

ABSTRACT

ANALYSIS OF BEHAVIOR GIRDER PRESTRESSED CONCRETE BY SET IMPLEMENTATION GIRDER OF BRIDGE

By

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The Construction of prestressed concrete general used as girder of bridge. Some system of set implementation (erection) girder of bridge influence of behavior structure girder. In this examination are two system erection girder of bridge that will observation, there are system full span and balanced cantilever. The purpose of this examination is for know difference of behavior structure girder by both that system. Object of examination that do analysis structure that are PCI girder and box girder.

Analysis structure girder that do them are calculated of the beginning force prestressed, determined of line of prestressed tendon, calculated lose of prestressed, and control of pressure that occurred at longitudinal section of girder.

From output of analysis that do it, be found difference of behavior structure girder that is at the center line of prestressed tendon. At system full span, the position of center tendon dominant under neutral line of longitudinal section, and for system balanced cantilever, the position of tendon beside under neutral line of longitudinal section too be found on neutral line. The difference of center line of tendon consequenced by difference of position center tendon at each point that influenced by moment that occurred at structure girder. At system full span, the construction of girder of bridge designed as one span with shoring joint – roll. And for system balanced cantilever, the construction of girder of bridge designed as continue span. So, from difference of construction design consequence for difference moment that occurred at structure girder.

Key words : girder, erection, full span, balanced kantilever, tendon