



CITY OF RAPID CITY

Growth Management Department
300 Sixth Street
Rapid City, South Dakota 57701-5035

MEMORANDUM

TO: Legal & Finance Committee

FROM: Marcia Elkins, ^{me}Director
Growth Management Department

DATE: December 30, 2008

RE: University of Wisconsin Madison
Preventing and Detecting Deficiencies in Design and Construction Documents

Staff requests City Council approval of the travel request for Ted Johnson, Engineering Project Manager, to attend the University of Wisconsin Madison training seminar Preventing and Detecting Deficiencies in Design and Construction Documents in Las Vegas, NV, January 26-28, 2009.

The cost of travel is estimated at \$2,403.00 and includes the following expenses:

\$500.00	Airfare with 14 day advance booking
\$128.00	Meals (1/25/09-1/29/09)
\$580.00	Lodging (4 nights)
<u>\$1,195.00</u>	Registration
\$2,403.00	Total Travel Estimate

Staff Recommendation: Staff recommends approval of the travel request for Ted Johnson, Engineering Project Manager, to attend the University of Wisconsin Madison training seminar in Las Vegas, NV, January 26-28, 2009 (travel dates January 25-29, 2009) in an estimated amount of \$2,403.00.



**CITY OF RAPID CITY
TRAVEL REQUEST**

Person requesting travel Ted Johnson Department Growth Management

I hereby request permission to travel for the following purpose: (Give specific nature of business and interest of the City to justify cost involved.)

Preventing & Detecting Deficiencies In Design and Construction Documents

List all other City employees, if any, making the trip for the same purpose: na

Place of meeting or destination: Las Vegas NV

Date of meeting January 26-28, 2009

Date trip to begin 1-25-09 Date trip will end 1-29-09

Method of transportation requested air

Estimated transportation cost 14 day advance \$ 500.00

Meals 128.00

Lodging 4 days 580.00

Other costs - description registration 1,195.00

Total estimated cost of trip \$ 2,403.00

Signed Ted Johnson Date 12/15/08
(person requesting travel) (Department Head)

When the cost of the trip will exceed \$500, per employee, this section must be signed.

In accordance with the provisions of Rapid City ordinances and travel regulations, consent is hereby given for travel as requested in the foregoing application. Maximum cost of trip authorized is \$ _____

Approved: _____ Date _____
Mayor

When the cost of the trip will exceed \$1,500, per event, Council approval is required.

Approved by Common Council on _____ (Date)

White copy - Mayor

Yellow copy - Finance

Gold copy - Department copy



THE UNIVERSITY
of
WISCONSIN
MADISON

COLLEGE OF ENGINEERING ■ DEPARTMENT OF ENGINEERING PROFESSIONAL DEVELOPMENT

Preventing and Detecting Deficiencies in Design and Construction Documents

January 26–28, 2009
Las Vegas, Nevada

- Quality assurance practices for design and documentation
- Avoiding costly change orders
- Areas vulnerable to deficiencies
- Coordinating for quality control
- Project and document management procedures



Preventing and Detecting Deficiencies in Design and Construction Documents

January 26-28, 2009 in Las Vegas, Nevada

Increase Quality, Decrease Costs and Claims

This practical course is your opportunity to learn fundamental quality-control measures to avoid costly change orders and deficiencies in construction documents. The course examines, in detail, critical areas where change orders, increased costs, and discrepancies occur in contract documents during design and contract document development phases of building and site improvement projects.

Recent surveys of owners indicate that the quality of working drawings and specifications in construction continues to decline. Simultaneously, there is a rapid increase in the number of construction change orders. The correlation between quality of construction documents and changes is substantiated by recent claims. Trends in claims highlight the critical need for the construction industry to focus on measures and actions required to decrease costs, increase quality and decrease claims of the constructed product.

For Related Course Descriptions

[http://epd.engr.wisc.edu/
catalogs/building.lasso](http://epd.engr.wisc.edu/catalogs/building.lasso)

What You Will Learn

By attending this course you will learn to:

- Conduct graphic reviews for potential change orders
- Integrate a quality checking process into production tasks
- Identify deficiencies in contract documents
- Find opportunities for substitutions
- Identify areas vulnerable to claims
- Identify potential job delays
- Apply techniques to improve project quality
- Apply effective cost-control measures
- Develop quality assurance programs
- Organize effective document development and management systems

Who Should Attend

This course will benefit owners and facility managers in public and private sectors, contractor representatives, architects and related design professionals, engineers, and planners responsible for developing and reviewing contract documents.

Valuable Take-home Materials

Each participant will receive a course notebook as well as a copy of the book, *REDICHECK Interdisciplinary Coordination*.

Your Instructors

William C. Charvat AIA is senior vice president with Helman Hurley Charvat Peacock Architects, Inc., Maitland, Florida. He has more than 35 years of experience in project and construction management on large buildings, complex projects and extensive building renovations. Mr. Charvat provides forensic and architectural services to correct building deficiencies and analysis of architect, engineer and contractor performance. His firm has developed and implemented an extensive quality-assurance and quality-control program recognized by liability underwriters.

Peter C. Halls is a partner and attorney with Faegre and Benson, Attorneys-at-Law, Minneapolis, Minnesota. He specializes in construction law and is experienced in drafting contracts and handling claims for all parties in the building construction process. Mr. Halls is a member of the American Bar Association's Forum Committee on the Construction Industry and the American Arbitration Association's Panel of Construction Arbitrators.

Donald J. Hammelman is a principal with Summit Construction Consultants in Bellevue, Washington. He has nearly 30 years of experience providing project management, construction auditing and contract review, as well as field experience implementing cost systems and cost controls for a wide range of commercial and industrial projects. He has worked for a major West Coast electric utility, a large international contractor, and a utility services company.

William T. Nigro AIA is president of REDICHECK, located in Peachtree City, Georgia. His firm, specializing in quality-assurance reviews and training, has reviewed more than \$8 billion worth of construction documents over the last 20 years and provided training for over 8,000 architects and engineers. He is the originator of the REDICHECK system, which is used by the United States Navy and is included in handbooks and guidelines-to-practice published by the American Consulting Engineers Council and the American Institute of Architects (AIA). Mr. Nigro has conducted more than 240 quality-assurance seminars for the AIA, private A/E firms, and other organizations.

Program Director

Bruce D. Kieffer is a registered architect and a program director with the University of Wisconsin-Madison, Department of Engineering Professional Development. He manages programs in structures, architecture, construction and project management. He has a combined 30 years of experience in private practice and as a faculty member teaching architectural design, engineering and management.

Preventing and Detecting Deficiencies in Design and Construction Documents

January 26-28, 2009 in Las Vegas, Nevada

Course Outline

Monday, January 26

7:30 Registration/Continental Breakfast

The Riviera Hotel
2901 Las Vegas Boulevard South
Las Vegas, Nevada

8:00 Welcome and Introduction

Bruce D. Kieffer RA
Program Director
University of Wisconsin-Madison

8:20 A Look at Our Design and Construction World Today

- Issues, directions and complexity
- Project leader challenges
- Common pitfalls of the process
- A visit to Nightmare Park (examples of failed projects)

William C. Charvat

10:00 Break

10:30 Today's Design and Construction Atmosphere

- The construction litigation world
- Architect and engineer state statutes
- Required continuing education
- Reasons why change orders happen

William C. Charvat

12:00 Lunch

1:00 Setting Up a Project Approach

- Owner assessment phase
- Contract negotiation phase
- Design phases
- Quality control techniques

William C. Charvat

2:30 Break

3:00 Construction Phase

- Pre-qualification of contractors
- Effective meetings and communication
- Alternate dispute resolution
- Lessons learned

William C. Charvat

4:30 Adjourn

Tuesday, January 27

8:00 Definition and Benefits of REDICHECK

- History of the system and documentation of savings
- How to reduce needless change orders and time extensions
- Case examples of typical construction blunders
- How to integrate REDICHECK into your production and quality assurance programs
- How to reduce your exposure to claims and/or A/E liability
- How to perform interdisciplinary review

William T. Nigro

9:30 Break

10:00 Civil and Structural Review

- Attendees divide into teams and work on sample contract documents to learn the steps and techniques required to perform a REDICHECK review

12:00 Lunch

1:00 Architectural, Mechanical, Plumbing and Electrical Review

- Specifications: items to check in specifications
- Attendees continue working in teams on sample contract documents to further understand the steps and techniques required to perform a REDICHECK review

William T. Nigro

2:30 Break

3:00 Concepts to Improve the Quality of any Project

- Eleven concepts that need to be understood by the design team before the first line is drawn

William T. Nigro

4:00 Tools, Systems and Procedures for Quality Management in Design

- Project document management objectives and procedures
- Incorporating quality assessment and control into project systems
- Document version controls
- Communication techniques for coordination and control
- Tools for systematic document management

Bruce D. Kieffer

5:00 Adjourn

Wednesday, January 28

8:00 Identifying Critical Cost-Control Measures

- Document and review for major cost-impact items
- Ability to influence costs on your project
- Identifying the right delivery method for your project
- Advantages and disadvantages of the design-build process
- Owner controls one should implement
- Tips on getting off to a good start

Donald J. Hammelman

9:45 Break

10:15 Case Study: Critical Cost-Control Areas; Reviewing Contract Language and Working Drawing Coordination for Cost-Control Impacts

- Document review checklists
- Field vs. home-office costs
- Recovering contractor items through discrepancies
- Evaluating change orders
- Analysis of cost proposals and cost components
- Controlling changes
- Identifying what is causing changes
- Cost prevention vs. recovery
- Budget-control techniques: budget vs. actual, GMP contracts, allowances, contingency and management reserves
- Claims management/deterrents

Donald J. Hammelman

12:00 Lunch

Four Easy Ways to Enroll

Need to Know More?

Call toll free **800-462-0876** and ask for

Program Director:

Bruce D. Kieffer RA
kieffer@epd.engr.wisc.edu

Program Associate:

Debbie Benell
benell@epd.engr.wisc.edu

Or e-mail custserv@epd.engr.wisc.edu

General Information

Fee Covers Notebook and course materials, lunches, break refreshments and certificate.

Cancellation If you cannot attend, please notify us by January 19, and we will refund your fee. Cancellations received after that date and no-shows are subject to a \$150 administrative fee. You may enroll a substitute at any time before the course starts.

Location The course will be held at the Riviera Hotel, 2901 Las Vegas Boulevard South, Las Vegas, Nevada.

Lodging We have reserved a block of sleeping rooms at the Riviera Hotel, the course site. To reserve a room, call 800-634-6753 or 702-794-9412. Mention this course and group code University of Wisconsin-Madison. Room requests made later than January 9 will be subject to availability. A deposit equal to the room rate for one night is charged at time of booking. This deposit is refundable if the reservation is canceled 48 hours prior to scheduled arrival. Room block rates are not available for Friday or Saturday night stays.

1:00 Liability for Deficiencies in Working Drawings and Specifications

- Types of deficiencies
- Legal framework
- Problems and solutions associated with failure to...
 - meet the goals of the owner
 - meet the budget
 - be buildable on schedule

Peter C. Halls

2:30 Break

2:45 Liability for Deficiencies in Working Drawings and Specifications (continued)

- Review of problems and solutions associated with meeting regulatory requirements
- Deficiencies in submittals and shop drawings
- Deficiencies in general contractual provisions
- Unforeseen site conditions and insufficient due diligence
- Deficient detailing

Peter C. Halls

4:00 Final Adjournment

Earn CEU, PDH or AIA LU Credit

Engineering Professional Development is an AIA/CES approved sponsor of continuing education courses.

By participating in this course, you will earn 2.0 Continuing Education Units (CEU), 20 AIA Learning Units (LU) or 20 Professional Development Hours (PDH).



Phone:
800-462-0876 or
608-262-1299 (TDD 265-2370)



Internet:
<http://epd.engr.wisc.edu/webK187>

Mail to:
Engineering Registration, The Pyle Center
702 Langdon Street, Dept. 108
Madison, Wisconsin 53706



Fax:
800-442-4214 or 608-265-3448



Course Information

- Please enroll me in **Preventing and Detecting Deficiencies in Design and Construction Documents**

Course #K187 January 26-28, 2009 in Las Vegas, Nevada Fee: \$1195

- I cannot attend at this time. Please send me brochures on future courses.

Personal Information (Please print clearly.)

Name _____

Title _____

Company _____

Address _____

City/State/Zip _____

Phone (____) _____ Fax (____) _____

E-mail _____

Additional Enrollees

Name _____

Title _____

E-mail _____

Name _____

Title _____

E-mail _____

Billing Information

- Bill my company P.O. or check enclosed (Payable in U.S. funds to UW-Madison)



Cardholder's Name _____

Card No. _____ Expires _____

UW#

Important—please enter the 3-digit UW# Code from the mailing label.

- Please check the box if you are a person with a disability and desire special accommodations. A customer service representative will contact you. Requests will be kept confidential.