

**CONSTRAINT SIMULATION - IDENTIFICATION
OF IMPORTANT CONSTRUCTION CONSTRAINTS**

Sebastian Hollermann
Hans-Joachim Bargstädt

Institute for Construction Engineering and Management
Bauhaus-Universität Weimar
Marienstraße 7
D-99423 Weimar, GERMANY

ABSTRACT

This paper identifies construction constraints for a constraint simulation of a construction flow. Therefore the construction environment and the methodologies of scheduling in construction are analyzed. Typical characteristics of construction schedules are classified. The relationship between different activities or between activities and building elements or between different building elements are examples for identified classes. With these characteristic construction schedules of real construction projects are analyzed. The results of this survey of construction schedules and the identified strategies of construction methods are presented in this paper in order to understand the process of scheduling. Based on that, the results of constraint based scheduling simulation can be improved a lot. Additionally, the reliability of construction schedules can be improved. Thru the productivity in construction can be increased.