

Automation of Bridge Structure Design (SBSD)

Comprehensive package for Bridge Structure Design Automation



<http://www.secon.in>

About SECON

SECON is an ISO 9001:2015, NABL Accredited and CMMI Level 3 Certified Multidiscipline Engineering and Mapping Firm, established in 1981. 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 SBSD automates Bridge structure design. Utilizing the latest AutoCAD technology and SECON's industry expertise, SBSD provides an efficient and effective way to generate design drawings and various reports for Bridge Structure. It keeps track of voluminous data belonging to each project & structure combination and allows to set parameter/ properties of project to generate better and effective output.

This application eliminates manual or semi-automated design generation, which consumes a lot of time and effort. It is user-friendly, accurate, efficient and fast design generation tool.

The screenshot displays the 'Conventional Abutment' software window. It features a 'Design Abutment' section with 'Auto' and 'Manual' options. The 'Auto' option is selected, showing a 3D model of an abutment. The 'Manual' option is also available. The 'Reinforcement Details' section includes fields for 'Longitudinal Reinforcement' (Dia. of bar, Spacing, Hook Length, Clear cover to reinforcement) and 'Transverse Reinforcement' (Dia. of bar, Spacing, Hook Length, Clear cover to reinforcement). The 'Abutment Cap' section includes fields for 'Longitudinal Bar Dia', 'No. of Bars (in each row)', 'Transverse Bar Dia', 'Spacing', 'Clear cover to reinforcement', 'Grade of Concrete', and 'Grade of Steel'. The 'Del Wall' section includes fields for 'Longitudinal Bar Dia', 'No. of Bars (in each column)', 'Transverse Bar Dia', 'Spacing', 'Clear cover to reinforcement', 'Grade of Concrete', and 'Grade of Steel'. The 'Foot' section includes fields for 'Main reinforcement dia', 'Spacing', 'Distribution reinforcement dia', and 'Spacing'. The 'Top Reinforcement' section includes fields for 'Main reinforcement dia', 'Spacing', 'Distribution reinforcement dia', and 'Spacing'. The 'Hook Length' section includes fields for 'Hook Length', 'Clear cover to reinforcement', 'Grade of Concrete', and 'Grade of Steel'. The 'Submit', 'Clear', and 'Cancel' buttons are at the bottom right.

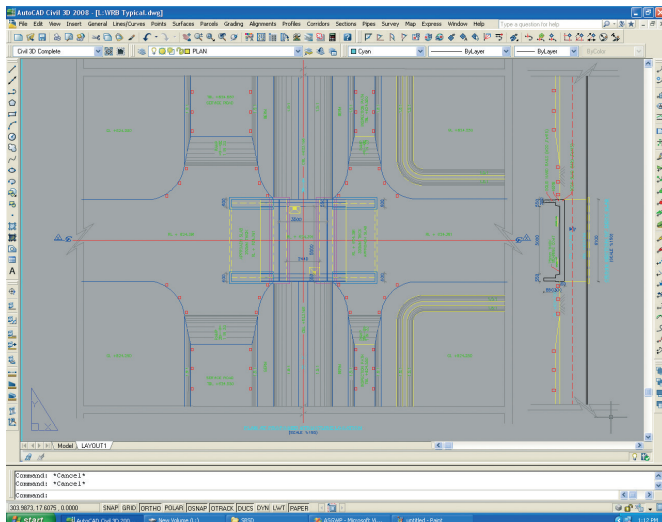
Conventional Abutment



GIS is our Passion. Quality is our Commitment.

What SBSD does for you:

- Proper management and efficient storage of Input data
- Excellent Project Settings which includes Canal, Super Structure, Sub Structure, Approach Slab, Drainage Spout etc.
- Generation of Cross Section of Canal Drawing
- Fixation of Span and Type of Super Structure
- Generation of Super Structure [Deck Slab, by MOST Data and Conventional method]
- Generation of Sub Structure[Abutment & Wingwall, by SP13 and Conventional method and Pier]
- Generation of Approach slab design
- Generation of Reinforcement design drawings for Super structure, Sub structure and Approach slab
- Generation of Drainage spout section drawings
- Generation of Bridge design drawings
- Lift based earthwork estimation report generation
- Facility to set the output path
- Facility to set the database connection
- User Management (Creating user and roles, assign the functionalities to roles)
- Document management
- Dynamic Help
- Saves 60% of man days compared to the traditional method



VRB Plan

What benefits you will get :

- Proper management and efficient storage of data
- Intelligent user interface gives you comfortable feeling
- SBSD gives you instant access to reports. All desired reports are available at the click of a button.
- You will be a design expert of using SBSD within a few hours
- Extensive security mechanisms to protect data and application from unauthorized access with the help of hardware lock and login feature

Contact Us

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