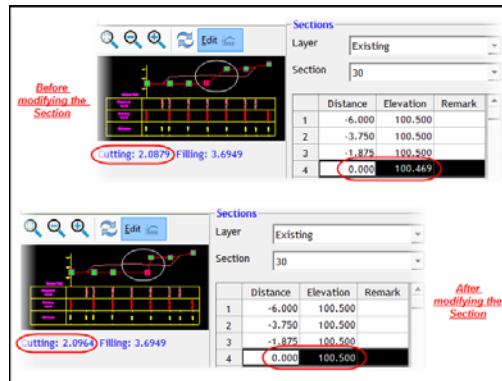
**Optionally print area calculation below the cross section**

It may sometimes be required that the quantity calculation be printed just below the section drawings in CAD. E Sections addresses this requirement and it can be done easily.



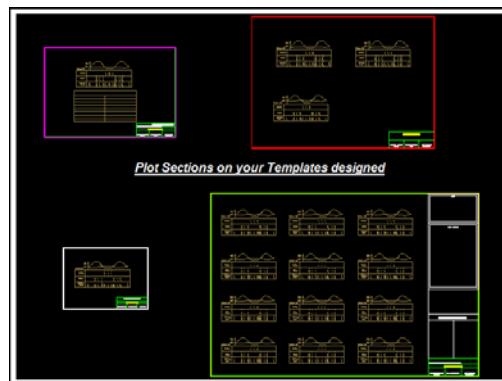
**Modify Sections dynamically to arrive at required area**

Area is calculated for region in-between the layers. With ESurvey Sections, view the area Calculations (Cutting and Filling) just by dragging and modifying it dynamically.



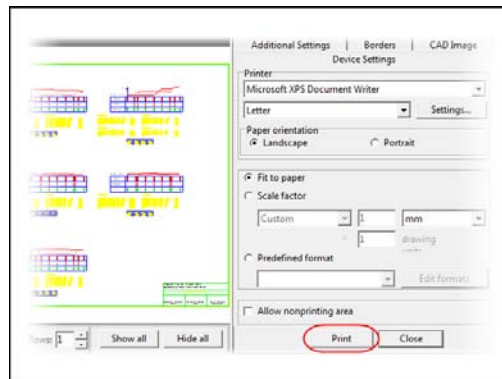
### Plot sections on your own drawing templates and export to CAD package

Drawings are plotted on various sheets featuring the company name and other legends. Once these are made ready, they can be attached as templates. These templates can later be used to plot drawings directly upon them.



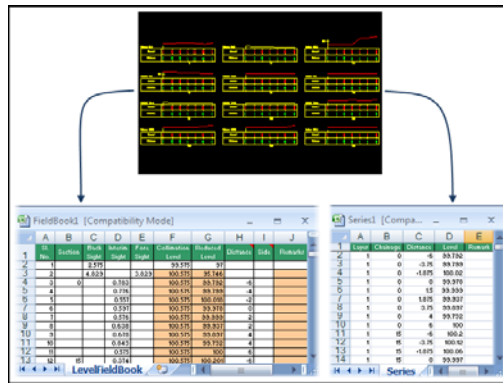
### Alternatively print the sections from within the package

Plot the sections onto the desired paper-size directly from ESurvey Sections. The various plot settings like Paper offset, Top and Left Margins, Drawing frame, Colour Settings, Device settings etc. can be configured before plotting the sections onto paper.



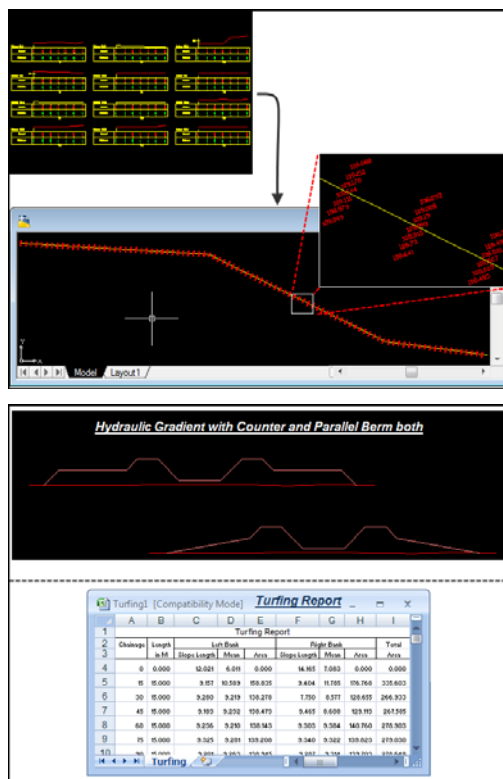
### Export Sections to Excel or Field Book

Export existing section data present in ESurvey Sections back to Excel, thus providing cross compatibility to and from Excel. Also export these section data to Field book (level book).



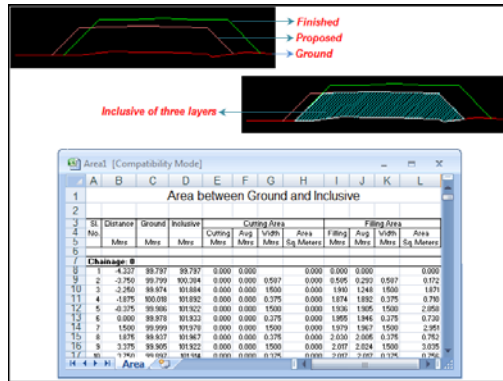
### Data back to CAD along an alignment

Export existing section data present in ESurvey Sections back to CAD in alignment format, thus providing cross compatibility to and from CAD.



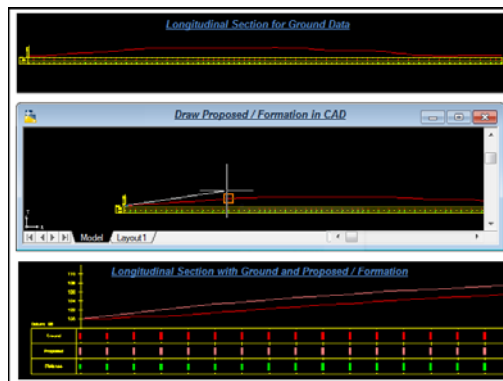
### Inclusive layer

Calculate the inclusive area of three different layers. This feature finds its usage especially while doing railway projects.



### Update Formation

The formation line in any of the projects is very important and while designing it, a lot of factors are to be considered. It is always easy to draw this formation line in CAD. Hence ESurvey Sections allows to import this designed formation line from CAD to ESurvey Sections.

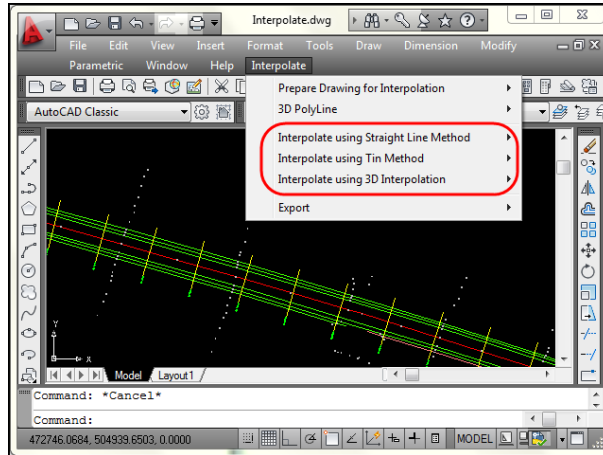


### Interpolate module

Multiple interpolation techniques to choose from

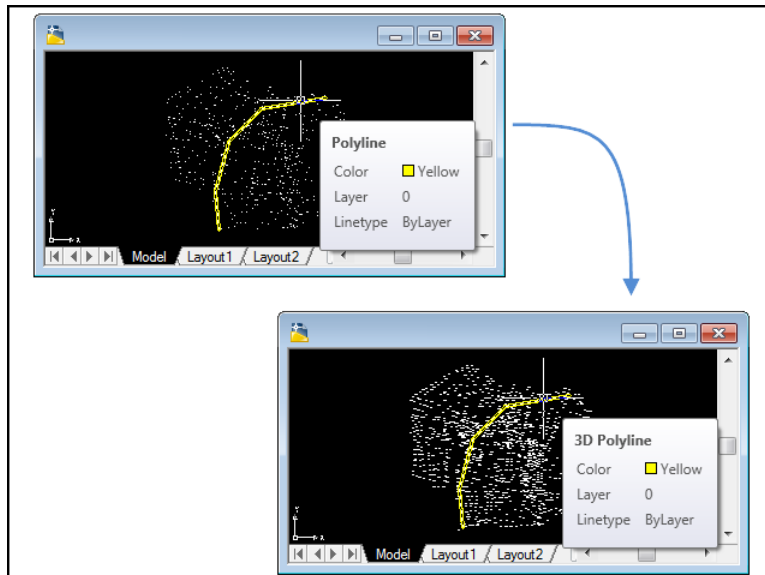
Various techniques are used for interpolation but each technique has its own limitations. To overcome this, multiple interpolation techniques are provided so that, depending on the requirement values can be interpolated.

The three techniques provided are Straight line (weighted average method), TIN (Triangulated Irregular Network) method and 3D interpolation. Using these interpolation methods in combination, the best possible interpolated values can be obtained.



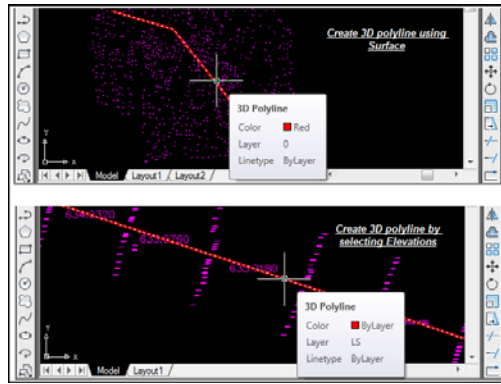
### Create 3D Lines with Elevation Data

3D polylines can also be created by selecting elevation texts or elevated texts such as codes of a topographical map available in drawing.



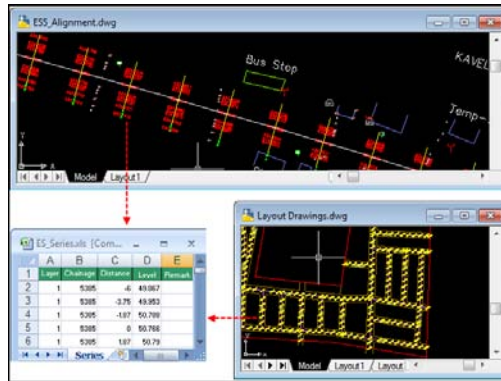
### Convert 2D Polylines to 3D Polyline

If you have to interpolate using 3D interpolation technique, then 3D polylines must be drawn. Using **Interpolate**, one can convert 2D Polylines to 3D Polyline using the Surface Data.



### Exports interpolated cross section and longitudinal section values to Excel

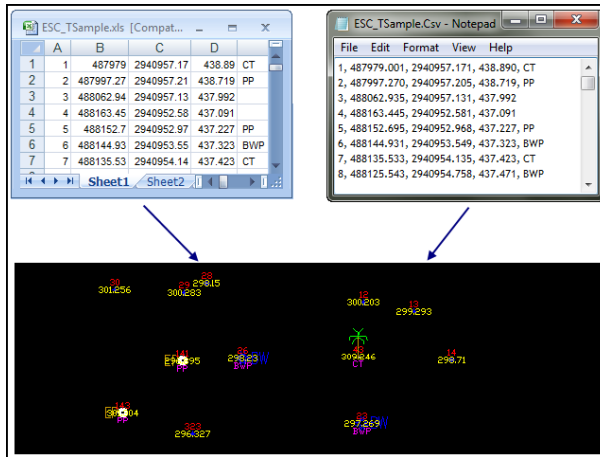
After interpolation you can export the interpolated values to excel or Section generation software.



### TopoDraw module

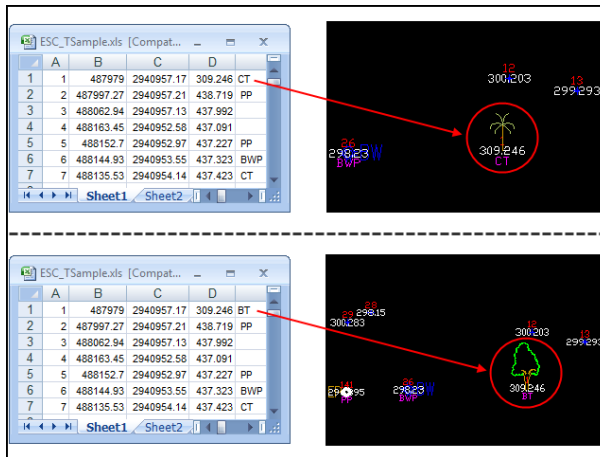
#### Import point data from CSV or Excel for generating Topographical drawing

E SurveyCAD draws CAD drawings from point data instantly with Blocks and Elevations in their respective Northing and Easting. With this feature, the point data in Excel can directly be converted into ready-to-use drawings.



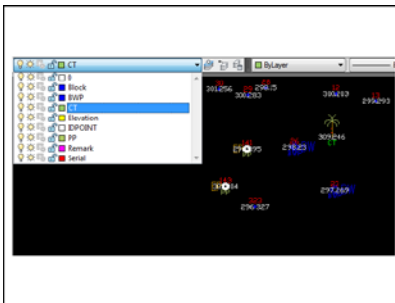
### Insert blocks automatically while creating drawing depending on code

For each code specific drawing block can be configured this allows to generate the drawing with required blocks depending on code.



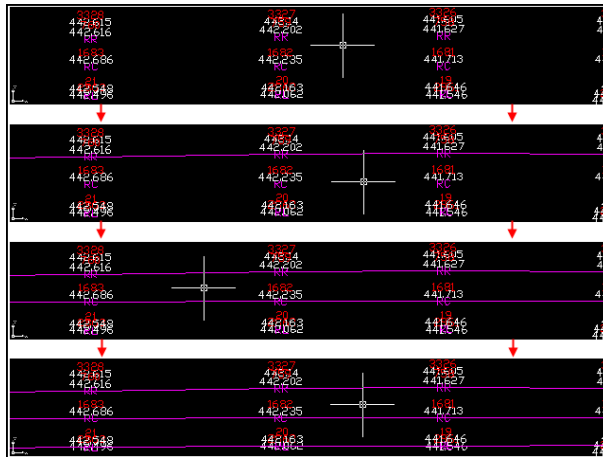
### Export codes point data in different layer selectively

The generated drawing and other related entities are stored layer wise, i.e. Block, Elevation, Remark, Serial, etc. can be stored in separate layers. Also, different colors can be set to each of these layers making the drawing visually distinguishable.



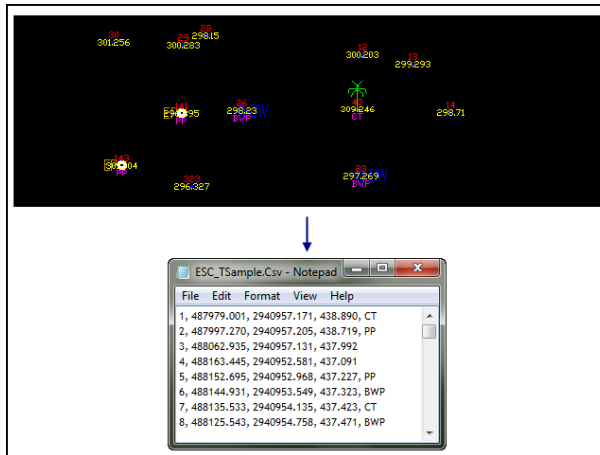
### Selectively Auto Connect codes in CAD

Texts representing same codes can be joined by line passing through all of them using pre written algorithm.



### Create Total station data from CAD drawing

Total station data comprising of the Serial Number, Easting, Northing, Elevation and Code can be exported to a CSV file from the point data available in CAD.



## Contact Us

AMR #7, Pathway P-3, Nandini Layout,  
Bangalore - 560096, Karnataka, India  
Ph: 080 23491717 Mobile : +919449599709

[info@esurveying.net](mailto:info@esurveying.net)

[www.esurveying.net](http://www.esurveying.net)

