Bentley Rebar

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Sustaining Infrastructure

Common Office Issues

- Dealing with tight lead times
- Working with different Design Codes
- Reworking or adjusting details
- Constant re-engineering
- Scheduling and quantities
- 3D modeling of reinforcement

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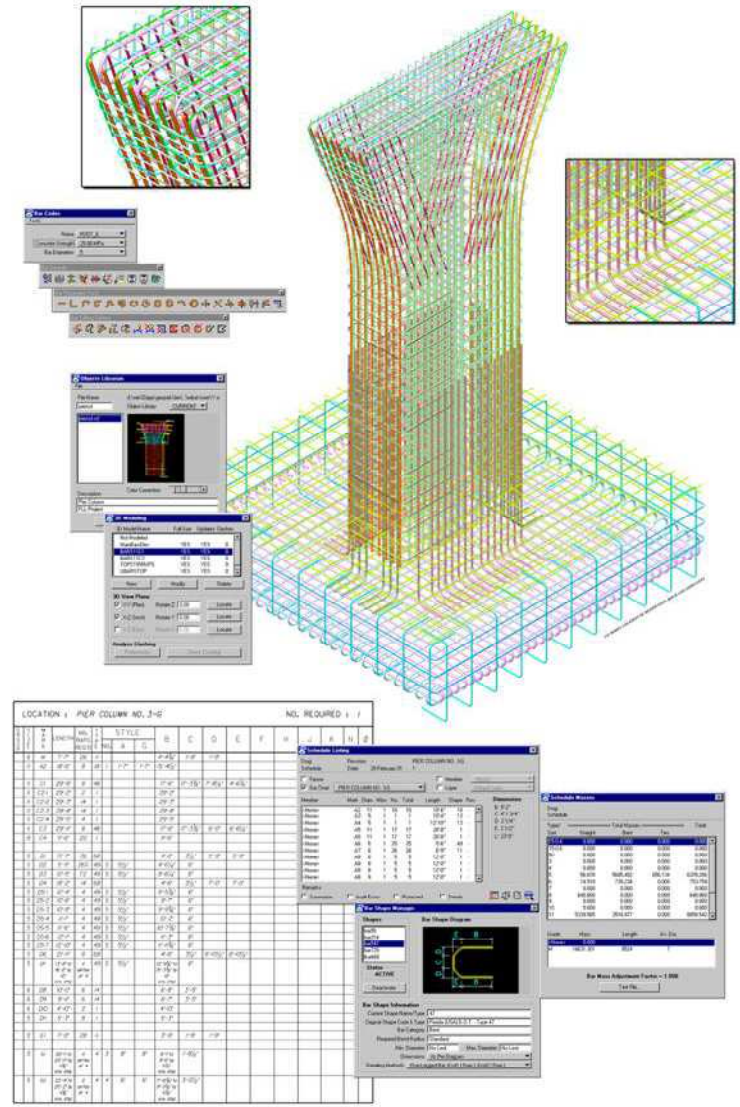
Interactive Product

- Rebar is a fully interactive software for reinforced concrete detailing.
- Rebar eliminates manual labor intensive problems.



BENTLEY Rebar Features

- Universal concrete detailing
- Custom concrete details
- Automatic scheduling and bar lists
- Automatic update of reinforcement
- International design codes
- English/metric units conversion
- Intelligent bar editing
- Dynamic dimensions
- Automatic full size and rescaling
- 3D modeling

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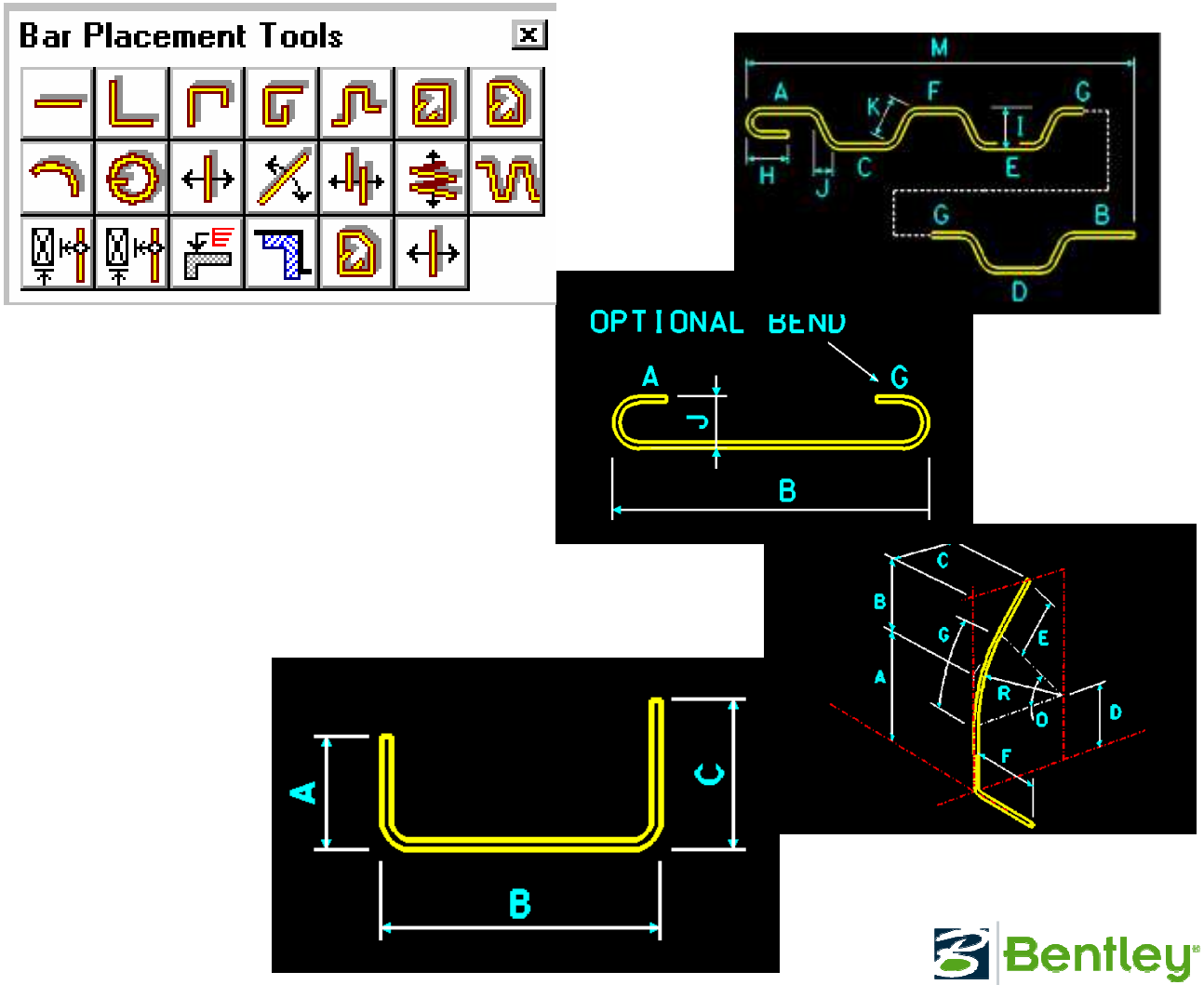
Universal Concrete Detailing

- Rebar greatly improves the accuracy of concrete detailing.
- Powerful routines enable placement of reinforcement to any concrete structure.



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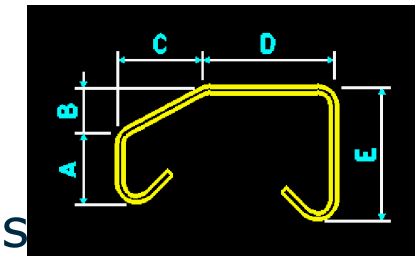
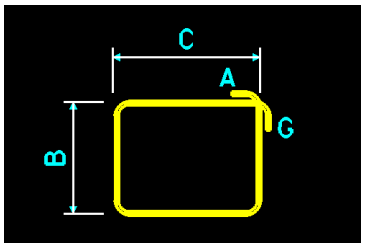
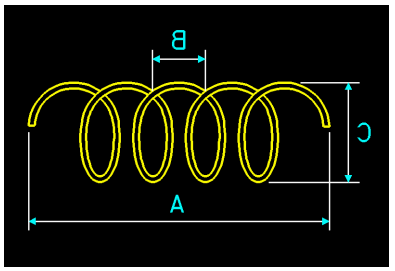
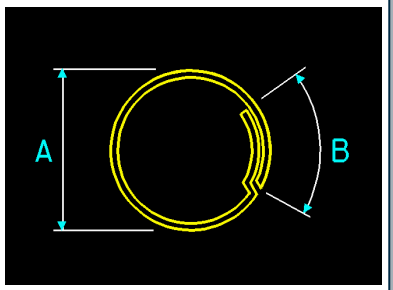
Bar Detailing Features...

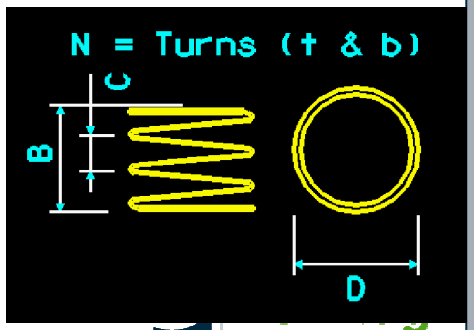
- Multi-legged reinforcement
- Parallel & Radial bar ranges
- Staggered & Alternate bar ranges
- Four and Five Sided Stirrups
- Circular Stirrups
- Circular and Radial bars
- Spiral reinforcement
- Truss Bar Reinforcement
- To virtually any concrete arrangement





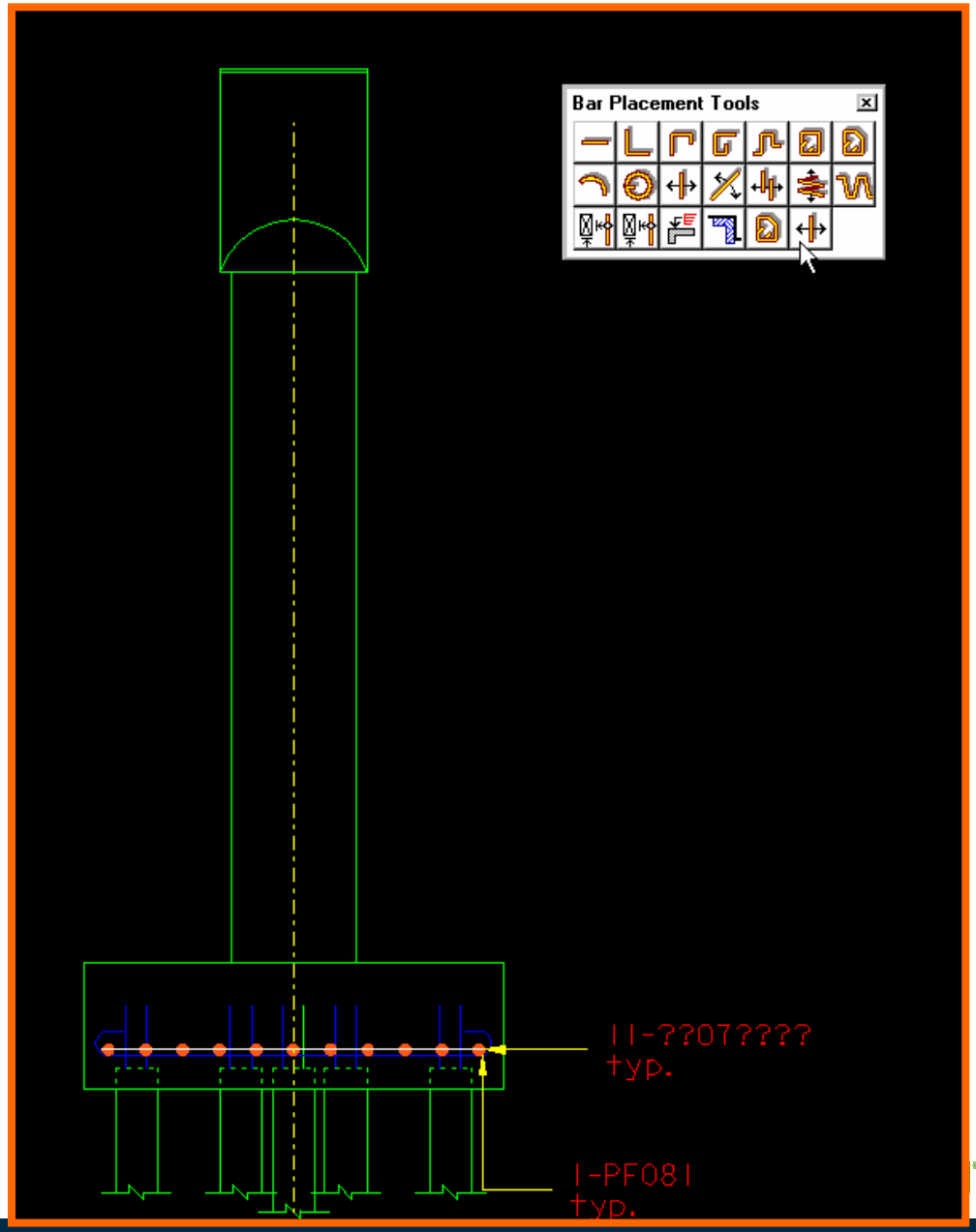






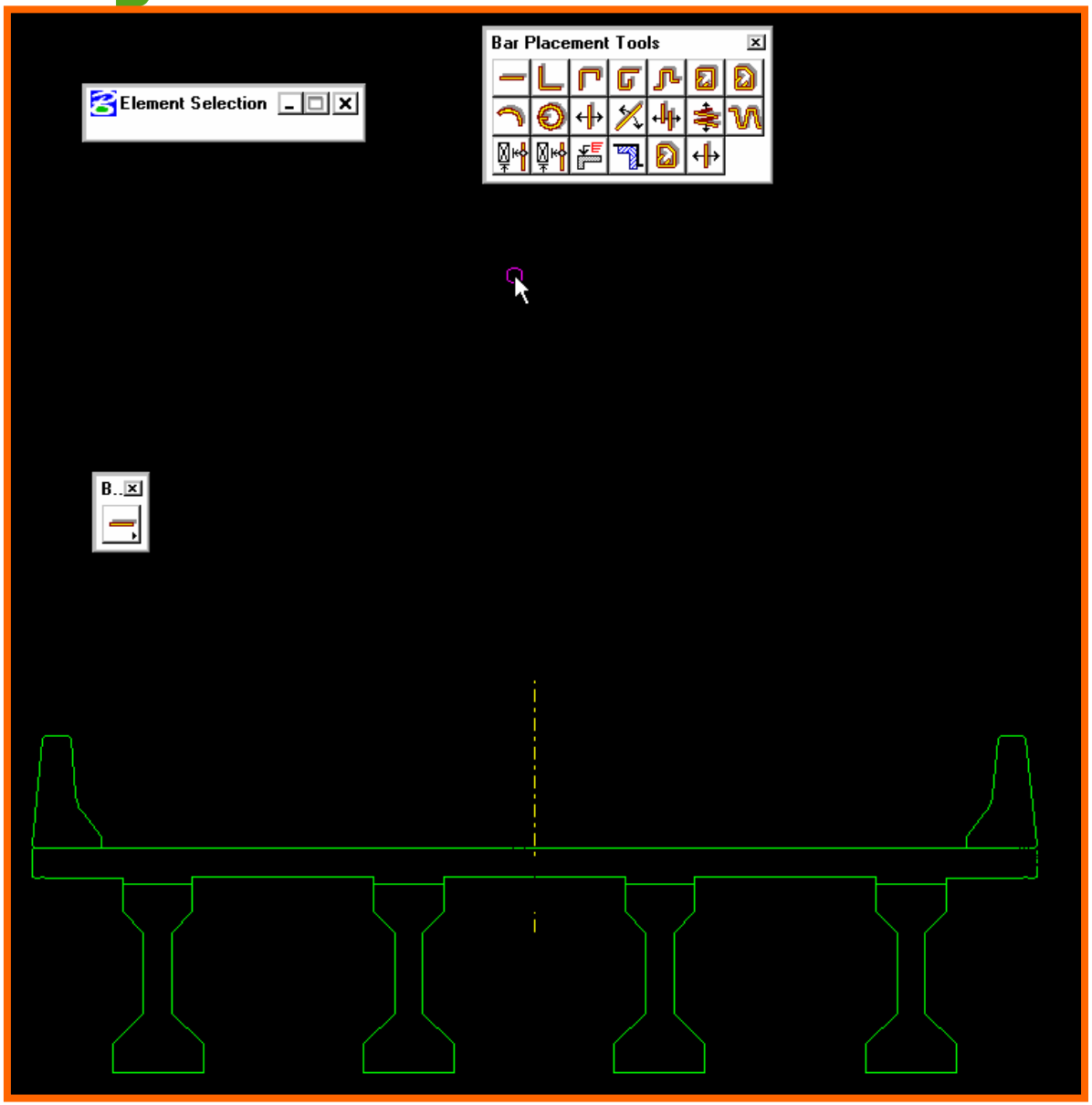
Concrete Detailing

- Spiral Bar Placement
- Powerful tools for modifications.
- Relocation and Cloning available.
- Automatic Schedule calculations.



Concrete Detailing

- Truss Bar Placement and Automatic Bar Dimension Calculations.



Bridge Detailing … Universal Concrete Detailing

- Originally designed for bridge detailing, where details are often ‘non-standard’ and normally very complex.
- Rebar suited to other A/E/C disciplines.
  - Commercial buildings.
  - Heavy industrial structures.
  - Marine Structures.
  - And more..
- 3D modeling as well as 2D detailing.

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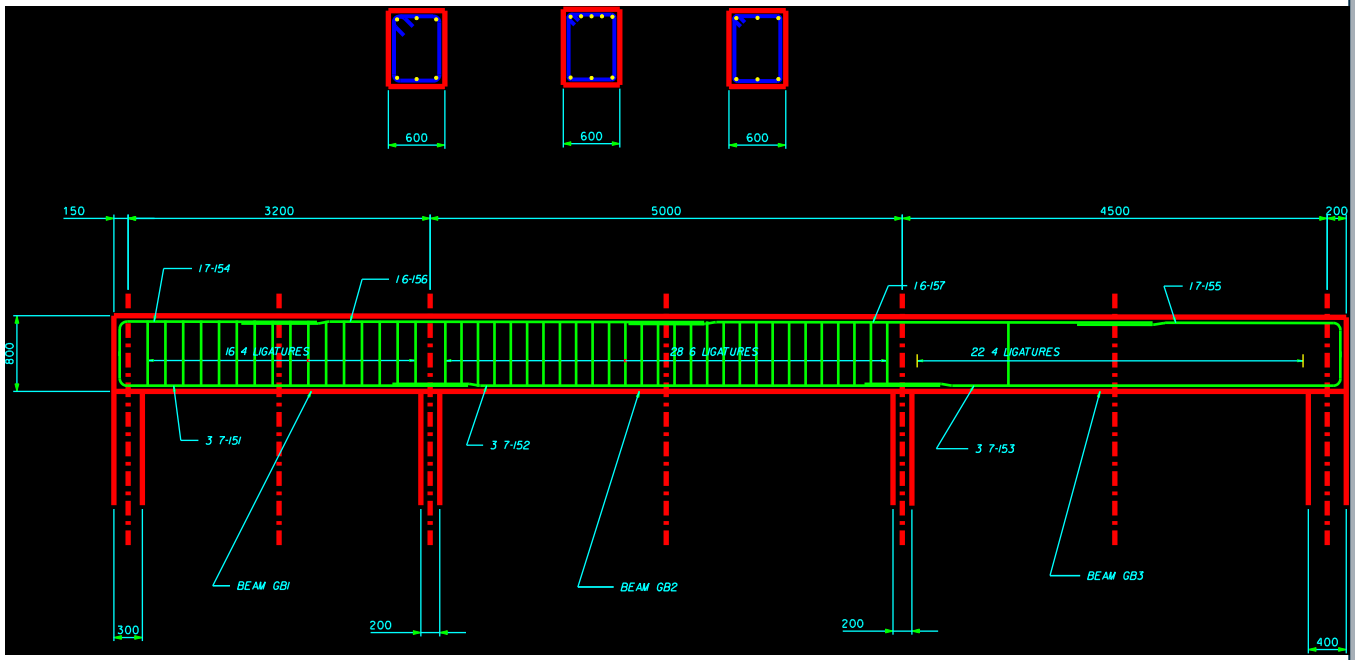
Beam Framing

- Multiple Span tie beam framing.
- Make changes to an interior span length and adjacent spans will automatically move.



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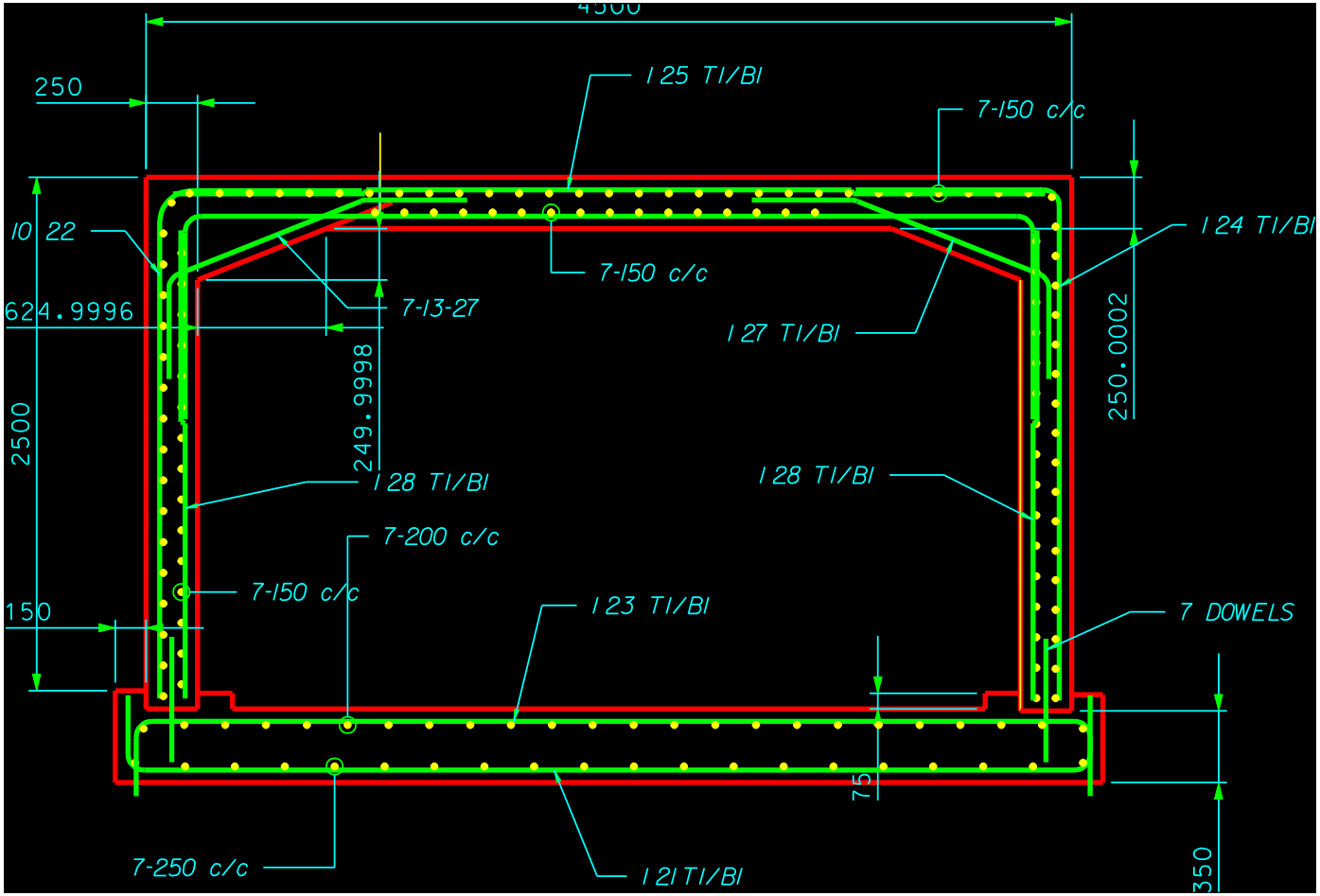
Box Culvert

- Concrete Boxes Precast or Cast in-place.



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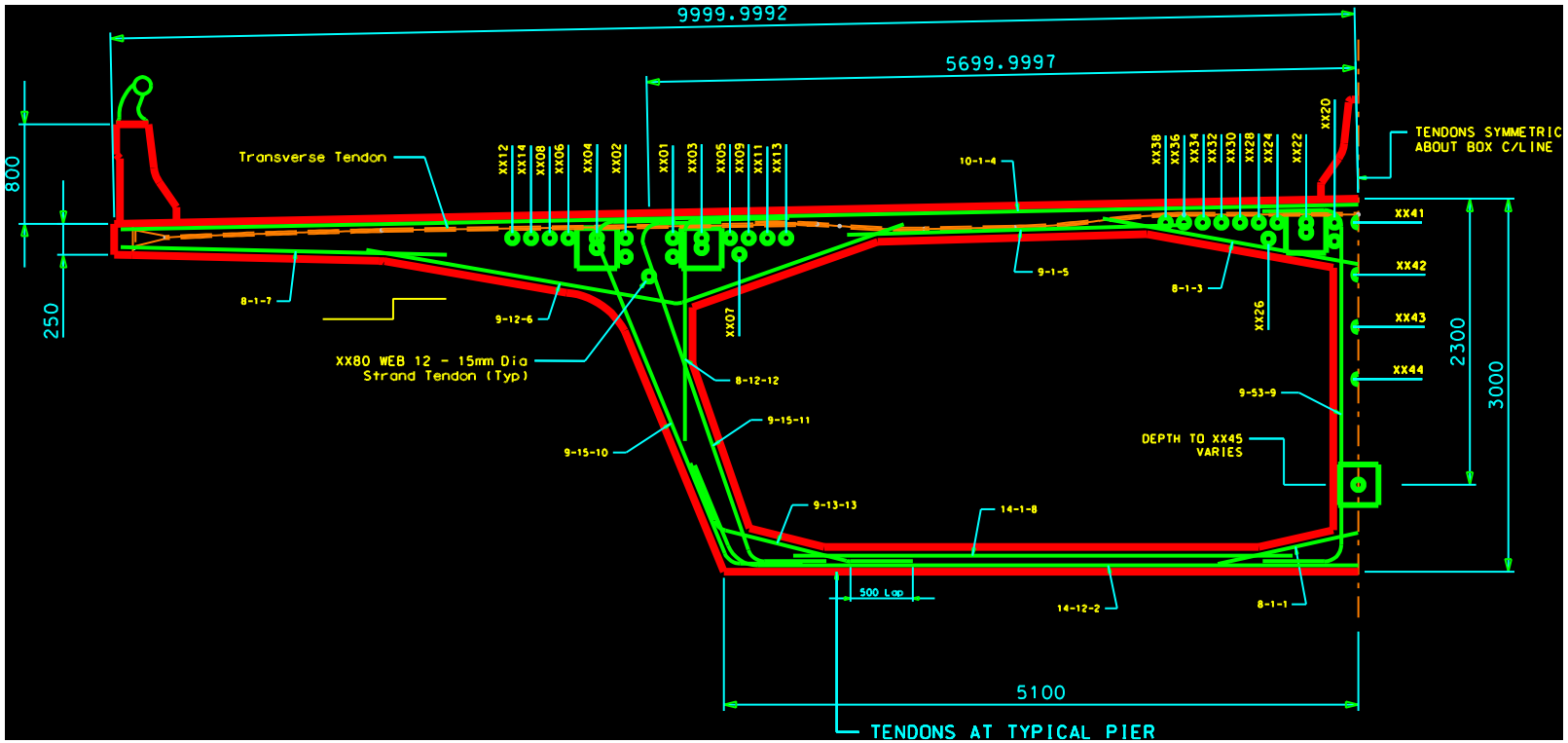
Precast Box

- Precast Segmental or Cast in-place Bridges.



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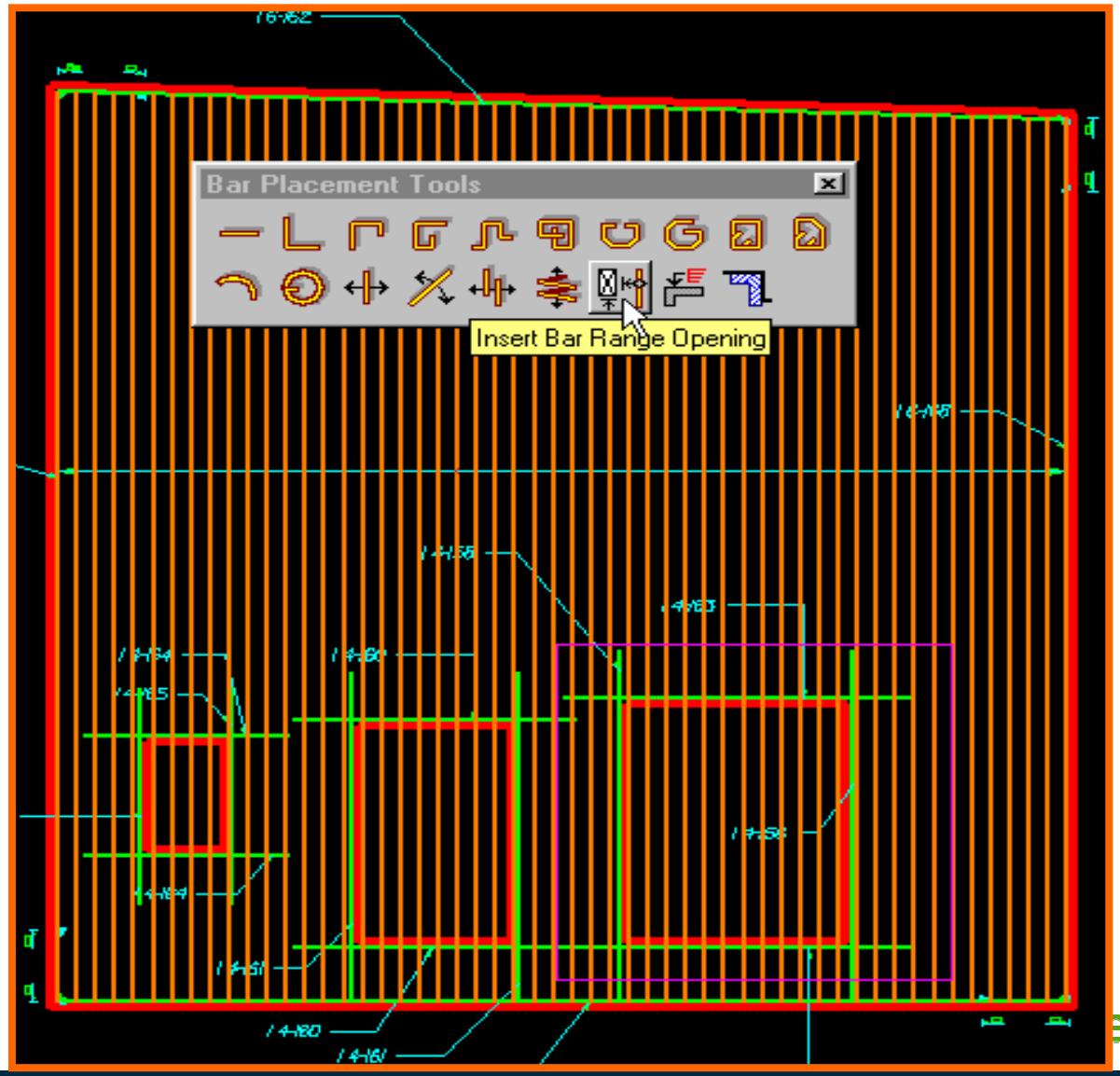
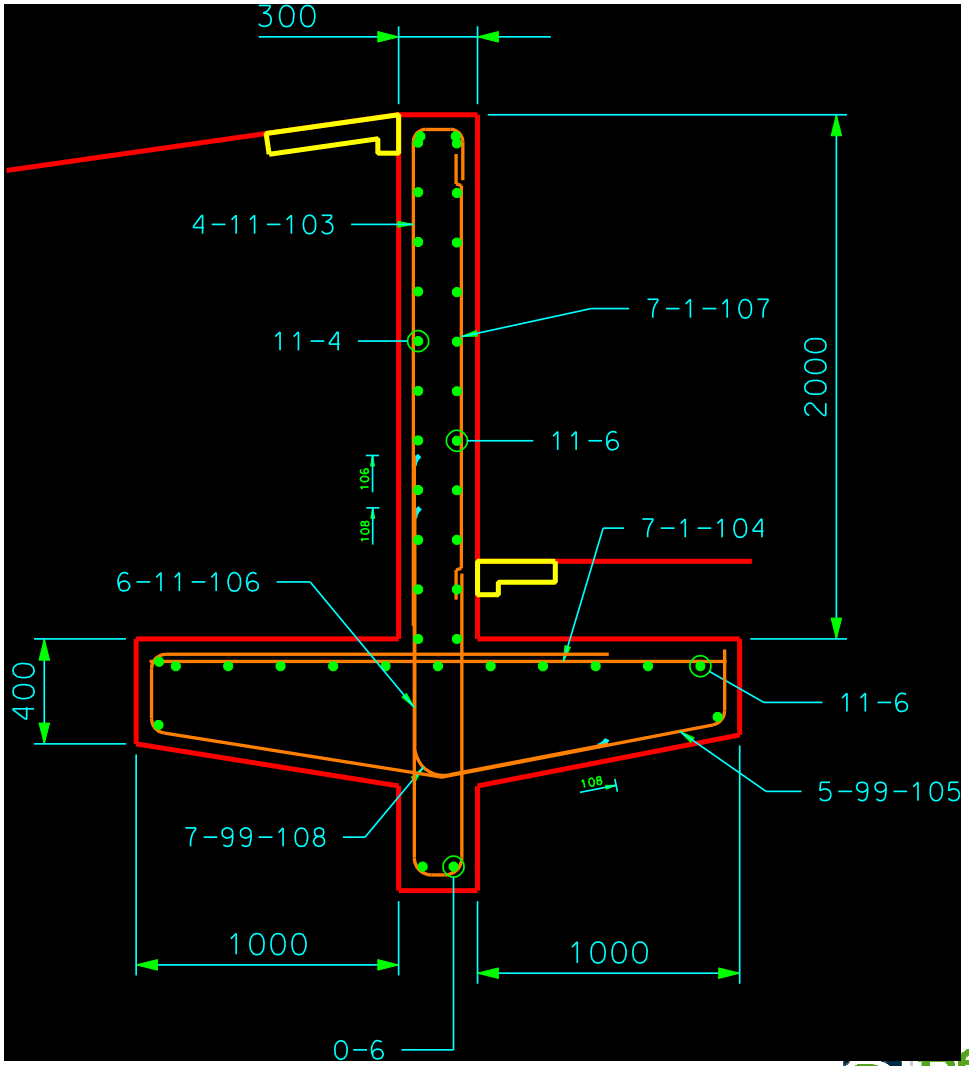
Building Floors

- Multistory floor slabs.



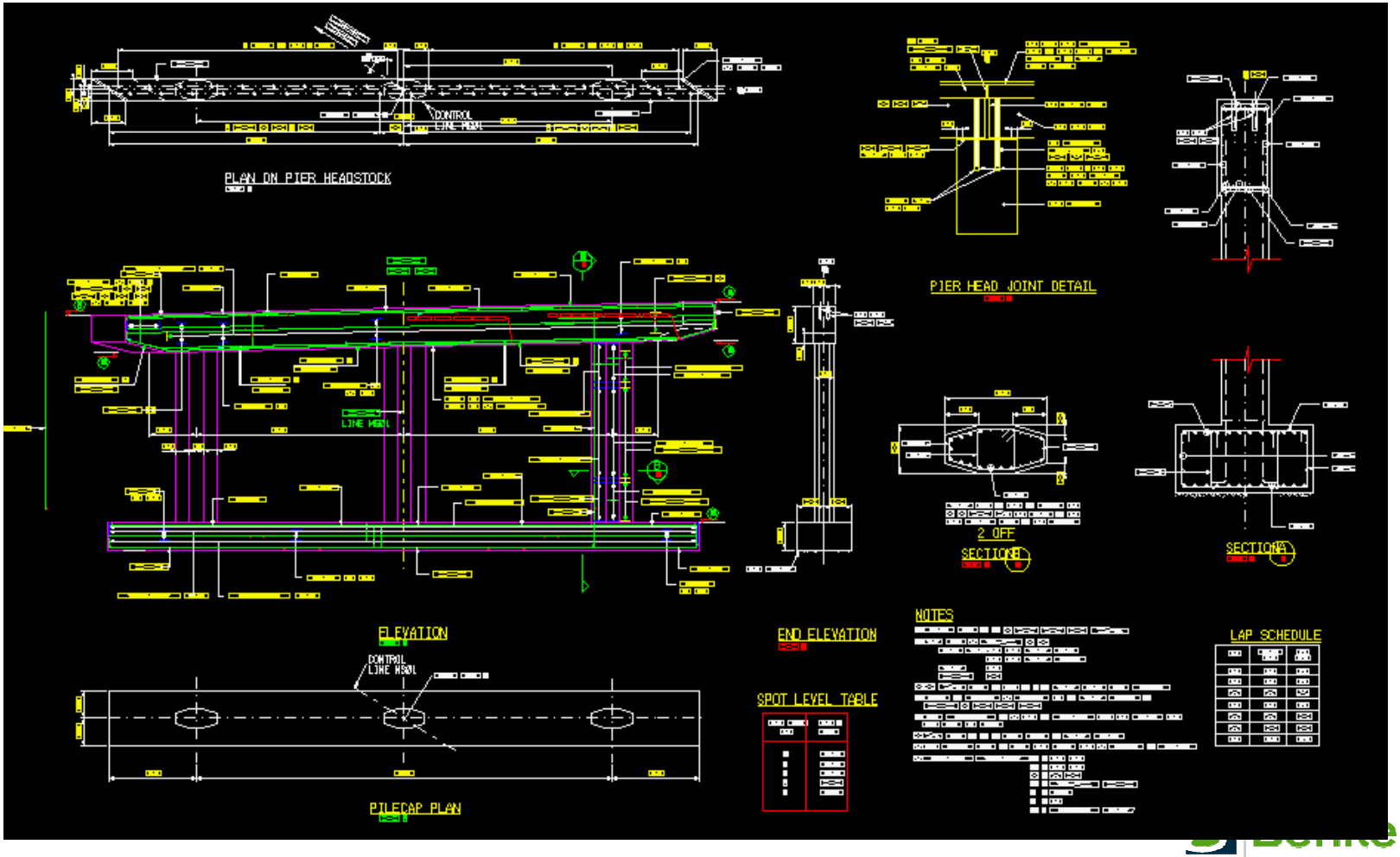
Foundations

- Retaining walls.



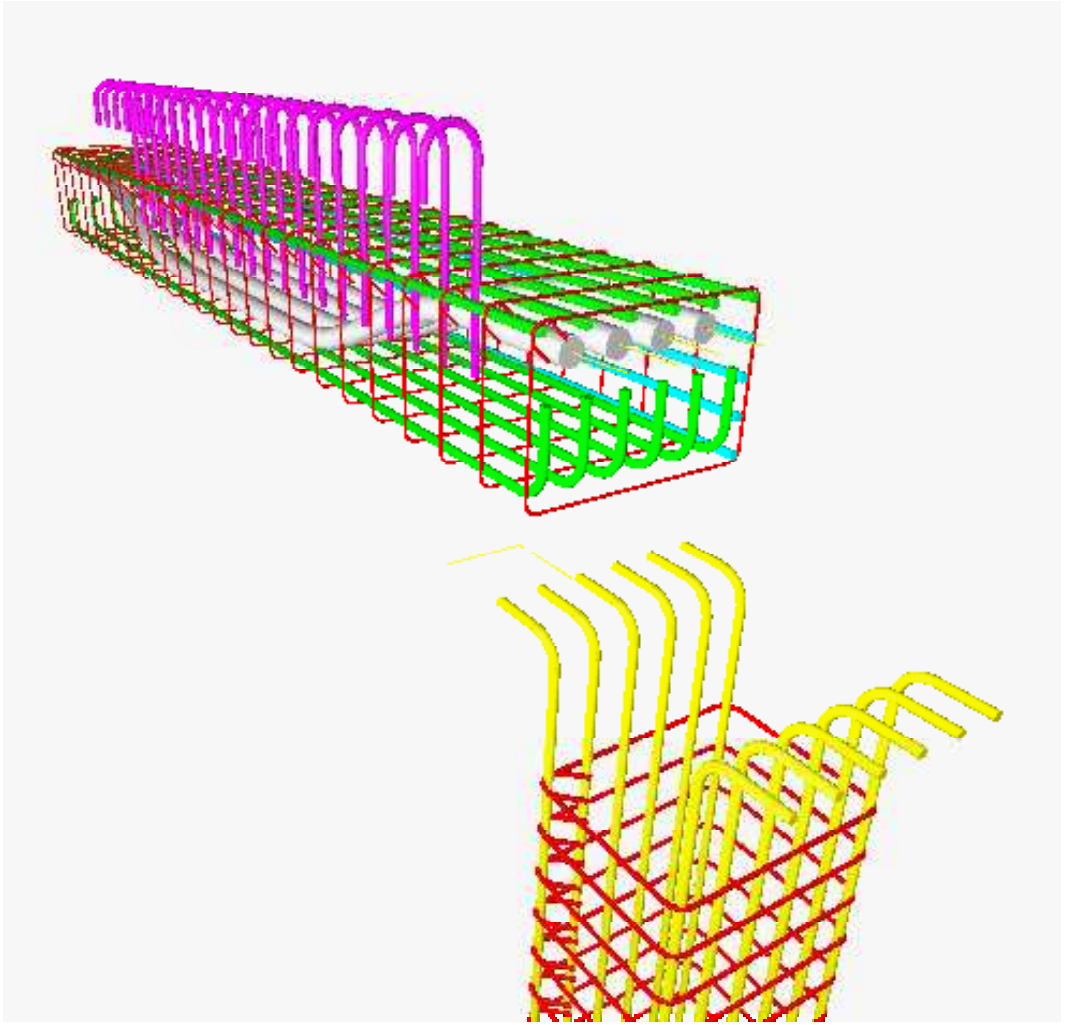
Bridge Piers

- Multiple Framed Column Bents.



3D Modeling

- Create 3D Models.
- Assemble Integrated Drawings.



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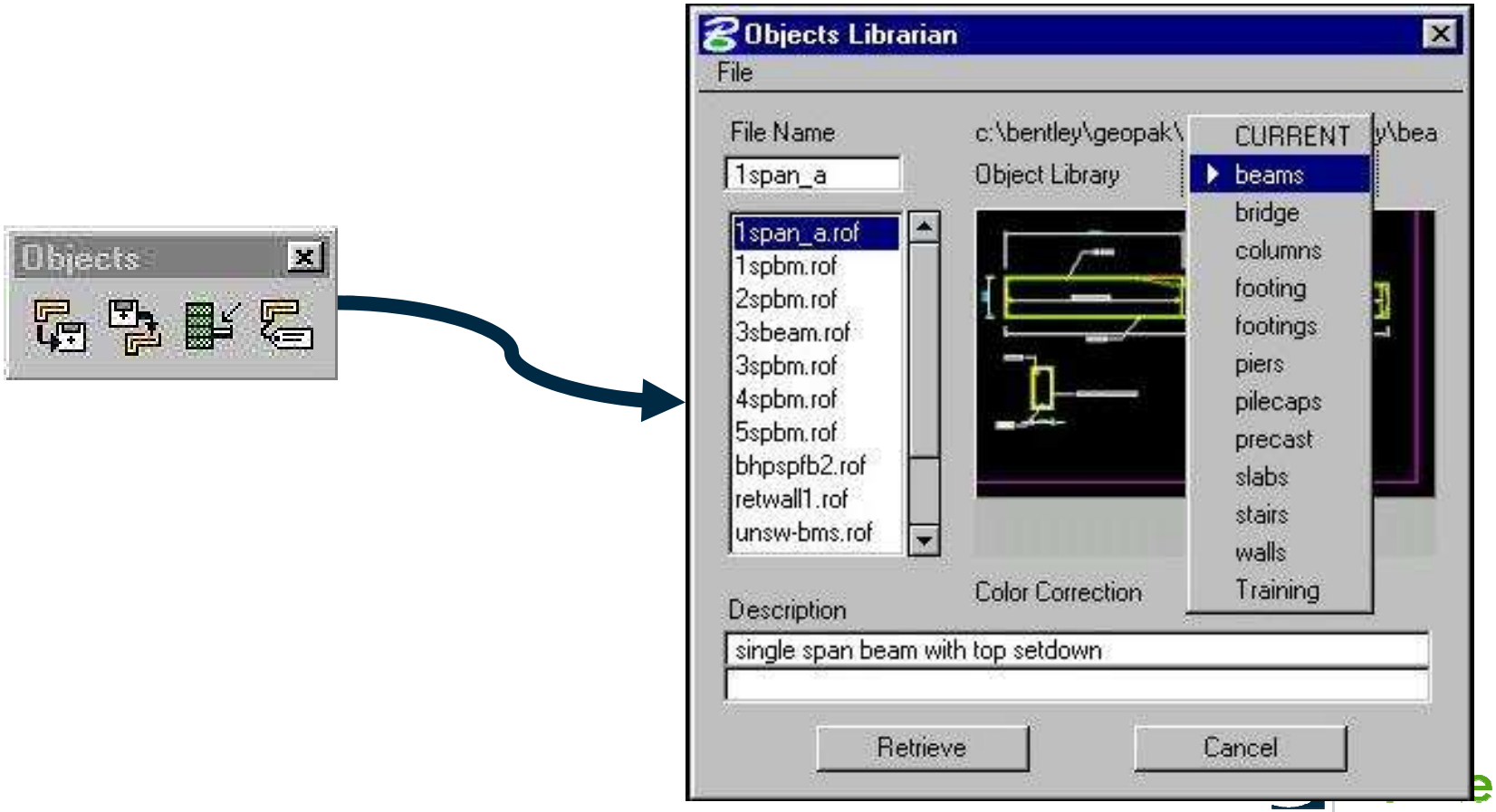
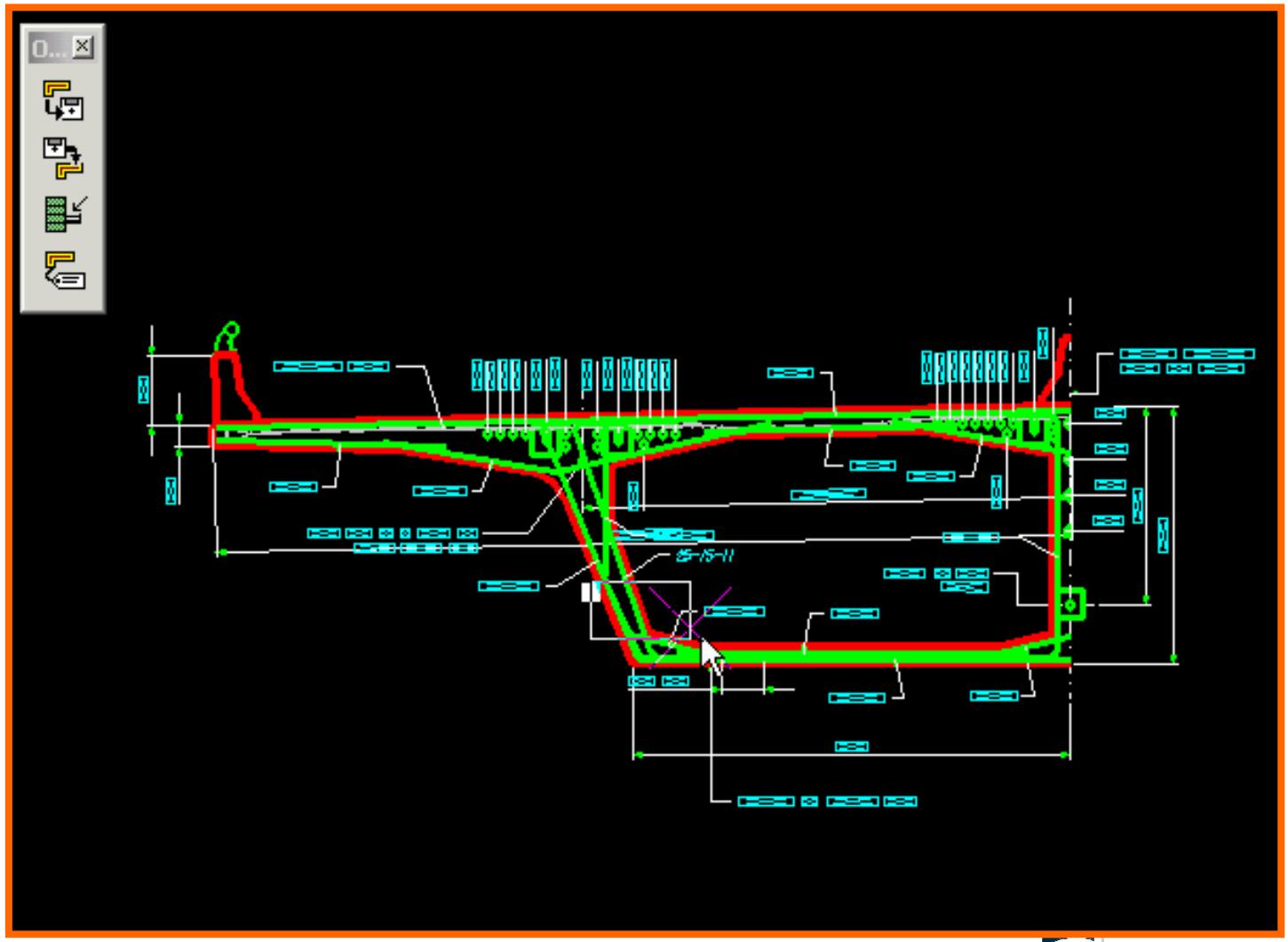
Custom Concrete Details

- Reinforcement detailing is automated by selecting predefined concrete details from Rebar's Object library.



Custom Concrete Details

- Retrieve a detail.
- Modify as required.



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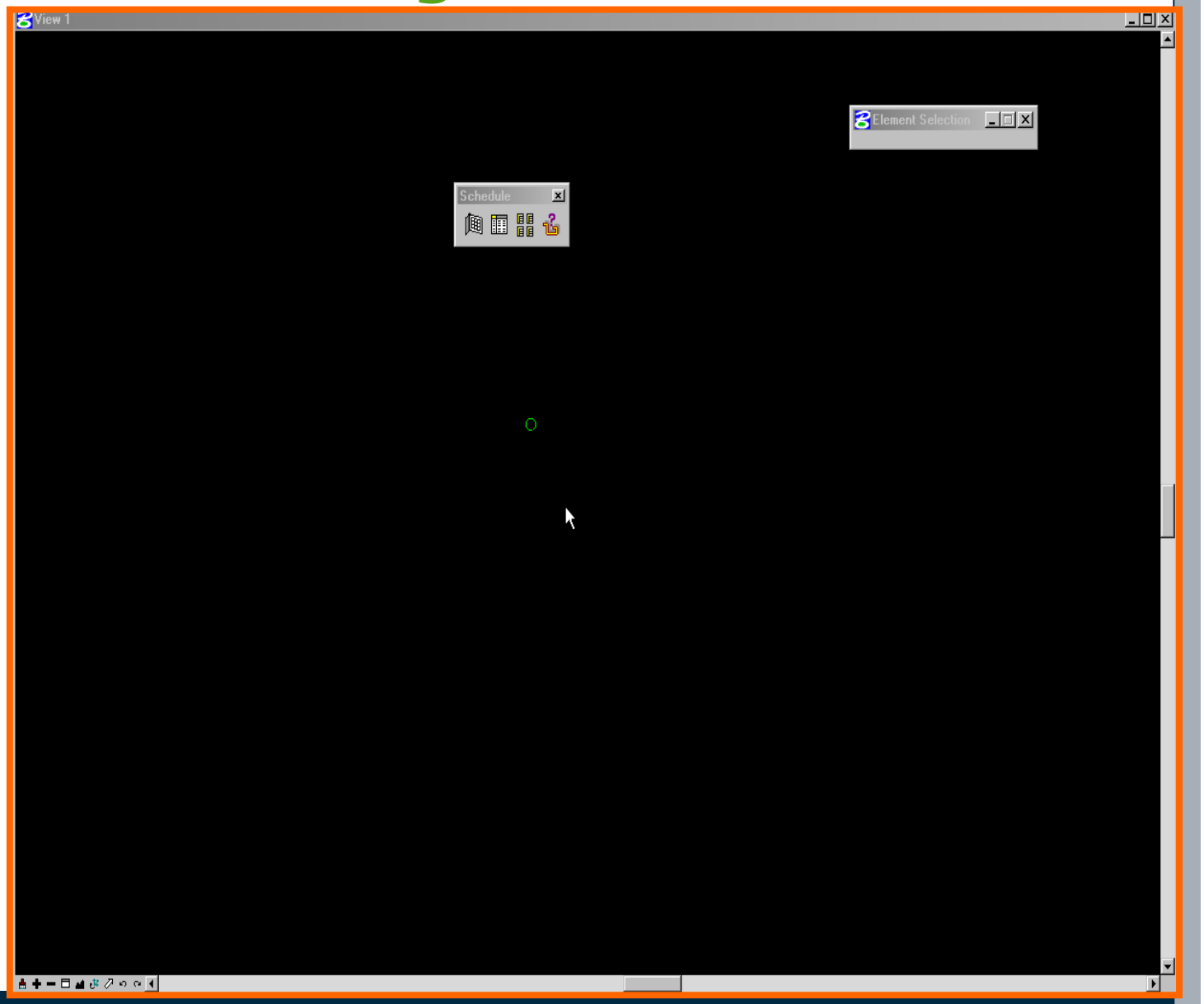
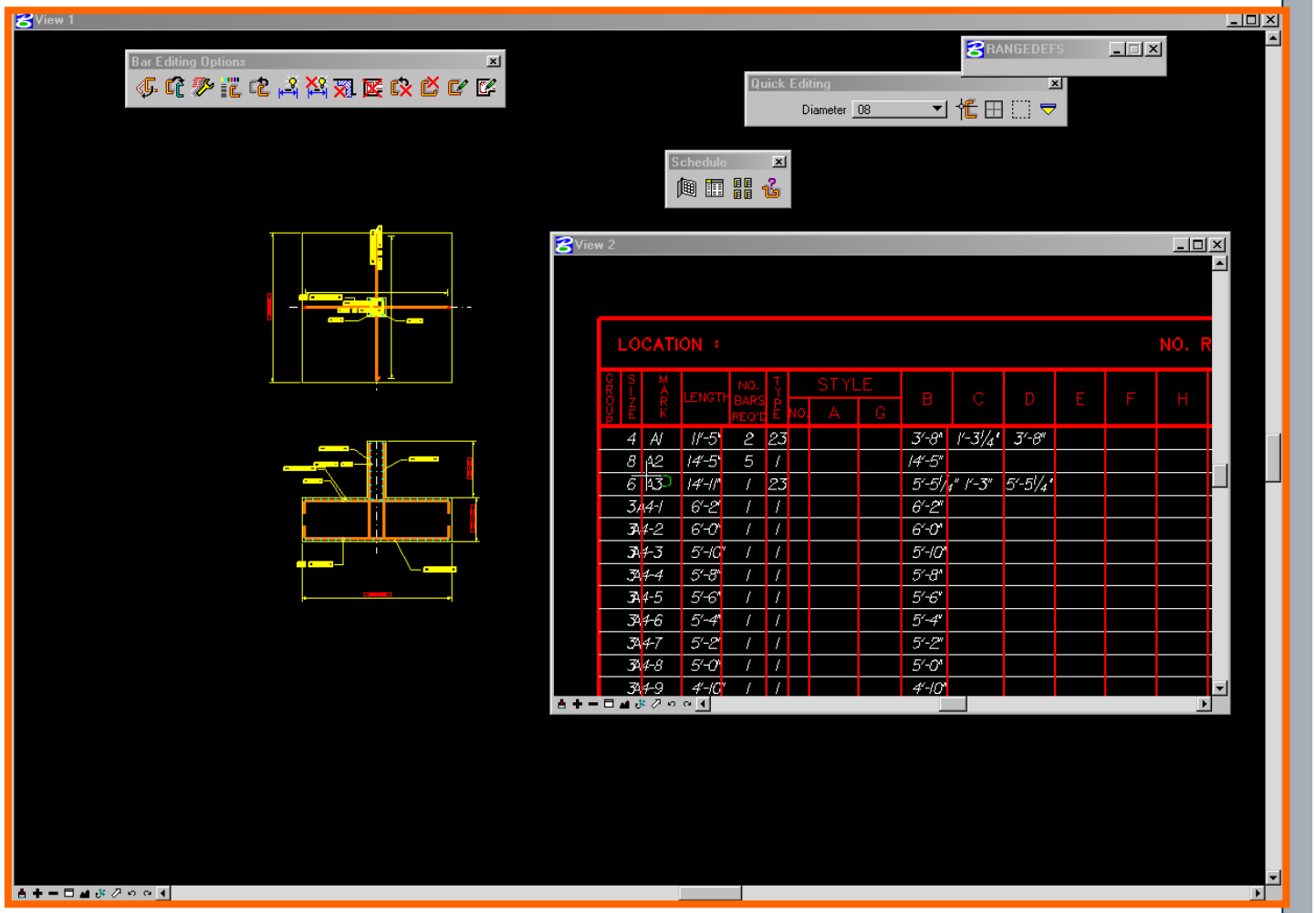
Automatic Scheduling

- Automatics Bar Lists containing Bar size, schedule dimensions, quantities, shape types, shape diagrams etc.
- Bar list formats are user definable.



Automatic Scheduling

- Accurately records bar marks, bar shapes, and bar lengths as you detail.
- Automatic updates of reinforcement if changes are made to the size and shape of the concrete detail.



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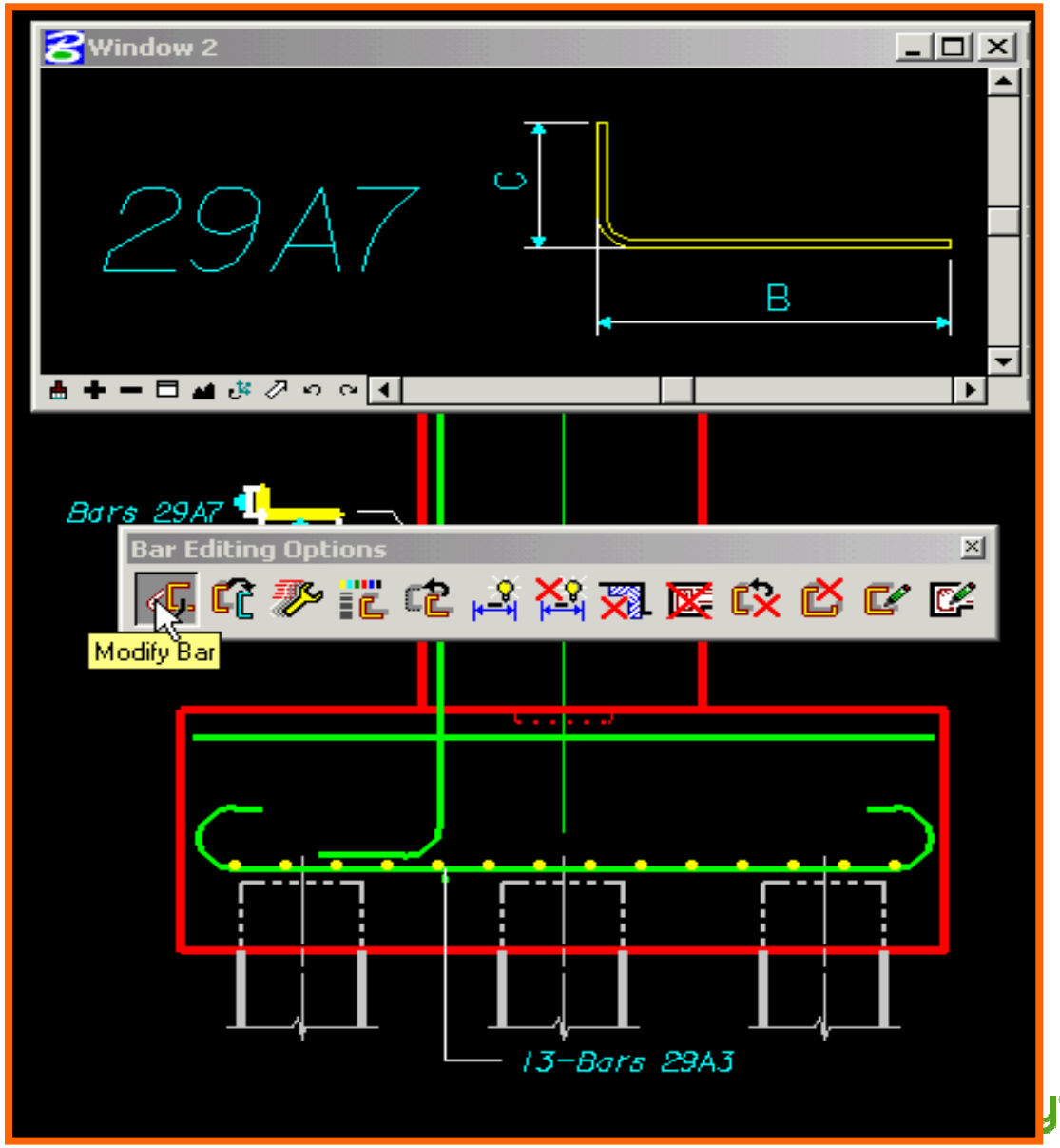
Dynamic Reinforcement Changes

- Place bar marks and Diagrams in labels.
- Make changes to the rebar and the label and diagrams automatically update.



Multiple Design Codes

- Rebar makes it easy to draw reinforcing to code.
- Lap lengths, bar diameters, steel designations, standard bend sizes, and the bar shape library are all preset to your specified detailing standard.
- Bar shapes includes an extensive library of shapes.
- Details created under a Code, can be re-drawn to another Code:
  - Bar diameters, bend radii, hook lengths and stock lengths are converted automatically.
  - All bar shapes applicable to the current design code are recalculated for the current project.

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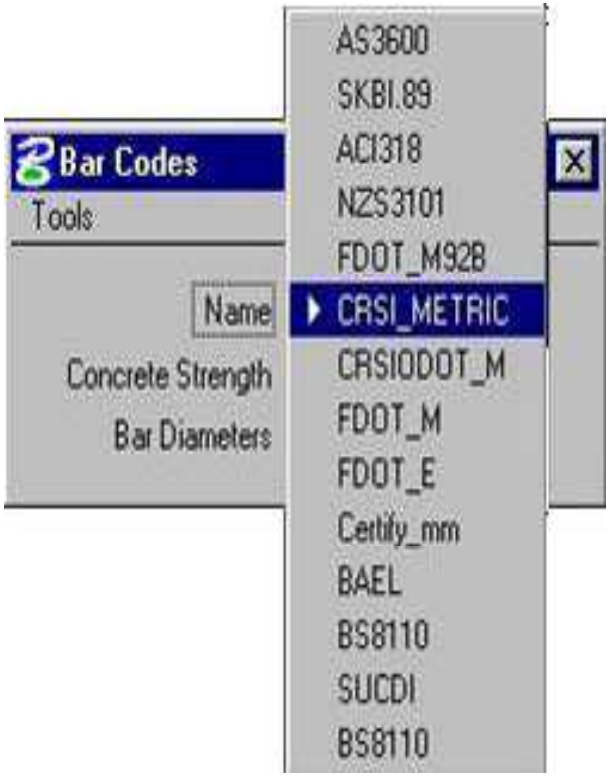
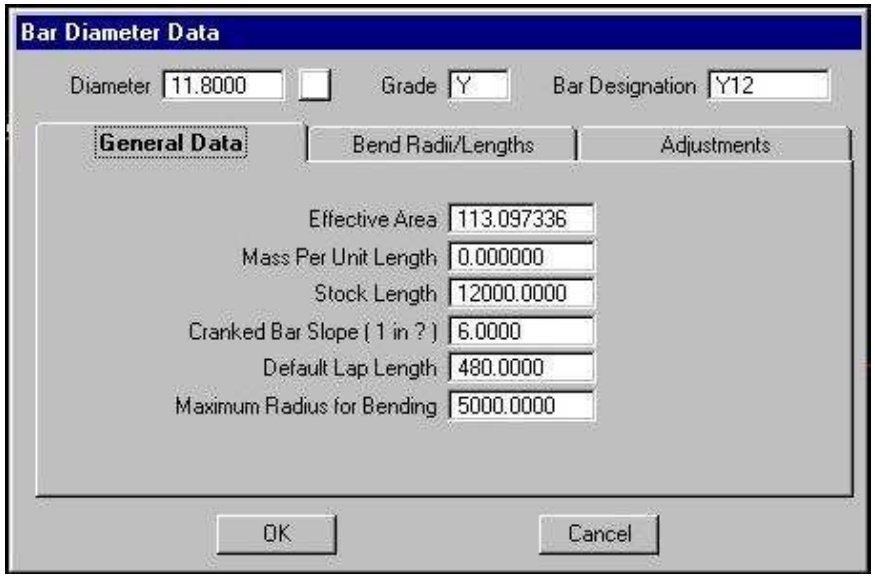
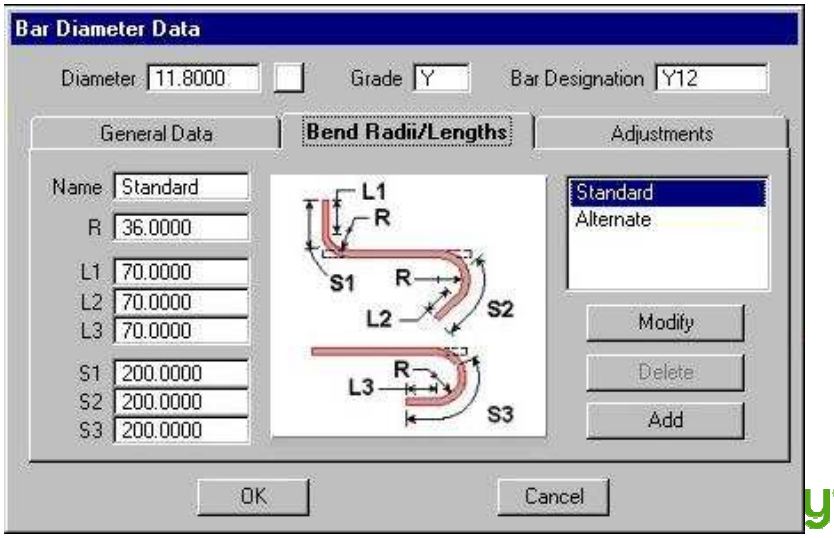
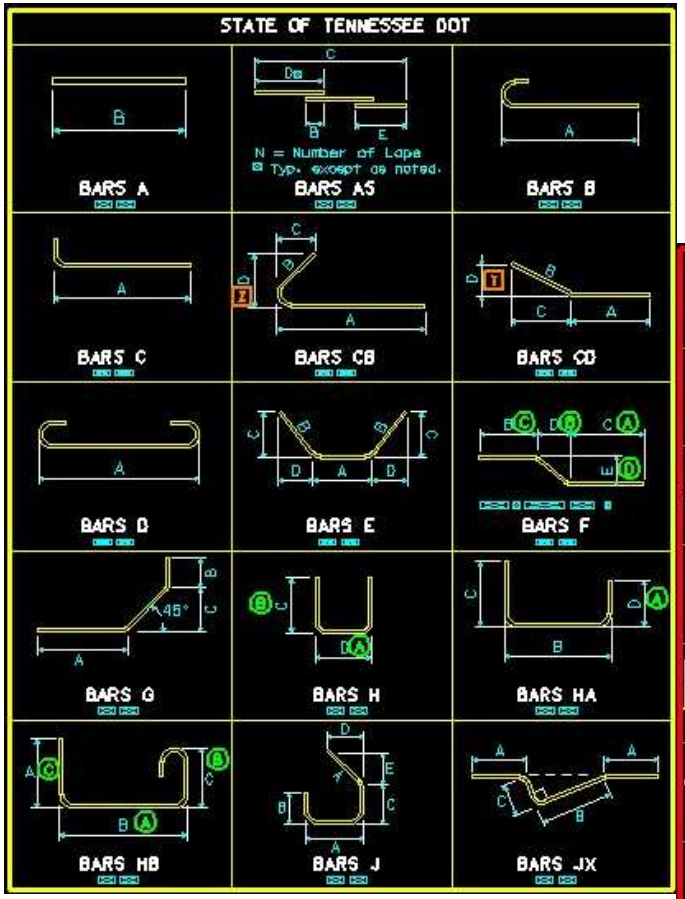
Multiple Design Codes



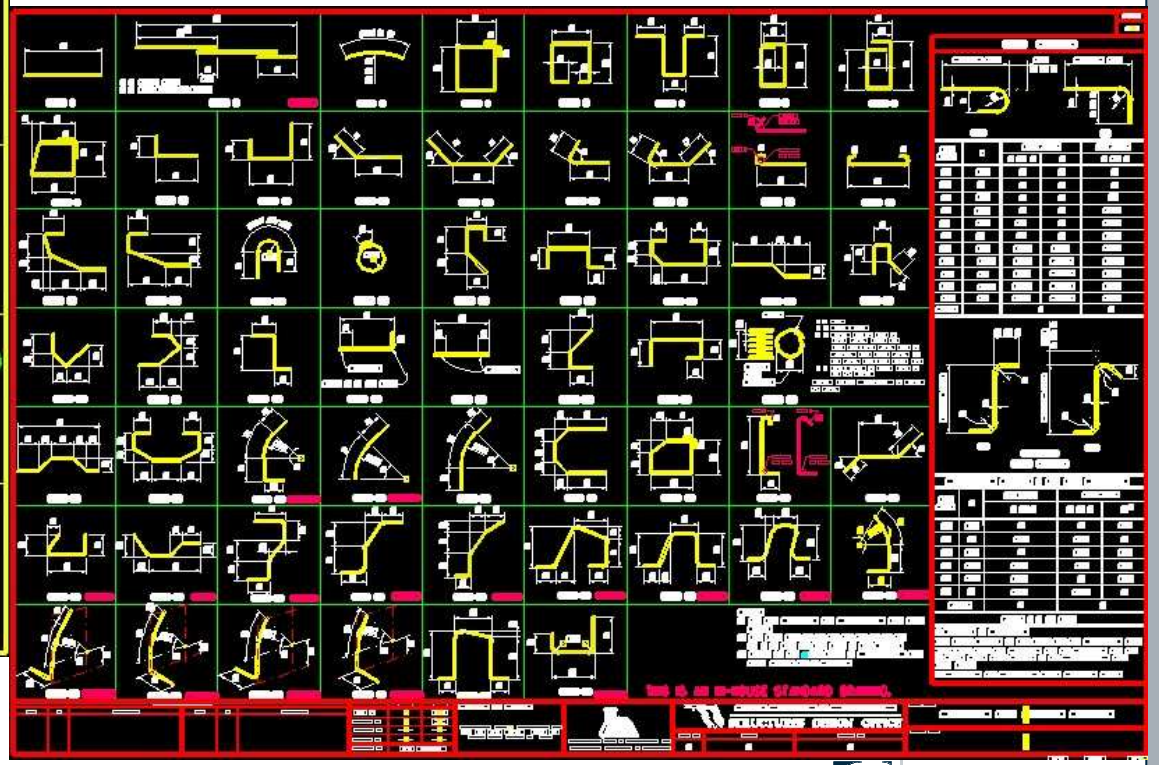




Design Code Shapes



Hundreds of Shapes Available.
Just Draw and let Rebar do the Detection…or just define your own.



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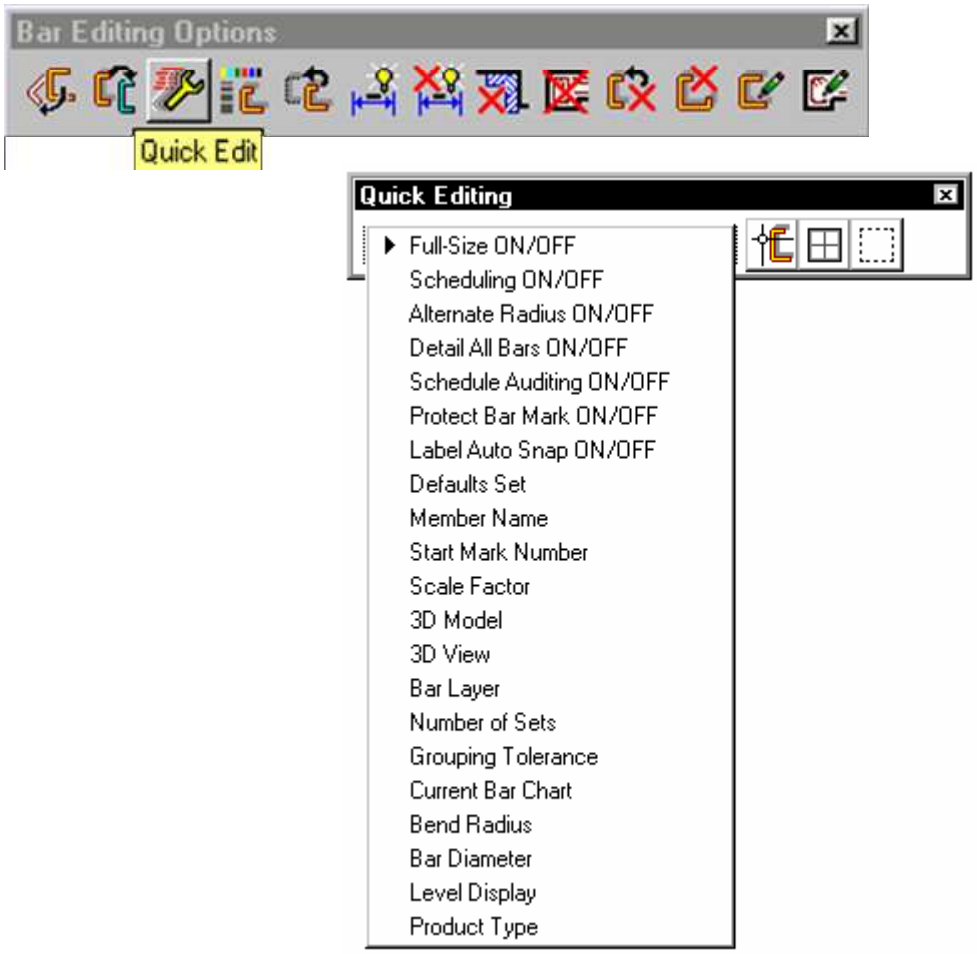
Intelligent Bar Editing

- Rebar eliminates redrafting time as powerful editing functions are available.



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Dynamic Dimensions

- Rebar's dynamic dimension capability intelligently resizes concrete arrangements.

- Dynamic dimensions can be stored and retrieved with components in the object library.

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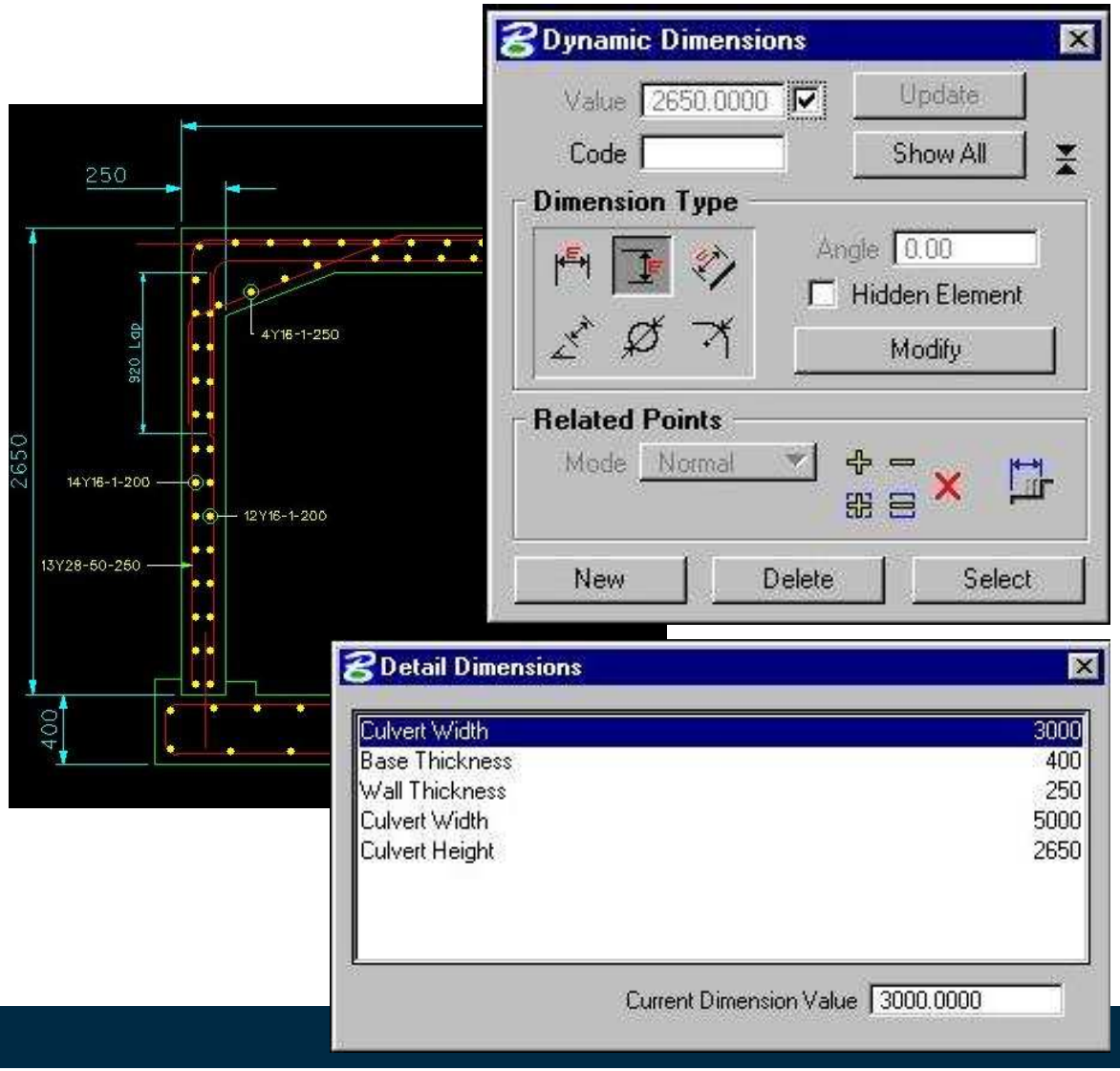
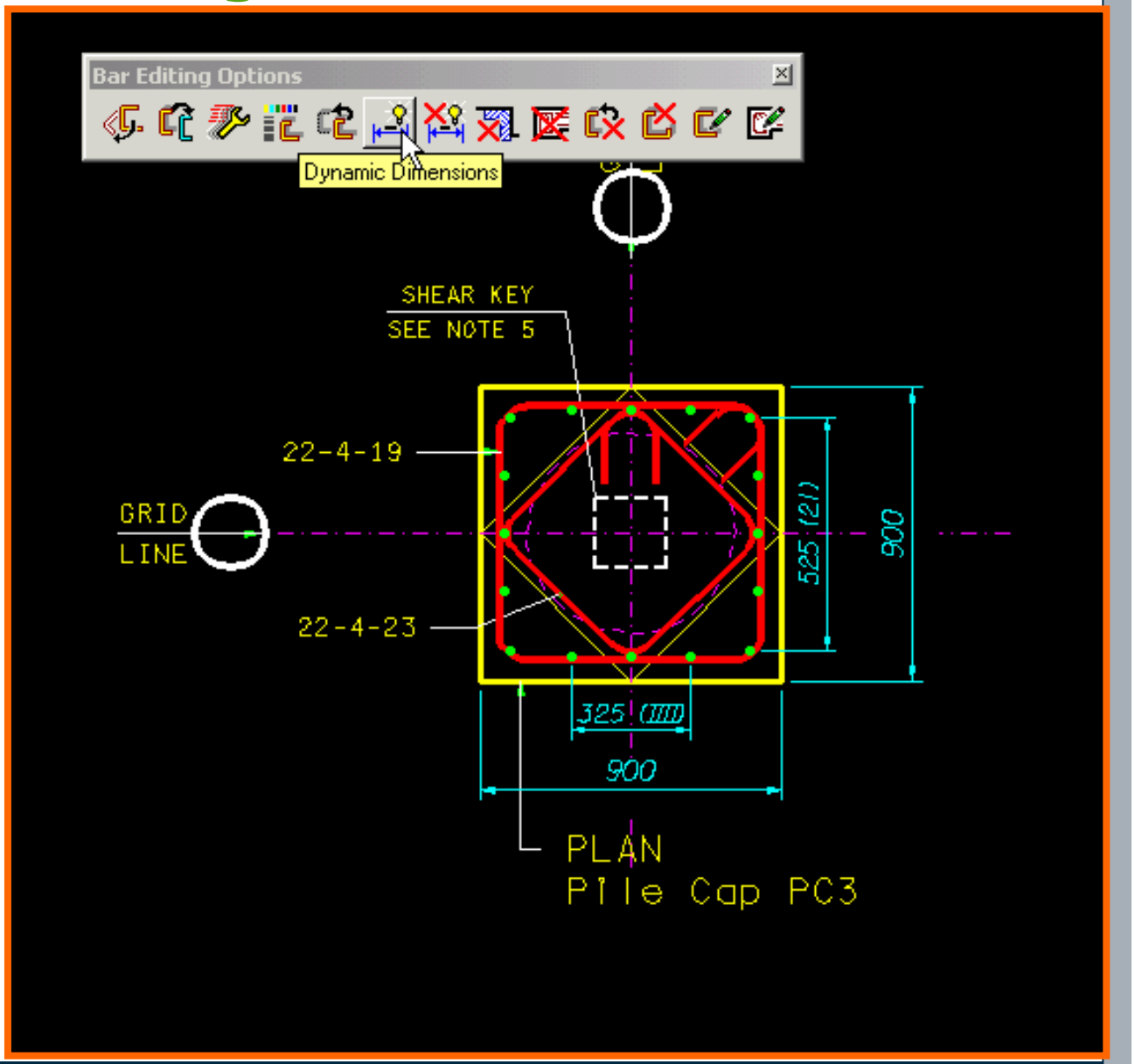
Dynamic Dimensions

- Manipulate a concrete arrangement in seconds.
- A single Rebar Dimension can re-size any number of details across the design file.



Dynamic Dimensioning

- Interactive Dynamic Dimensioning.
- Automatic changes to details forces reinforcing updates.
- Include related Points to a dimension for Automatic updates.



Automatic Full Size and Rescaling

- Full-size details are required to check for bar interferences.
- Simply place a fence around the detail, and rebar redraws main and longitudinal bars to exact size and location within the concrete detail.

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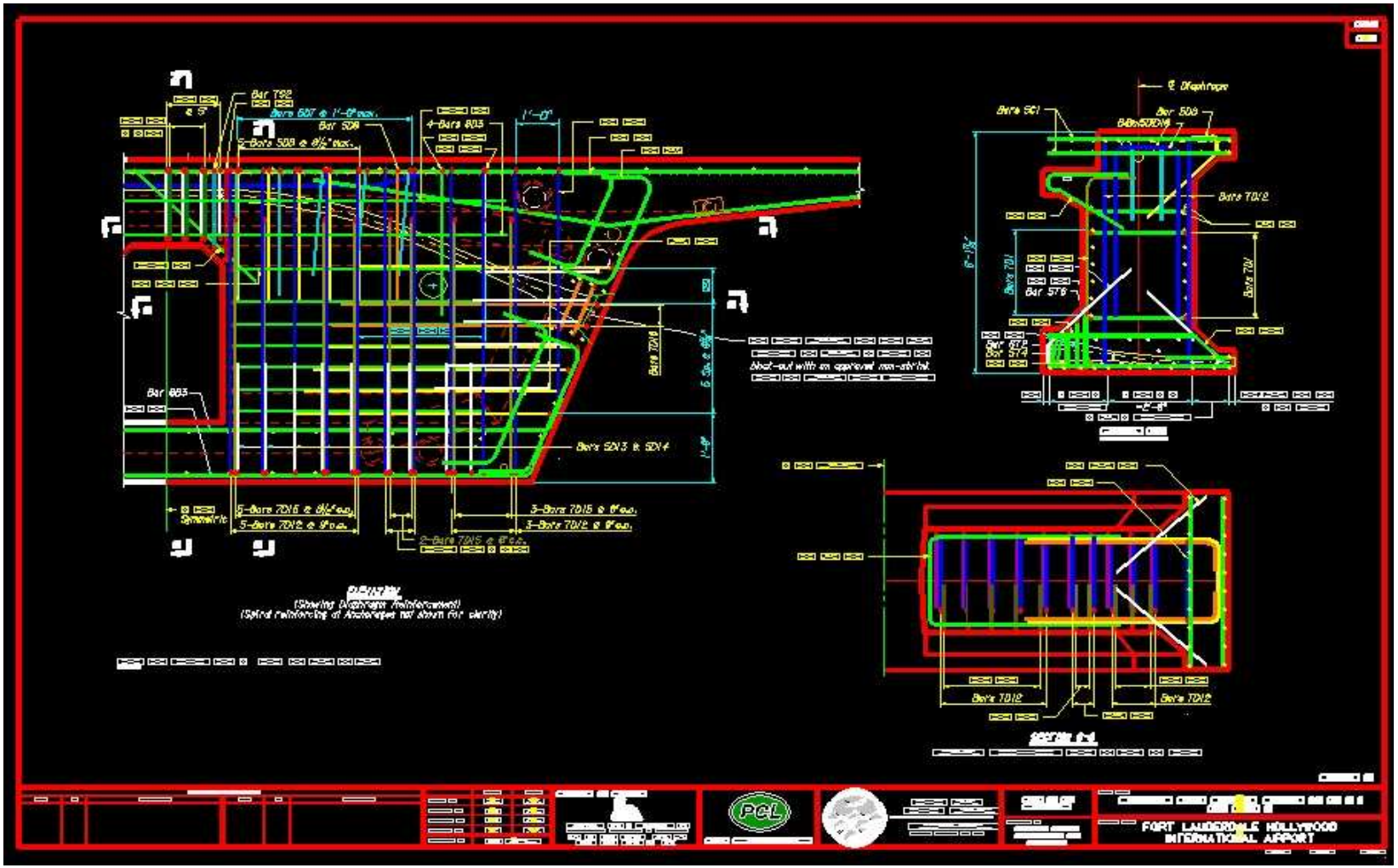
Automatic Full Size and Rescaling

- Center-Line Rebar Detailing.



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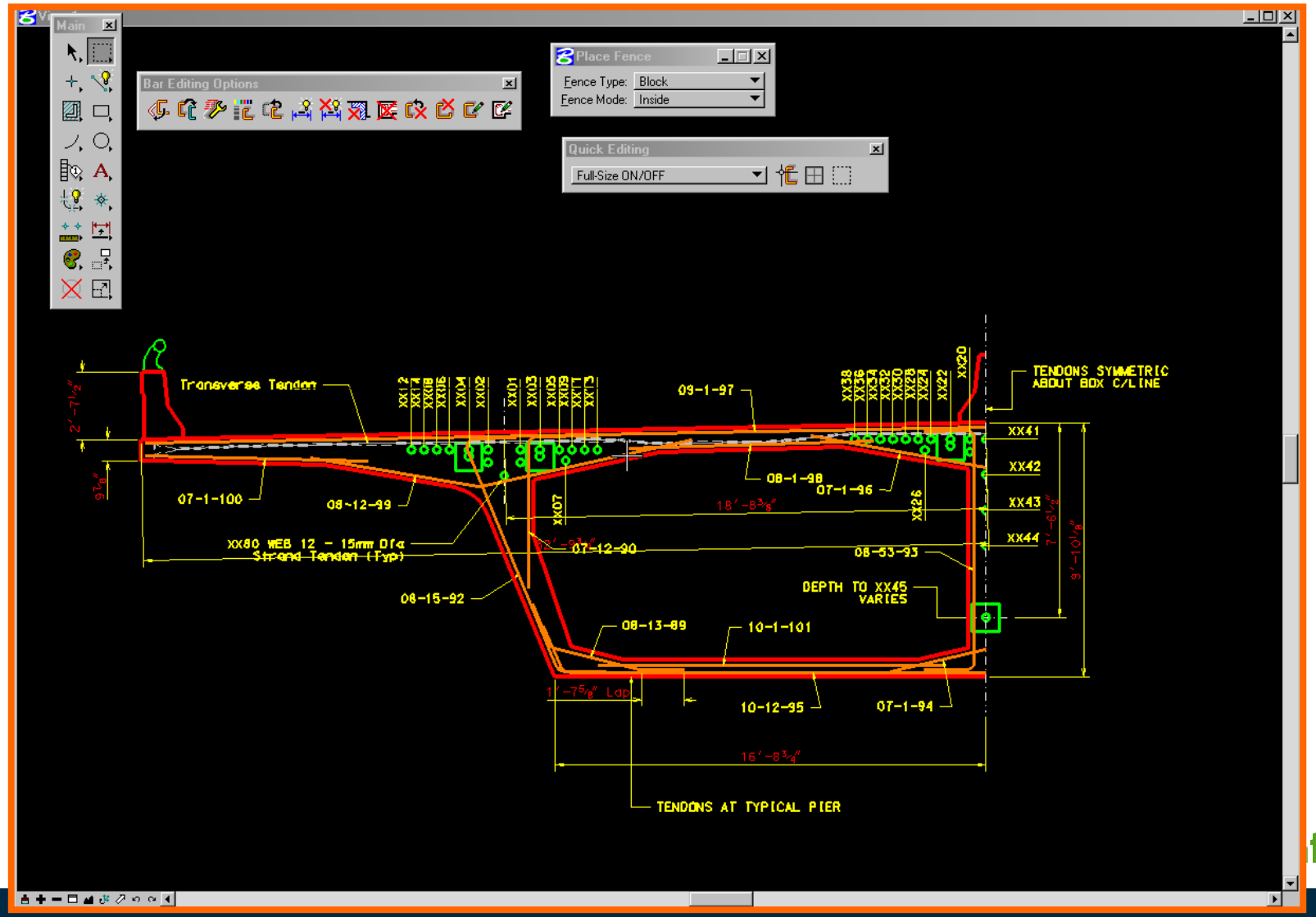
Automatic Full Size and Rescaling

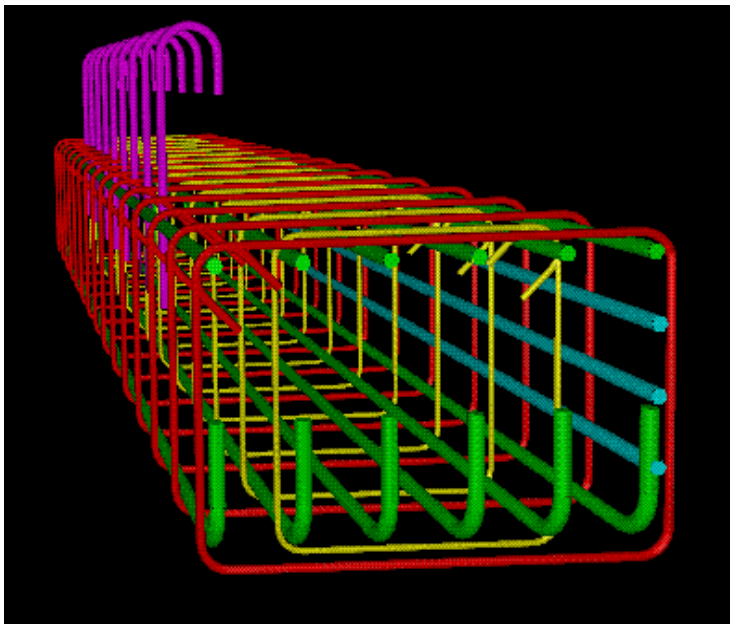
Fence a detail and toggle ON or OFF to view Full-size details.



3D Models

- Three-dimensional modeling of reinforcing bars has, until now, been extremely time-consuming.

- GEOPAK rebar overcomes these problems by producing 3D models automatically from the details contained in your normal 2D section, elevation, and plan views.



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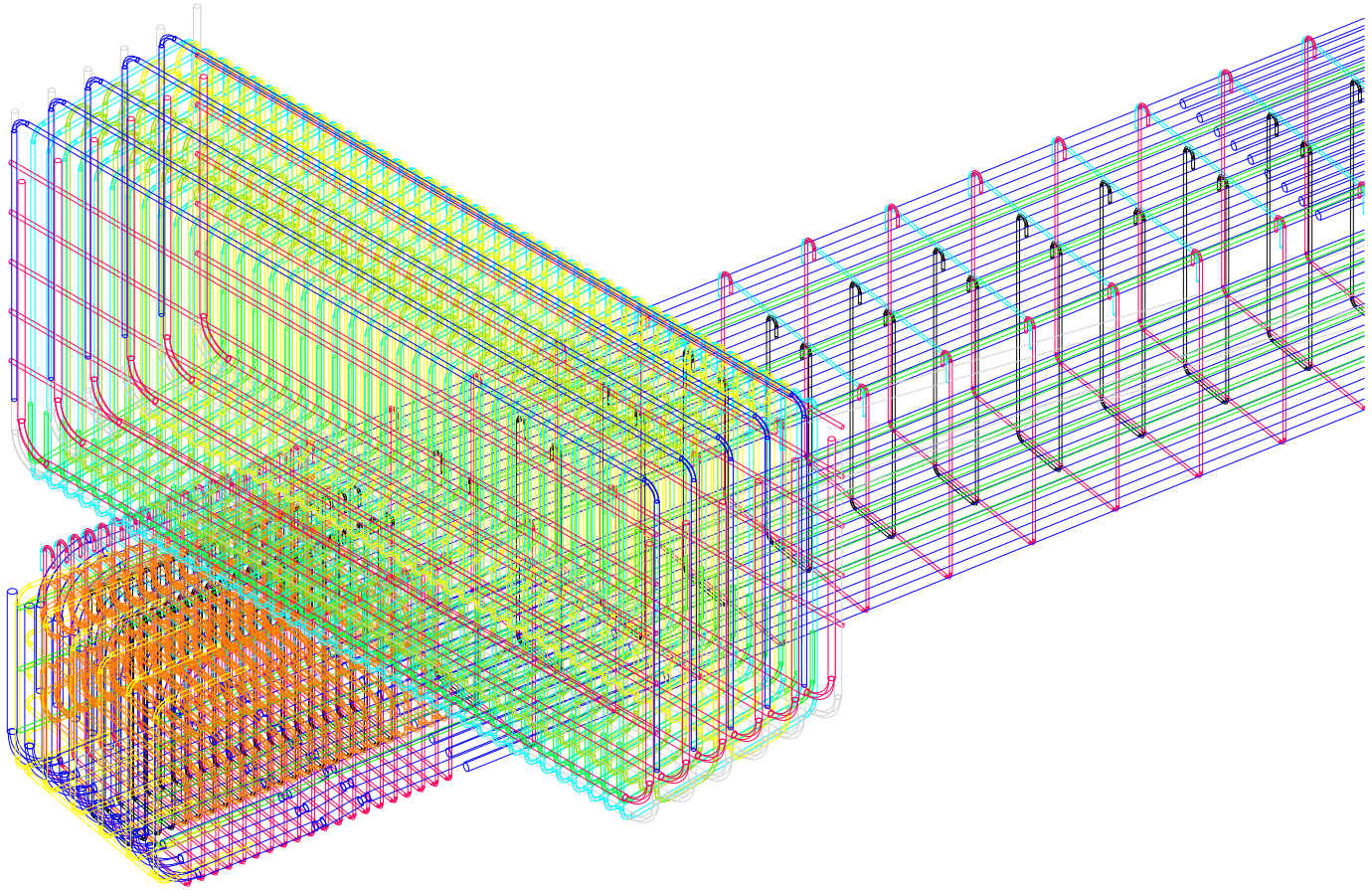
3D Models

- Wiremesh model created automatically by Rebar.



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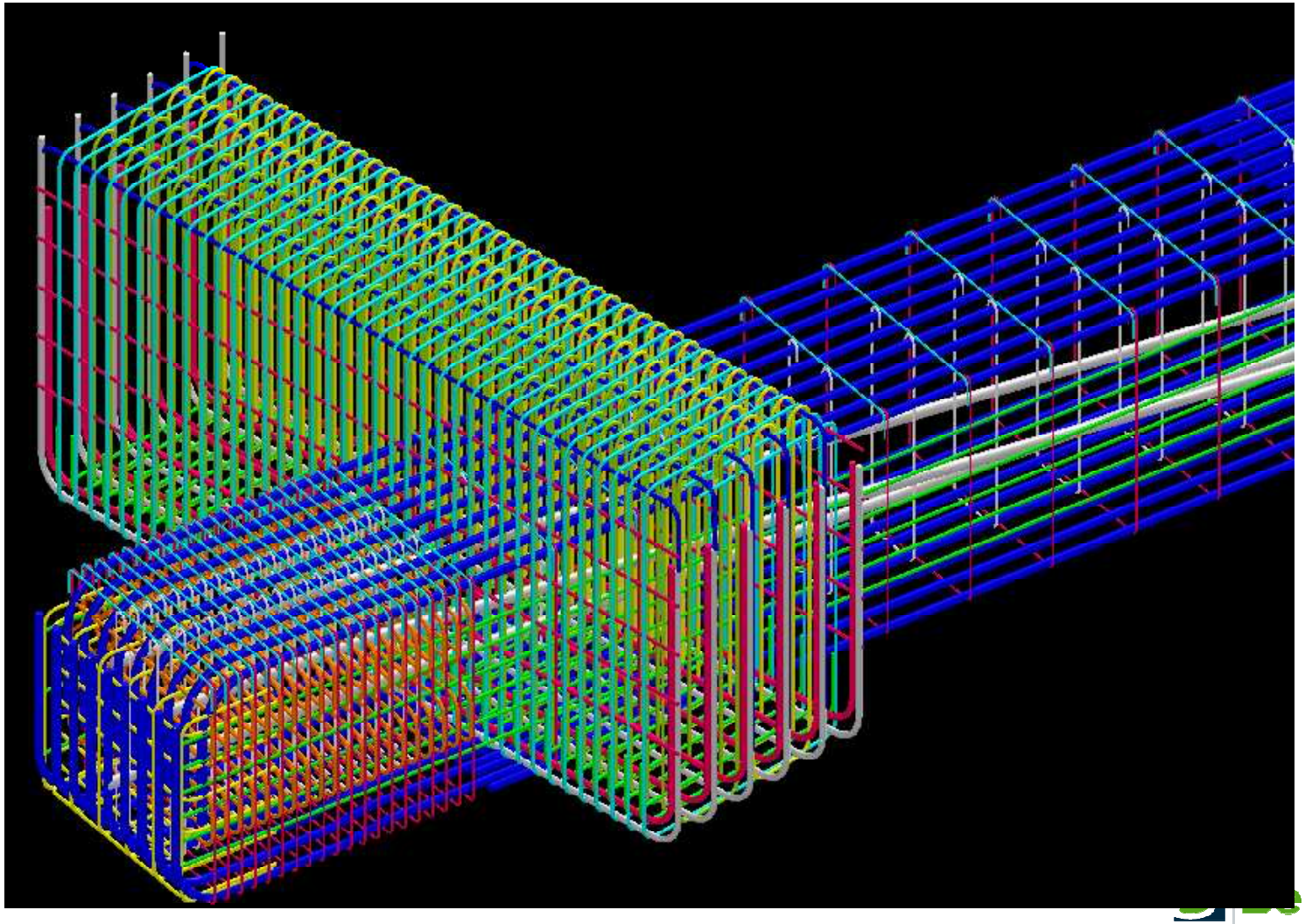
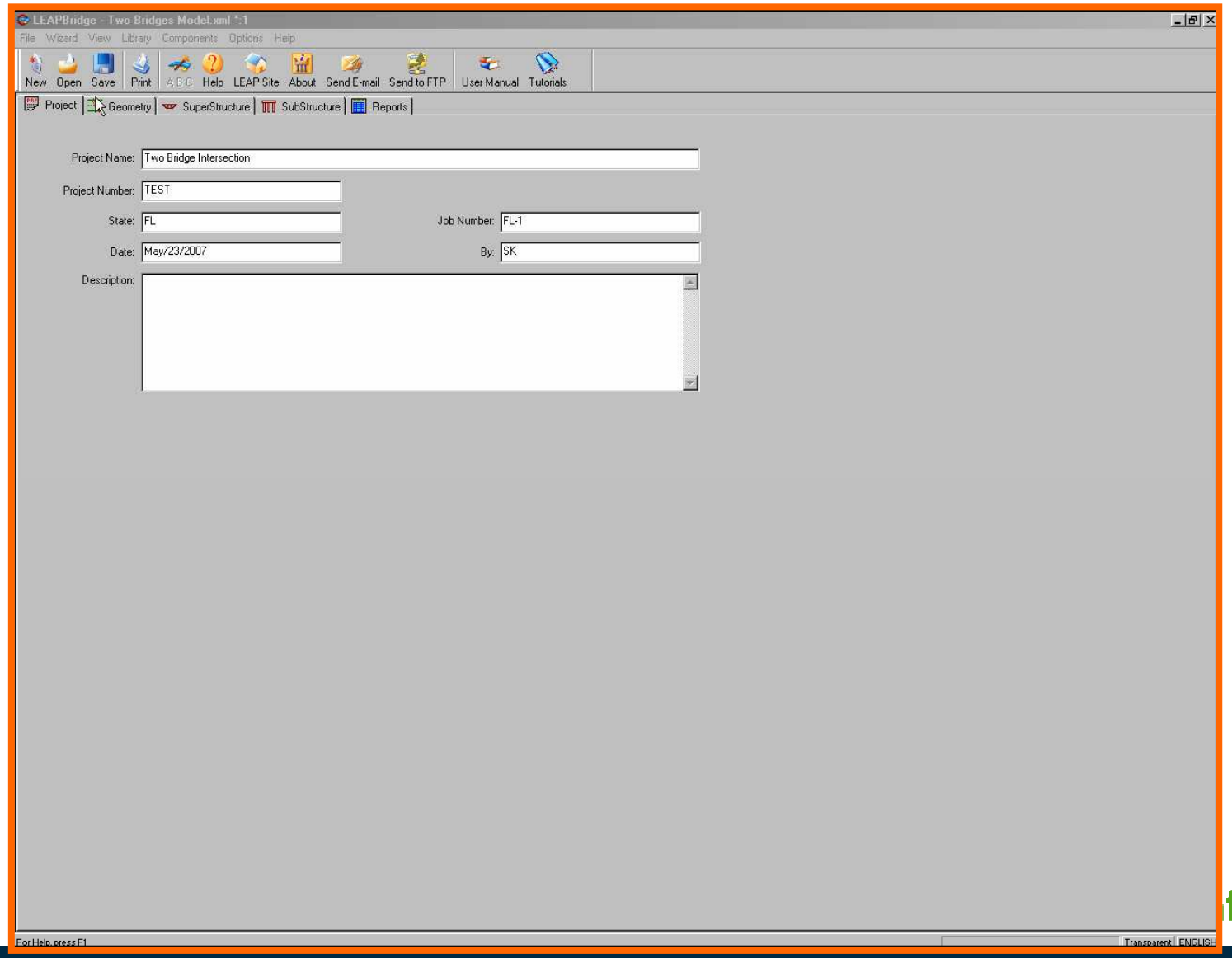
3D Models

- Rendered Beam connection showing post-tensioning tendons.



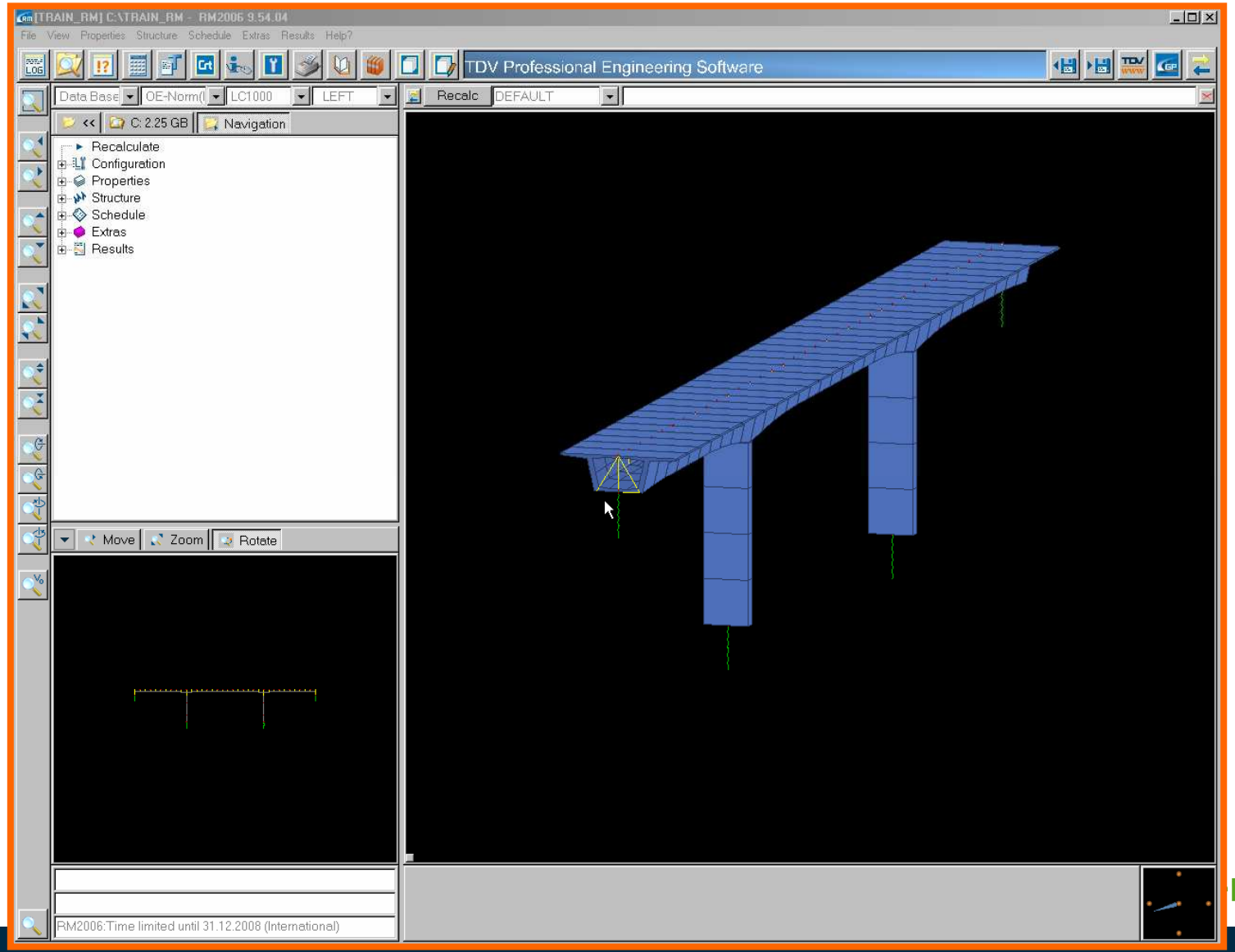
Interaction with Leap Bridge

- Detail with Rebar...



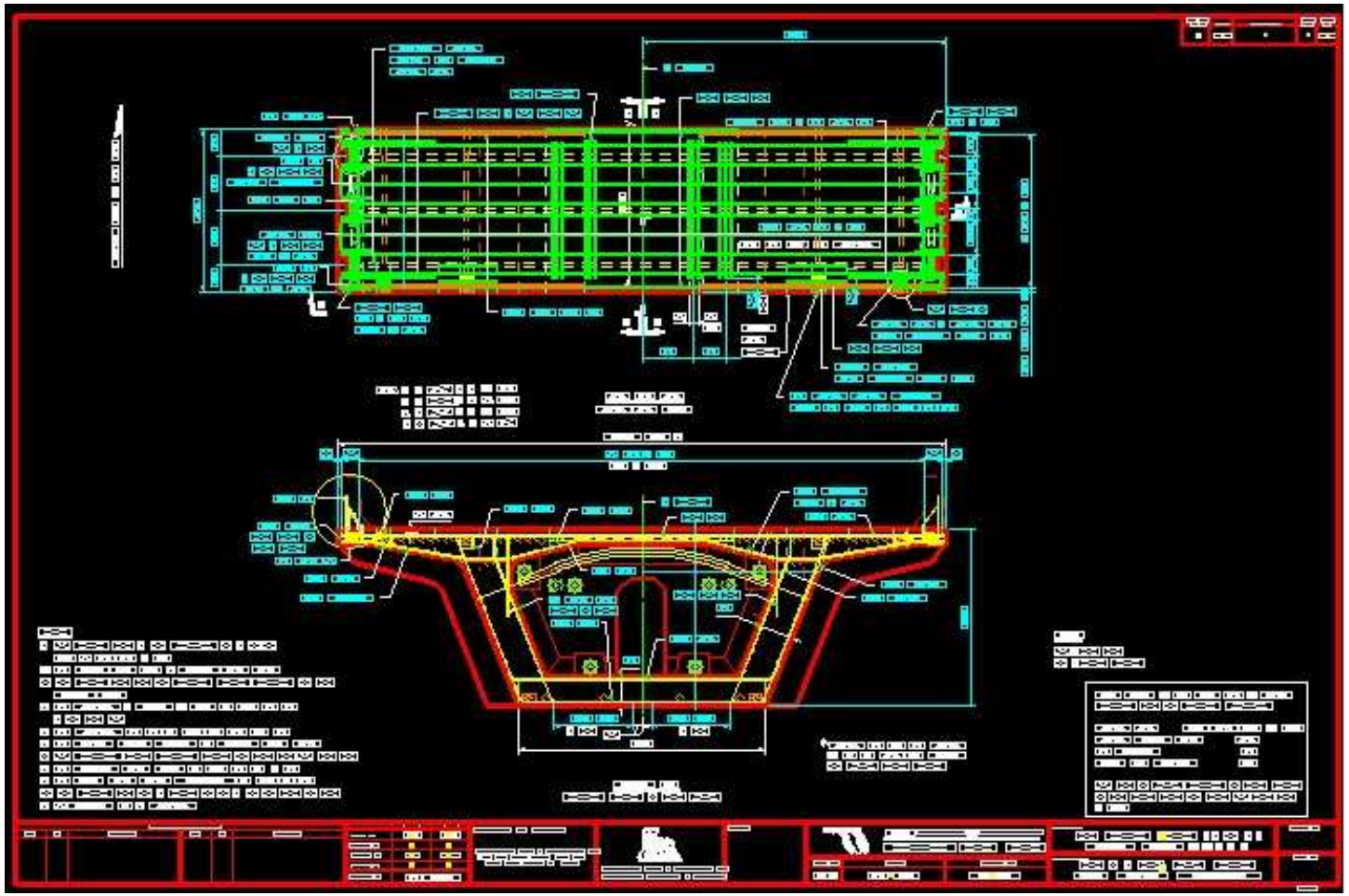
Interaction with RM Bridge

- Detail with Rebar...



Turn This Into..

Contract Drawings.



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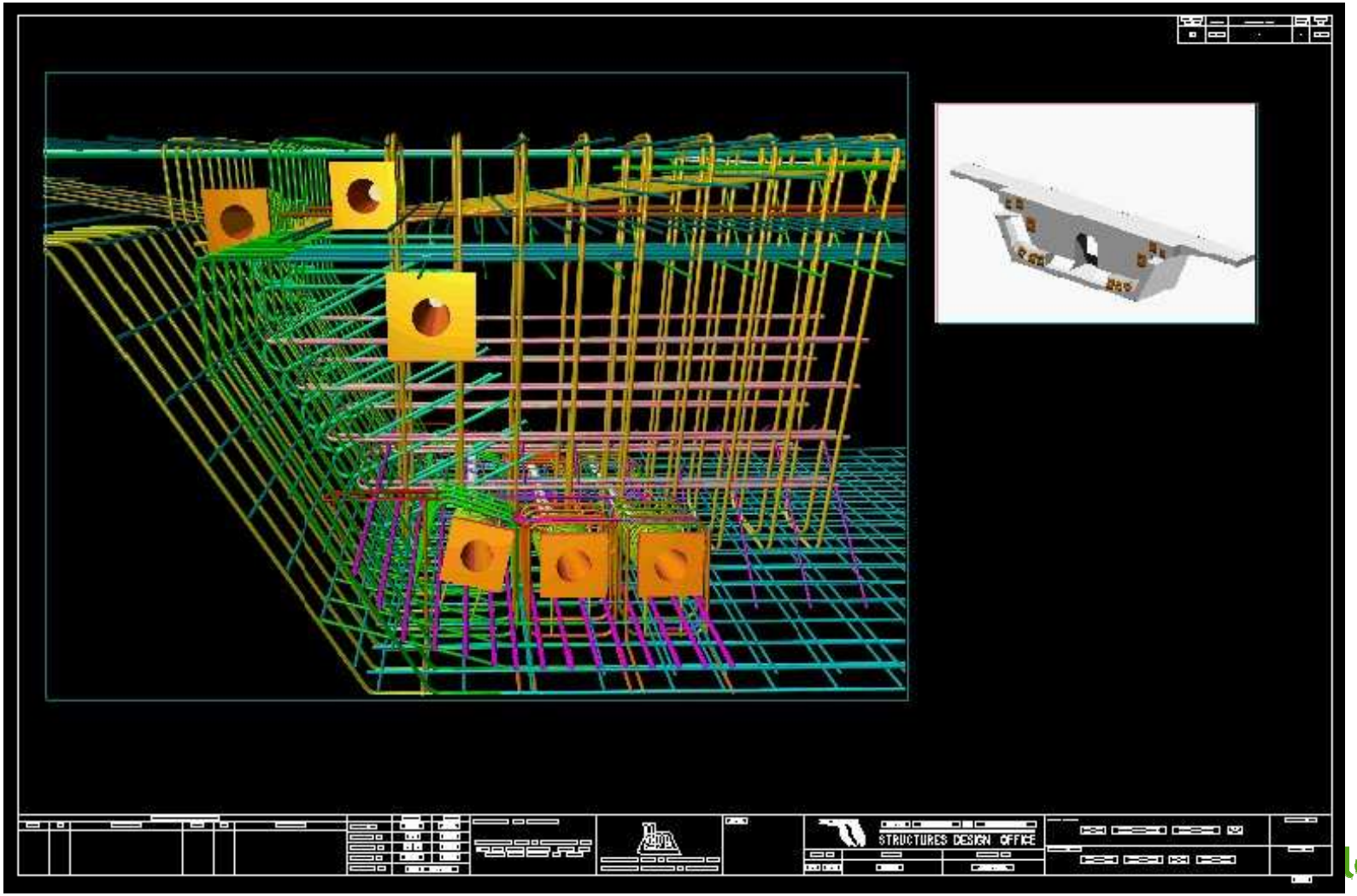
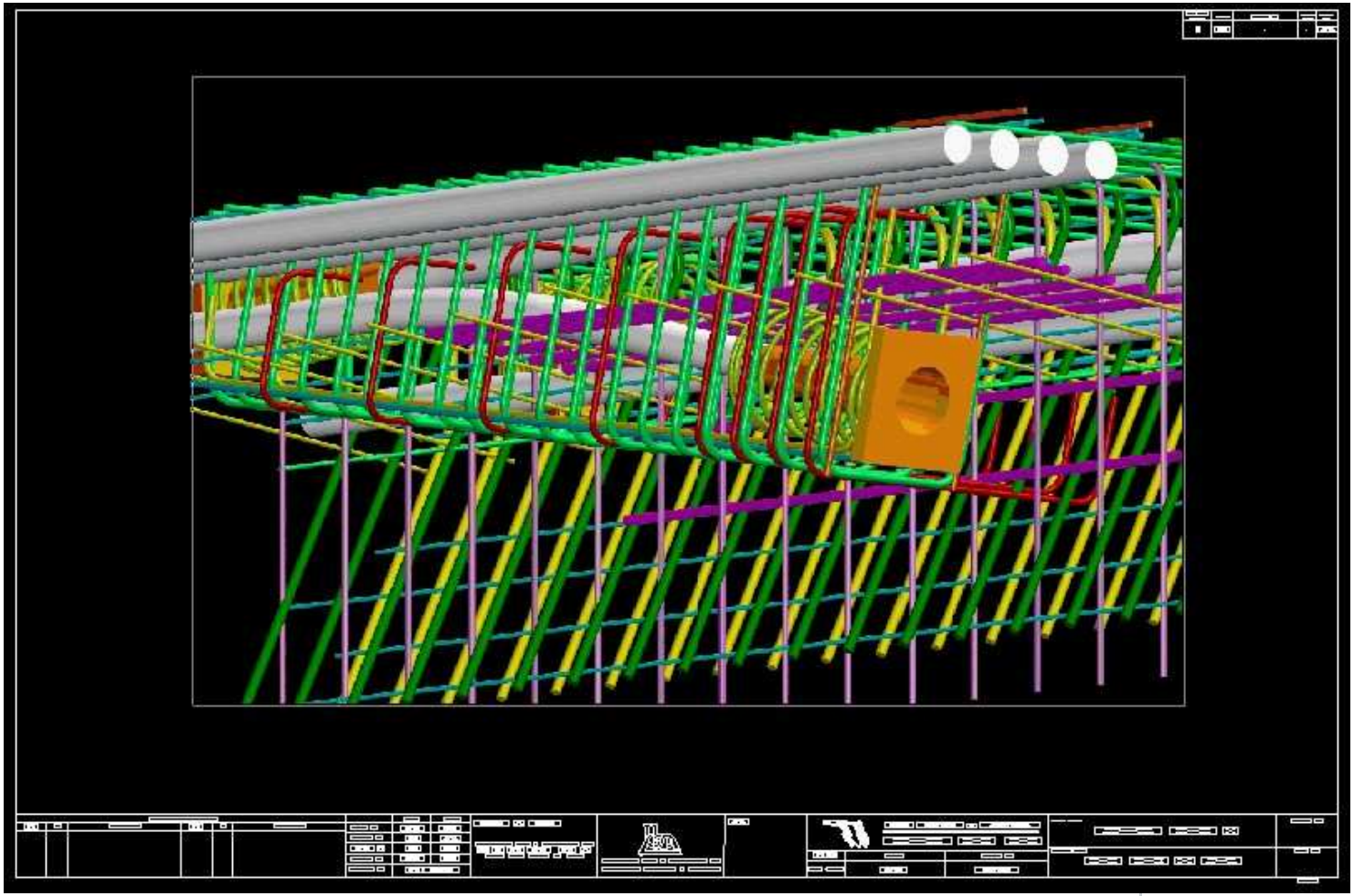
3D Modeling

Integrated Drawings.



3D Modeling

Integrated Drawings.



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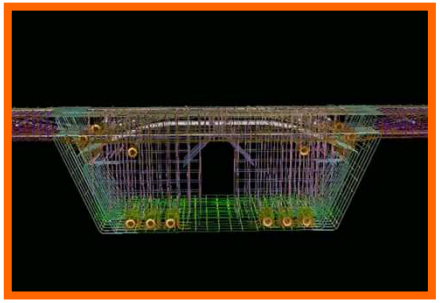
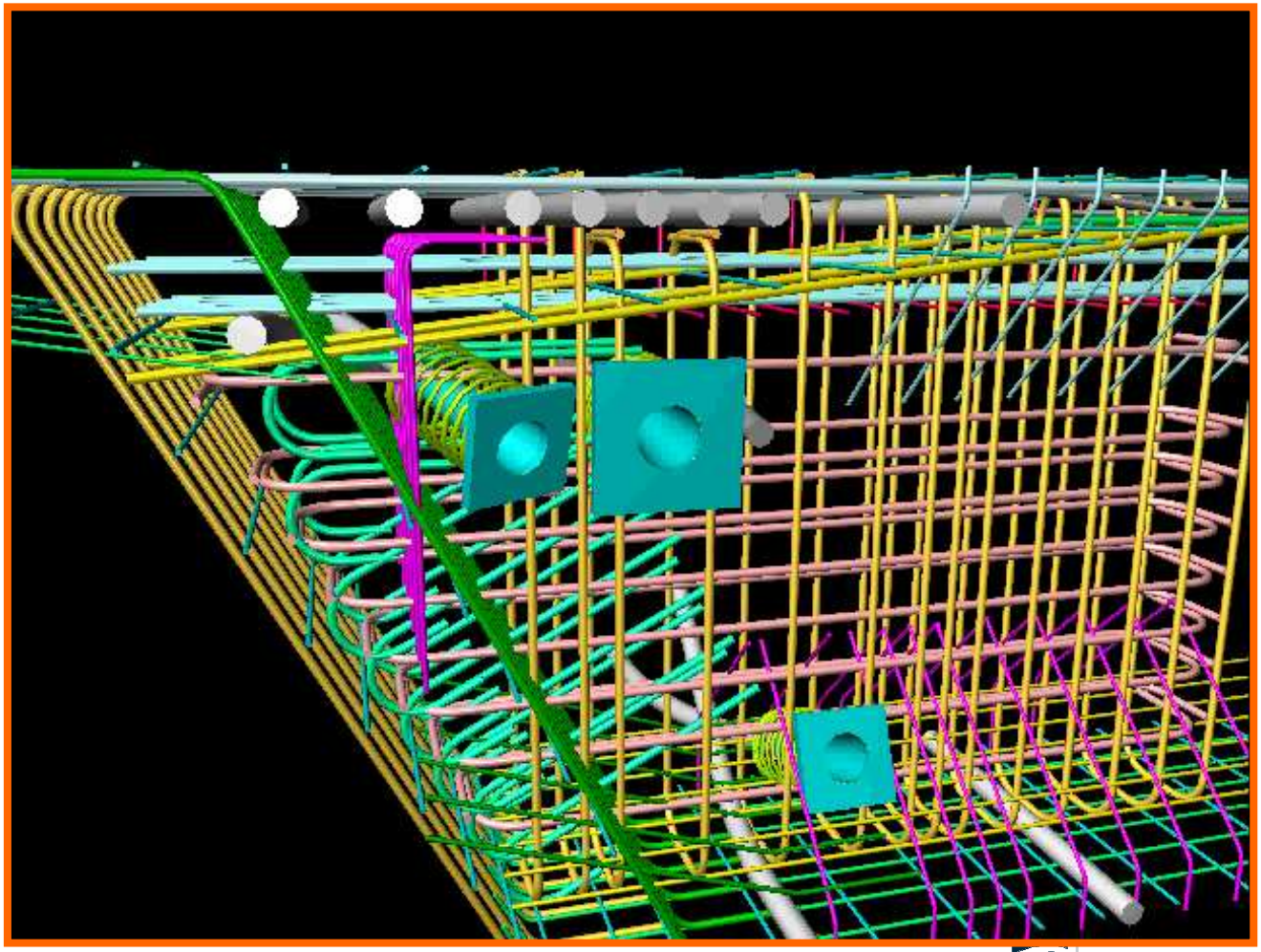
3D Model Checking



Check
Interferences



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Thank you for your attention!

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