Managing Your Practice's Risk…One Tool at a Time!

By Nils V. Ericson III, P.E., LEED AP

As engineers, we are all very good at researching and developing means to help us more efficiently solve the daily problems presented to us in our practice. You probably have an abundance of analysis, design and management tools at your fingertips, but how many risk avoidance, assessment and minimization tools do you have?

Over the course of the last three years, the Council of American Structural Engineers (CASE) Toolkit Committee has been producing Risk Management tools for the structural engineering design professional to fill this need. The tools are generally software-based and intended to be used by engineers at all levels of experience. This full toolbox of easy to use tools is available free of charge to CASE members, and for purchase to non-CASE members on the CASE website.

The tools have been developed using CASE's Ten Foundations of Risk Management as a framework. The Ten Foundations of Risk Management were developed by engineers in private practice to help engineering firms build a risk management program. The first five foundations deal with business practices while the last five foundations deal with project management. The Foundations are:

1) Culture – Create a culture of managing risks and preventing claims
2) Prevention and Proactivity – Act with preventative techniques, don't just react
3) Planning – Plan to be claims free
4) Communication – Communicate to match expectations with perceptions
5) Education – Educate all of the players in the process
6) Scope – Develop and manage a clearly defined scope of services
7) Compensation – Prepare and negotiate fees that allow for quality and profit
8) Contracts – Negotiate clear and fair agreements
9) Contract Documents – Produce quality contract documents
10) Construction Phase – Provide services to complete the risk management process

Examples of the some of the tools that the committee has developed in the last year include:

Tool 2-2: Interview Guide and Template (Prevention and Proactivity)

Do you have the resources you need to "get the right people on the bus"? Interviews can be complex and time consuming. This guide steers you through the interview process, providing sample questions and interviewing tactics necessary to conduct a high quality interview. The template will help you evaluate potential candidates to ensure you not only hire good people, but the right people.

Tool 6-1: CASE Contract Scope Exhibit Checklist (Scope)

A well defined scope of services avoids misunderstandings by defining which parties are responsible for which tasks, makes obvious additional services and establishes a basis for negotiations regarding compensation. How do you communicate your scope of services to your clients? This Microsoft Access based database prompts you to select tasks that you would like to be included or excluded from

Summary of Currently Available Tools

10 FOUNDATIONS *for* RISK MANAGEMENT $Success = \Sigma F_{RM}$

Tool 1-1: Company Culture	Involve your staff in developing a risk management commitment statement.
Tool 2-1: Risk Evaluation Checklist	Evaluate a prospective project for potential risks.
Tool 2-2: Employee Interview Guide	"Get the right people on the bus".
Tool 3-1: Risk Management Program Planning Structure	Identify risk factors and develop risk management policies and procedures for your firm.
Tool 3-2: Right Foot Meeting Agenda	Template and guide for running an effective project kick-off meeting with your team.
Tool 4-1: Status Report Template	Communicate project status to keep your clients informed.
Tool 5-1: A Guide to the Practice of Structural Engineering	Teach young structural engineers the business of being a consulting structural engineer and things they may not have learned in college
Tool 6-1: Project Scope Creation Checklist	Quickly and easily develop a scope of services document for your proposals or contracts.
Tool 7-1: Client Evaluation	Analyze past workload and profitability data to evaluate your clients.
Tool 8-1: Red Flag Word Search	Search for onerous words and clauses in your contracts.
Tool 9-1: A Guideline Addressing Coordination and Completeness of Structural Construction Documents	A Guideline discussing inadequate and/or incomplete design documents including recommendations for development and application of quality management procedures.
Tool 10-1: Site Visit Cards	Pocket reference of what to look for on a site visit.
Tool 10-2: Project Construction Administration Log	RFI, sketch and submittal log.

your scope of work. It then creates a scope of work document from your responses that can be attached to your proposals or contracts. Project information and the scope document are stored in the database for future reference.

Tool 9-1: A Guideline Addressing Coordination and Completeness of Structural Construction Documents
(Contract Documents)

The toolkit committee has repackaged CASE Document 962-D in an electronic, user-friendly format with upgrades and additions such as search functions and test questions. The Guideline discusses the background behind inadequate and/or incomplete design documents, the important aspects of design relationships, communication, coordination and completeness, guidance for dimensioning of structural drawings, effects of various project delivery systems, document revisions, and closes with recommendations for development and application of quality management procedures. The CASE Drawing Review Checklist is included with the tool.

Tool 10-1: Site Visit Cards
(Construction Phase)

Do the people in your firm that perform site observations have a quick and easy reference to bring with them to the site? These cards list brief tasks to perform as part of a site visit: what to do before the site visit, what to take with you to the construction site, what to observe at the site, and what to do after completion of the site visit. Cards for site visits for several types of construction and construction materials have been included, and can be edited. Creating cards for additional types of construction is simple using the provided cards as a template.

Descriptions of all of the tools and more information on the Ten Foundations can be found on the CASE website, **www.acec.org/CASE**. If you would like to evaluate a tool at no cost, email Corey Matsuoka, chairman of the Toolkit Committee, at **cmatsuoka@ssfm.com** for more information. If you have any ideas for risk management tools that you feel will improve the risk management efforts of the structural engineering community or if you have any suggested enhancements to the tools that have already been released, please contact the CASE Toolkit Committee.▪

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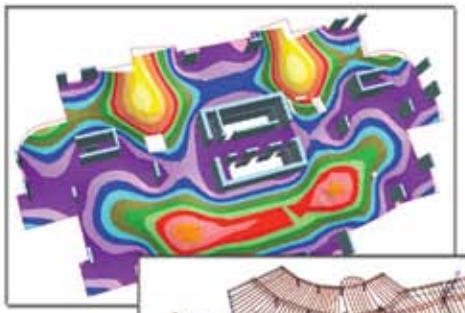

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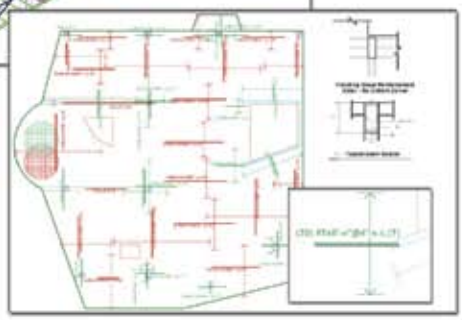

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