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## Non-Chronological Approach in Crane Girder and Composite Steel Beam Installation: Case Study

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**Abstract :** The time delay and the structural stability are major issues in big size projects due to several factors. Improper planning and poor coordination lead to delay in construction, which sometimes result in reworking or rebuilding. This definitely increases the cost and time of project. This situation stresses the structural engineers to plan out of the limits of contemporary technology utilizing non-chronological approach with creative ideas. One of the strategies to solve this issue is through structural integrity solutions in a cost-effective way. We have faced several problems in a project worth 470 million USD, and one such issue is crane girder installation with composite steel beams. We have applied structural integrity approach with the proper and revised planning schedule to solve the problem efficiently with minimal expenses.

Keywords: construction management, delay, non-chronological approach, composite beam, structural integrity

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