PGSuper Coordinate Systems

# Global Coordinates

The global coordinate system defines points in a 3D global space

Xg = Positive values are East

Yg = Positive values are North

Zg = Elevation



# Route Coordinates

Route coordinates are measured along the curvilinear path that represents the roadway alignment.

Station = distance along path from starting point

Offset = distance from the path, measured normal to the path. Positive values are to the right, looking ahead on station

Elevation = elevation

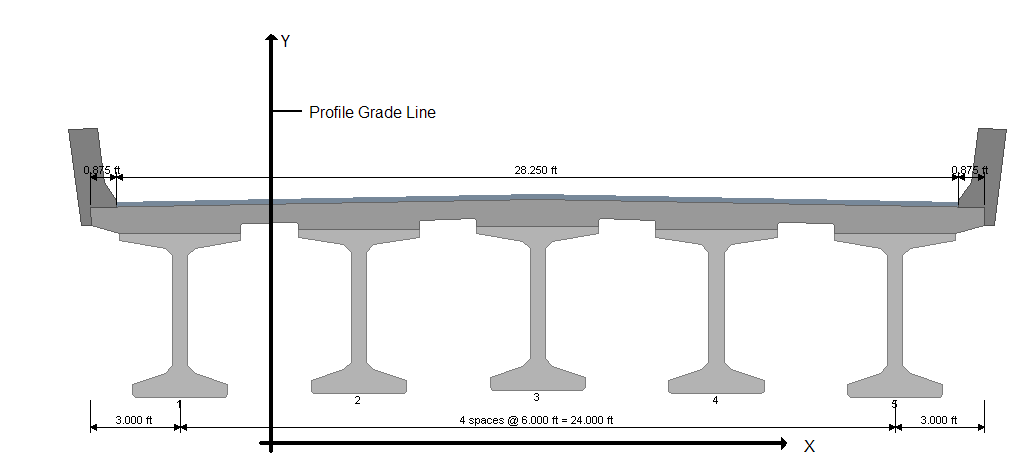


# Bridge Coordinates

Bridge coordinates are a planar coordinate system measured normal to the roadway alignment.

Xb = normal distance from the alignment (same as Offset in the Route Coordinate System)

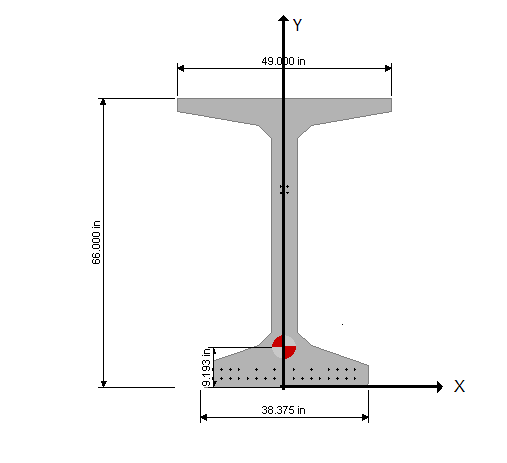
Yb = elevation (same as Elevation in the Route Coordinate System)



Girder, deck, and traffic barriers are defined in the bridge coordinate system.

# Girder Coordinate System

Girder coordinates are a planar coordinate system that lays in the same plan as the Bridge Cross Section coordinates. The origin of the coordinate system is the bottom center of the rectangle that surrounds the girder cross section.



Strands are defined in the girder coordinate system