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Disputes Potential Index

*Prepared by the
Construction Industry Institute
Dispute Prevention and Resolution Research Team*

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Executive Summary

Contract disputes and litigation between parties on construction projects should be avoided to minimize the overall costs of construction. Disputes can be minimized by implementing many of the recommendations and practices promoted by the Construction Industry Institute (CII).

Many of the parties to the design and construction process, however, may not be aware of their need to implement CII recommended practices on a given project in order to prevent disputes from arising. The CII Disputes Prevention and Resolution Research Team, therefore, developed a tool to predict the potential for a construction project to incur contract disputes and claims. This tool, which is based on research that establishes a strong correlation between certain project factors and the occurrence of disputes, is called the Disputes Potential Index (DPI).

The overall goal of this predictive tool is to reduce the incidence of the contract disputes that often plague construction projects, resulting in delays, cost overruns and litigation. In order to take effective action to prevent disputes, those responsible for

construction projects must first acknowledge the possibility that costly disputes could affect their projects. The research accomplishes this goal by providing statistically-based insight into the factors associated with why disputes occur. The DPI tool provides those responsible for projects with the ability to assess the risk of disputes on any particular project by using a quantifiable measure. The DPI tool assigns an overall score that predicts the likelihood of disputes arising on a given project. Even where the overall risk of disputes is relatively low, the DPI tool may indicate specific aspects of a project that are relatively weak, thus identifying areas for further improvement in overall project success.

Once the risk of disputes has been quantified, action can be taken to minimize the risk. The DPI tool assists in this process by assessing eight areas associated with disputes. Strategies and steps for improvement can then be developed and implemented using the extensive work of other CII research teams.

The DPI tool points out problem areas; other CII products provide solutions.

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Introduction

For decades, the construction industry has been plagued with an excessive number of costly, time-consuming legal and contractual disputes. To improve this situation, CII formed the Disputes Prevention and Resolution Research Team to address these matters.

One of the first tasks undertaken by the research team was to define the term *dispute* as “a problem or disagreement between the parties that cannot be resolved by on-site project managers.” Disputes may evolve into more formal claims and costly litigation if they are not resolved at the project level. The research team offers an approach to dispute prevention by providing a tool to *predict* the likelihood of disputes. In particular, the task has been to analyze the effect of different project characteristics on the likelihood of project disputes. The research develops a method to predict whether a construction project is likely to suffer contract disputes so that steps can be taken early on to reduce this potential.

While previous research has investigated the causes of contract modifications and disputes, the research of this particular effort goes further by providing a tool to predict the likely dispute potential of a project. Such a predictive tool provides a quantifiable measure of how a project might perform based on unique features of that specific

project. Since this information is normally available in pre-construction stages, a project team can assess the risk of disputes and have an opportunity to make changes to improve the project’s anticipated performance *before* construction begins. It can also be used early in the contractor selection process to identify and make many of the necessary changes.

Given that each construction project is unique and that the reasons for disputes are varied, one goal of the research team was to design an audit tool to analyze individual characteristics of a project and compare them with other projects before disputes occurred. Another goal was to provide project managers with a predictive tool to identify project characteristics that might need to be changed. This predictive tool is called the Disputes Potential Index, or DPI.

Research Objectives

Research was undertaken to achieve the following objectives:

- To gain a better understanding of the predictors of construction contract disputes.
- To identify the important predictors of contract disputes and categorize them into simple groupings.