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INDUSTRIAL TRAINING REPORT

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Abstract

Bridges are structure, which connect the roadway across obstacles such as rivers, roads and rails. They can be the weakest links in a road network and must be very well maintained in order to keep the roads open to traffic. Most of the bridges carry a road over a river. Culverts are included too because they are like small bridges. A bridge shall be built to complement and exist in harmony with its surrounding. It should never be considered independent of its own environment. All the elements of structure and its surrounding should be considered as an interconnected part of continuous design process.

A bridge is an assembly of many components which interact with each other and their environment. The components can be grouped into three categories which are superstructures, substructures and miscellaneous components. The superstructure consists of the structural components above bearings. These include the deck slab, beams or girders, diaphragms and parapets. The substructure consists of those components of the bridge below the bearing supporting the superstructure. It comprises abutment, piers and the foundation system. The miscellaneous components include bridge surfacing or pavement, approach slab, expansion joints, drainage, slope and bank protection, railings, kerbs and sidewalks.

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