SECON Alignment Sheet Generator (SASG)

Comprehensive Package for Pipeline Alignment Survey Data Management

About SECON

SECON is an ISO 9001:2008 certified firm. In addition to Multidisciplinary design consultancy services, SECON provides end-to-end services on Geospatial & Engineering including Data Capture, Processing, Design & Drafting, GIS Based Customization and Application Development.
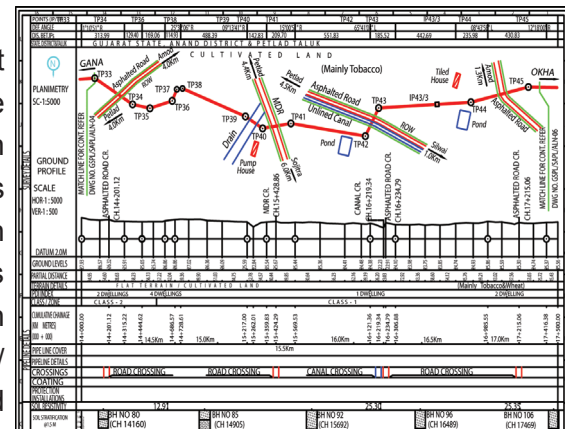
SECON's practice areas include:

- Comprehensive Engineering and Mapping solutions for Highways, Irrigation, Cross Country Pipelines, Infrastructure, Public Health Engineering etc. on Onshore - Offshore model
- Web-enabled Enterprise GIS and Software Development
- Photogrammetry, LiDAR and Satellite Image Processing
- GIS/ CADD Data Development and Maintenance
- Engineering Design Solutions

Introduction

SECON has developed SECON Alignment Sheet Generator (SASG), an application that automates the production of pipeline alignment sheets. SASG is an automated mapping application that completely automates the production and maintenance of alignment sheets with planimetry, profile, cross sections and soil investigation details on a standard CAD platform and to generate reports such as Population Density Index, Crossings, Soil Resistivity/ Soil Investigation, Control Points chainages, Bearing and Deflection angle. This product automatically produces high-quality alignment sheets from a CSV file data source.

Alignment Sheet

Using SASG it is possible to generate a corridor or alignment sheet with the current data within minutes. SASG is designed to integrate seamlessly with an AM/ FM/ GIS Application.
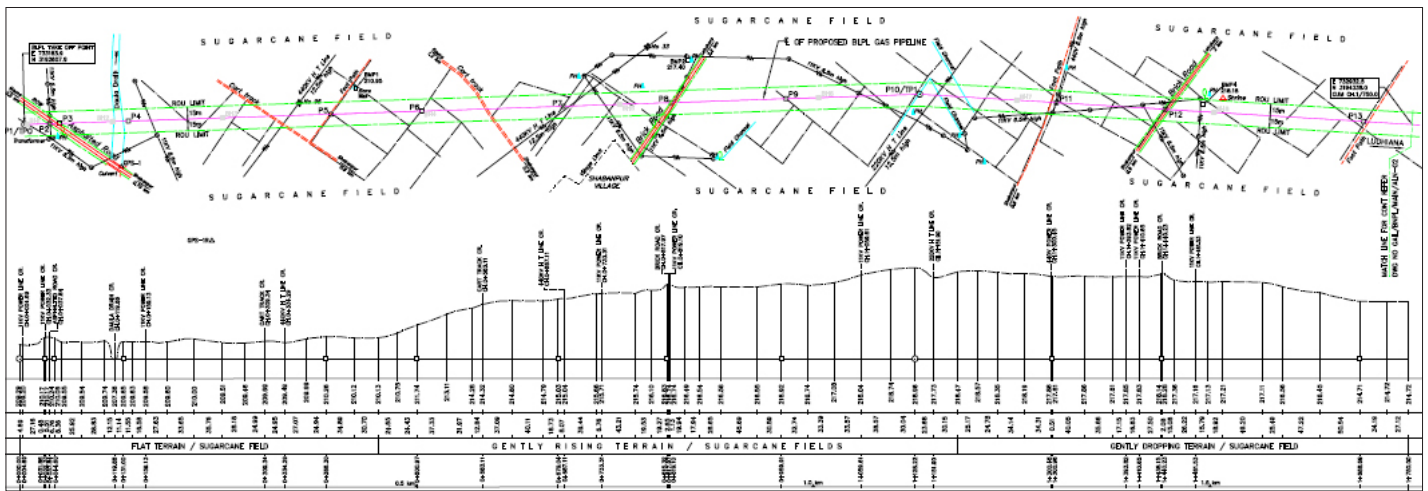
Why SECON

QUALITY COST TIME

GIS is our Passion. Quality is our Commitment.

Key Features

- A simple Total Station file in CSV format is sufficient to generate the basic Alignment sheet, reports like Control Points Chainage, Bearing and Deflection angle

- Additional data like Population Density, Soil Resistivity/Soil Investigation, and Land Details can be entered into the database through a unique User Interface, which allows the user to edit directly or load data through a CSV file

- Generate Crossing Drawings, Drawings with Soil Investigation/Soil Resistivity details

- Ready availability of data pertaining to Crossings or Photographs of crossings

- Map Data utility to check the accuracy of survey data at site

- Generate Soil Investigation details either as Drawing or Report

- Option to change, add or delete Feature Codes (data captured by Total Stations), so as to accommodate a variety of instruments and site details

- Multi-user facility to view generated drawings from a central site Secured Data Access

- Product is highly scalable to meet additional customization as per client's requirement

Case Study:

Client : Gas Transportation Infrastructure & Co. Ltd (GTIL)

Earlier constraint : GTIL, a part of Reliance Industries Ltd. (RIL) a premier industrial group in India, had inadequate IT enabled data process and monitoring system for their cross-country pipelines.

SECON's role : SECON, one of the primary vendor for GTIL's Engineering Consultancy, fulfilled the high quality and data accuracy requirements of GTIL by developing SASG for automatic generation of alignment sheets.

Implementation: SECON installed SASG application in all zonal offices of GTIL for efficient data management. User-friendly tools were developed to facilitate automatic generation of engineering reports like Alignment sheets, Crossing reports, Survey reports, etc., using centralized database.

Results : Common platform is built to achieve quality and uniformity of data delivered by various contractors in the generation of engineering reports/drawings, resulting in substantial reduction of supervisory staff.

"SECON's Pipeline management modules for generating crossing drawings, bore logs, reports, etc., ensures mapping and capturing with much higher speed and excellent repeatability compared to conventional methods. Updating and retrieval of data and information is greatly simplified. Being GIS compatible, the product has the capability for a seamless integration with other available pipeline application to perform "End-to-End" functions for Pipeline facility in all phase of its life cycle, viz., Concept to Commissioning.

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Contact Us

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