



Directly responsible to the Deputy Director - Engineering.

The Bridge Division is responsible for:

Providing consultation to the Divisions and Districts on issues concerning design, construction, management and maintenance of structures and representing the Department at meetings and conferences pertaining to structures.

Managing the reallocation of resources to achieve scheduling deadlines.

**RESEARCH AND MISSOURI RIVER BRIDGES**

Oversee the 17 Missouri River Bridges – 9 with Nebraska as a lead state, 6 with another state as a lead state, and 2 privately owned bridges.

Technical assistant to the Bridge Division for the AASHTO Bridge Specifications.

Technical assistant to the Bridge Division for Pre-stressed concrete, load rating, and NBIS activities.

Involvement with AASHTO Bridge subcommittees, PCI, and PCAN.

Consulting with industry and academic representatives concerning research, new products and processes.

Legislative liaison for the Bridge Division.

Providing research and development for various bridge engineering applications.

**BRIDGE DESIGN SECTIONS**

Providing preliminary recommendations for bridge projects.

Establishing final bridge data sheets and TS&L's for bridges and special structures from site survey and inspection data.

Managing the preparation of complete structural plans, specifications and special provisions for rural, urban, interstate and expressway bridges.

Directing Computer Aided Design and Drafting (CADD) operations in plan preparation.

Reviewing bridge design plans, specifications and special provisions prepared by consulting engineers for rural, urban, federal-aid county, interstate and expressway bridges.

Providing construction consultation to project managers and inspectors.

Managing and developing items for the Bridge Office Policies and Procedures Manual.

Reviewing shop plans and drawings.

**Steel Inspection:** Managing the quality assurance inspection of steel fabrication for rural, urban, federal-aid county, interstate and expressway bridges and other steel structures.

**Special Projects:** Managing the preparation of complete structural plans, specifications and special provisions for bridge size and non-bridge size structural elements (i.e., drainage inlets, box culverts).

Providing inspection of damages, recommendation and preparation of contract plans for repairing damaged structures. Assisting district personnel in the repair of damaged bridges.

**BRIDGE MANAGEMENT SECTION**

Developing and maintaining the Nebraska Bridge Management System to systematically determine the appropriate needs of Nebraska's bridges.

Needs of the bridges may include preservation measures, maintenance, repair, widening, rehabilitation, or replacement.

Providing analysis for the efficient maintenance and replacement of state-owned bridges in Nebraska.

Monitoring the schedule of projects in the bridge design process.

**INSERVICE BRIDGES SECTION**

Managing all aspects of the National Bridge Inspection Standards (NBIS) regulations.

Administering the statewide bridge inspection program.

Providing field inspection, coding and recording data for the structural inventory and appraisal of all state-owned highway bridges.

Performing load capacity ratings for all state and county bridges. Analyzing bridges for overload permits and load restrictions.

**BRIDGE INVENTORY AND DATA SECTION**

Administering the analysis and reporting of inventory, inspection, ratings and data collection to the Federal Highway Administration for all public highway bridges.

Providing technical support, maintenance of personal computers and structure-related software.

Specifying the monitoring of bridge coatings.

Supporting "Clarity" within the Bridge Division.

Developing and managing a document and photo management system for the Bridge Division.

Maintaining a record of all bridge sized structures within the State of Nebraska.

**HYDROLOGY AND HYDRAULICS SECTION**

Providing independent review of consultant hydrological analysis and preliminary bridge data sheets for state and federal-aid county bridges.

Directing hydrological analysis and the development of preliminary bridge data sheets for state bridges designed by state personnel.

Providing an Interdisciplinary Scour Assessment Team for the scour critical bridge program.

Developing design details and permit information for hydraulic related maintenance issues.