### **BAB II**

### CERTAIN STATIC BEAM STRUCTURES DUE TO FIXED LOADS

A bridge will be planned to connect region A and region B. The bridge has an elongated girder in the middle of the bridge width above which there is a highway. This longitudinal girder structure is modelled as a simple beam using joints and rollers at each end.

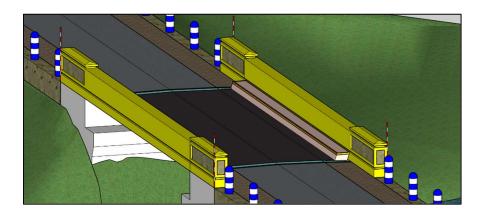
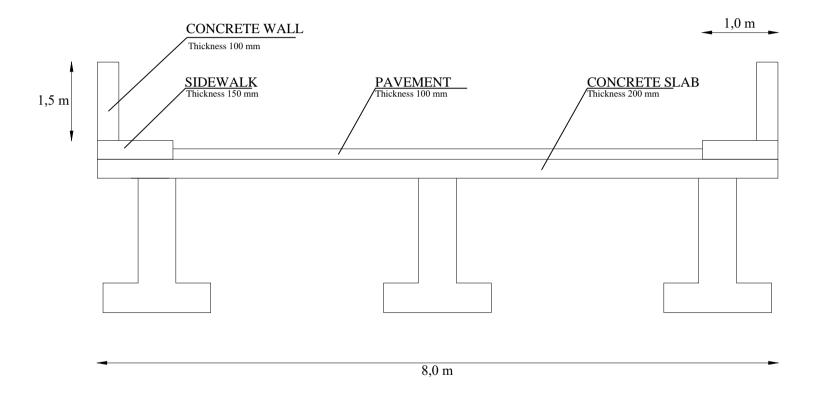
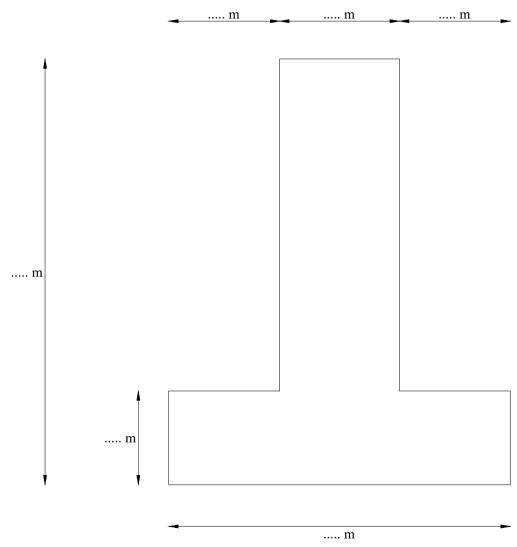


Figure 2.1 3D View of the Bridge









### **BAB III**

## CERTAIN STATIC FRAME STRUCTURES DUE TO FIXED LOADS

The structure of the staircase is defined as a frame that has joint and roller supports. And the load is the weight of the stair plate, stair landing, and ceramics.

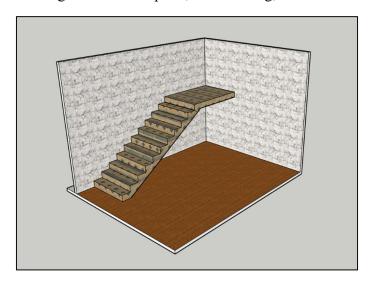
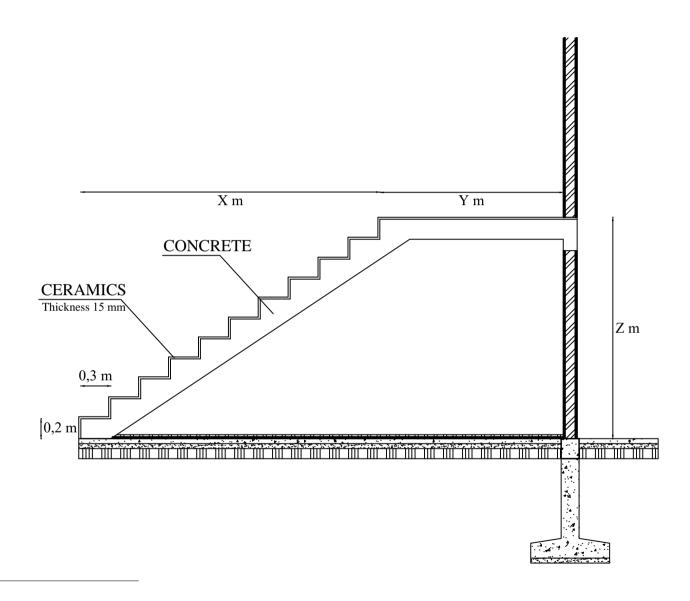


Figure 3.1 3D View of Staircase





SIDE VIEW

# **BAB IV**

# CERTAIN STATIC TRUSS STRUCTURES DUE TO FIXED LOAD

A pratt-type truss bridge connecting region A and region B is planned. The structure of the bridge is defined as a truss.

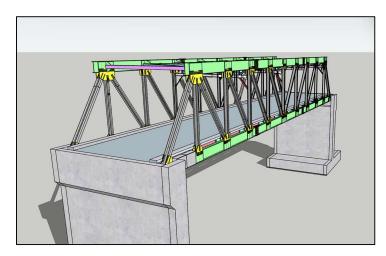
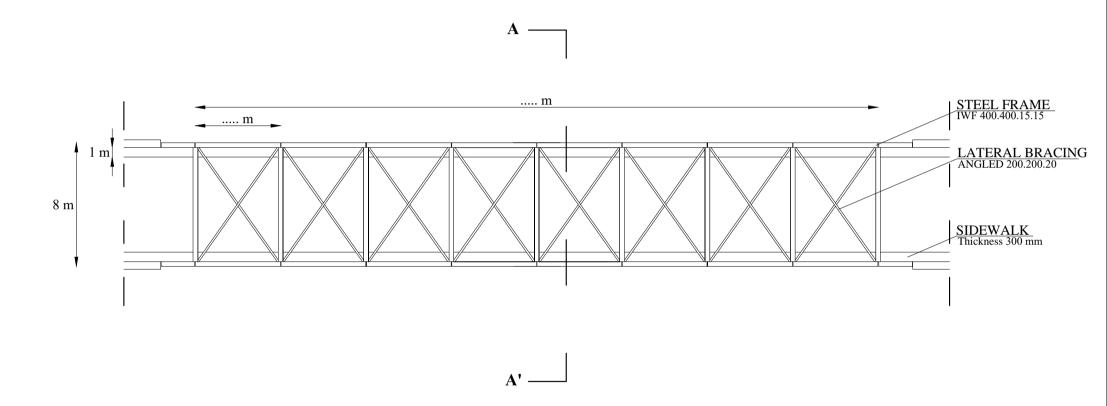
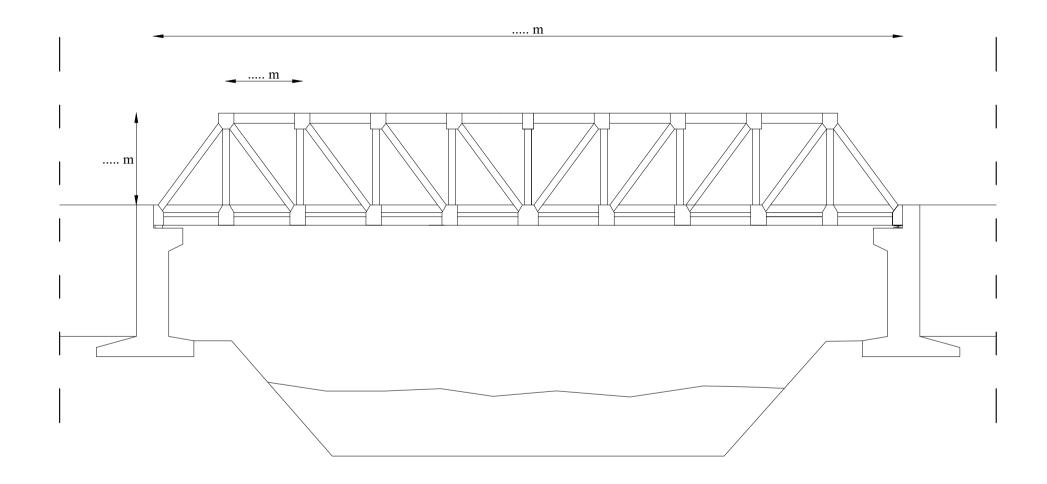
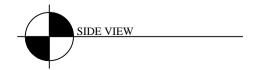


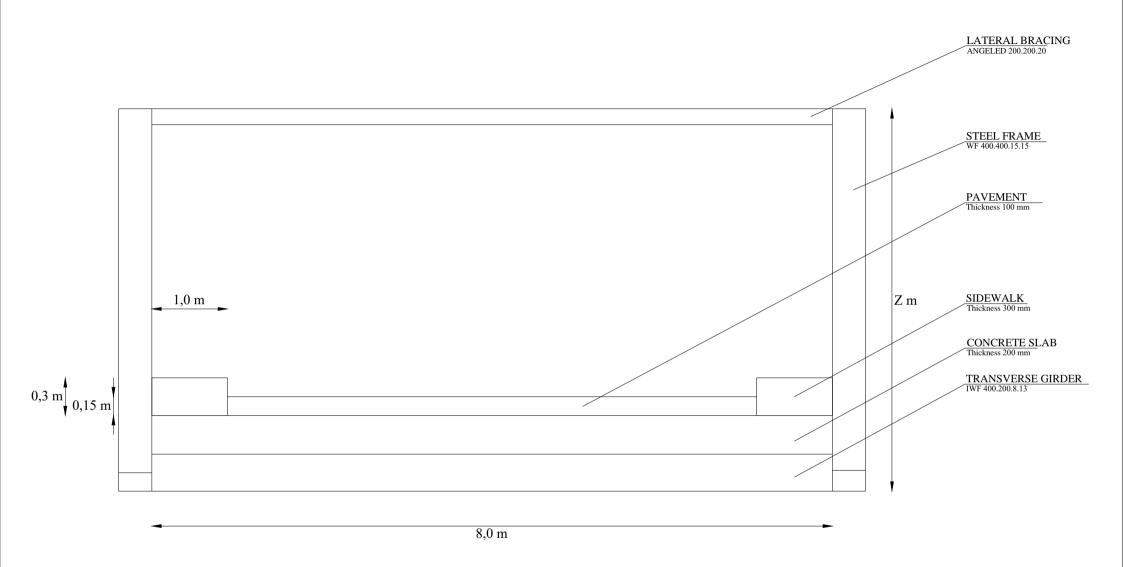
Figure 4.1 3D View of Pratt Truss Bridge













### **BAB V**

### CERTAIN STATIC BEAM STRUCTURES DUE TO MOVING LOADS

A bridge will be planned to connect region A and region B. The bridge has an elongated girder in the middle of the bridge width above which there is a highway. This longitudinal girder structure is modelled as a simple beam using joints and rollers at each end.

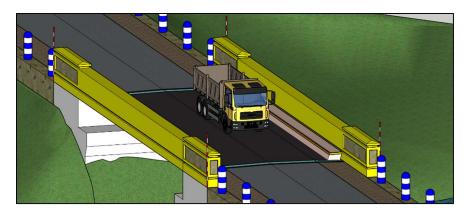
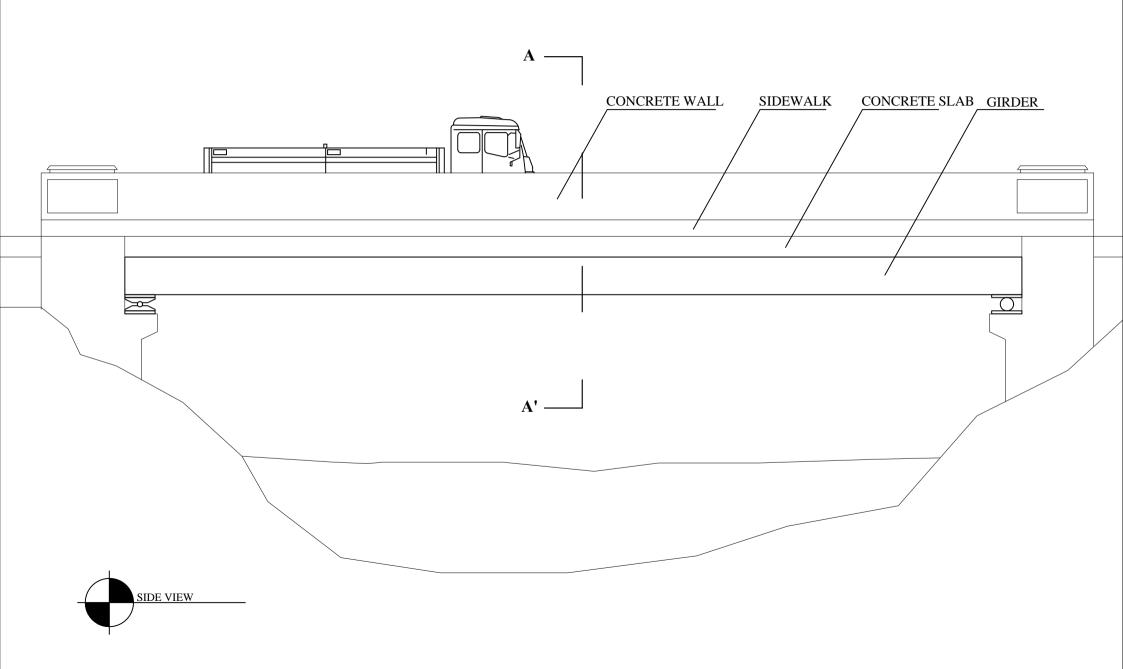
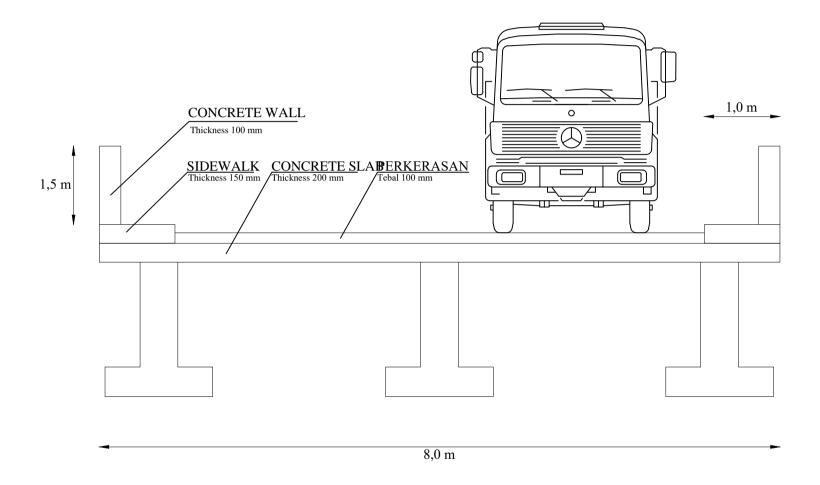
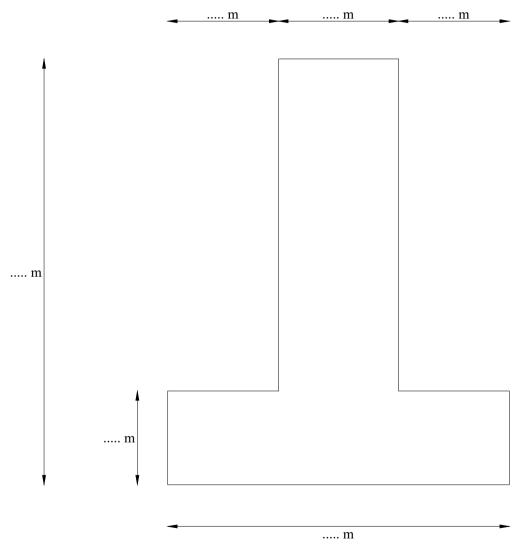


Figure 5.1 3D View of the Bridge









## **BAB VI**

# STATIC TRUSS STRUCTURES DUE TO MOVING LOADS

A pratt-type truss bridge connecting region A and region B is planned. The structure of the bridge is defined as a truss..

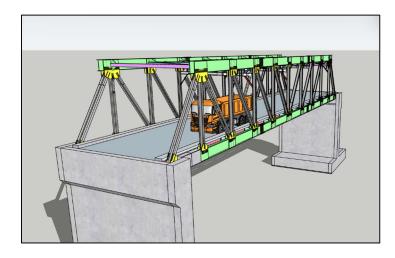


Figure 4.1 3D View of Pratt Truss Bridge

