VITA

I. PERSONAL DATA

Name: Mark Osborn Federle Work Address: 257 Haggerty Hall, Marquette University, Milwaukee WI 53151 Home Address:

Career Achievement Award - Rose-Hulman Institute of Technology, 2005

Outstanding Advisor, College of Engineering, Iowa State University, 1999

Outstanding Professor in Construction Engineering, Engineering Student Council, Iowa State University, 1998

Big XII Faculty Fellowship (to University of Kansas), 1998

Leadership Excellence Award, Master Builders of Iowa (AGC Building Chapter), 1997

Certificate of Appreciation, American Society of Civil Engineers, Chair of the Engineering Management Publications Committee, 1996-1997

Certificate of Appreciation, Iowa State University Honors Program, "A Celebration of Teaching and Learning" 1997

Certified Cost Engineer (CCE), *aace International* October 1996 (Inactive)

Member of Chi Epsilon, Civil Engineering Honorary, Spring 1996 - 1999

Outstanding Faculty Member, Associated General Contractors Student Chapter, Iowa State University, School year 1995-96

Constructor Level, American Institute of Constructors, April 1995

Charles W. Schafer Faculty Award for Excellence in Teaching, Research, and Service, Civil and Construction Engineering Department, April 1994

Member of Sigma Chi - The Scientific Research Society, Full Member, February 1994

Outstanding Student Award, Indiana Chapter of the American Society of Civil Engineers, Rose-Hulman Institute of Technology Student Chapter, 1985

VI. ACADEMIC AREAS OF SPECIALIZATION

(I) Teaching Marquette University

CEMA 4830/CEEN 5930, Construction Planning, Scheduling and Control, F10, F11, F12 CEMA 3860, Construction Materials and Methods, F10, F11, F12

CEMA 3810/CEEN 180, Introduction to Construction Management, F08, F09, S10, S11, S12

CEEN 181, Construction Cost Analysis, S09

CEEN 4931/5931/188, Construction Management Functions and Processes, S09, S10

CEEN 6999, Thesis Research, S11

GEEN 2952, Professional Orientation, F11

HOPR 1953, Project Management Skills for the 21st Century, F09, F10

(II) Teaching Iowa State University

CE 699, Thesis Research, S99, F98, Sum98, S96, Sum95, S95, F94

CE 599, Creative Component, S98, F97, Sum96, Sum93, Sum91, S91

CE 595X, Research Methods in Construction Engineering, F96, F95, F94, F93

CE 590, Special Topics, S98, S97, S96, F95, S95, Sum93, F92

ConE 550, Construction Management Functions and Processes, S91

CE 510, Advanced Technologies in Construction, F95

CE 503, Construction Management Functions, F98, F96, S94, S93, S92

ConE 490, Independent Study, F98, S98, F97, S97, SS95, SS4, F93, S93, S92, F91, S91

ConE 421, Construction Estimating, F97, F95, F94

ConE 410, Professional Development, S99, F98

ConE 372, Construction Equipment and Heavy Construction Methods, S93

ConE 346, Construction Estimating, F92, S92, F91, S91, F90

ConE 245, Contract Documents, S97, S96

ConE 241, Construction Materials and Methods, S97, F96

ConE 221, Contractor Organization and Management, S99 (4cr) F98 (1cr), S98 (4cr), F97

(1cr), S96 (4cr), F94 (2crs), S94 (4cr), F93 (2cr), S93 (2cr), F92 (2 cr)

ConE 110, Construction Engineering Orientation, S99, S98

Engr 101 - ConE Section, F98, F97

FrE 101, Engineering Orientation, F91 (6 lectures), S91 (2 lectures)

Honors 321, Project Management Skills for the 21st Century, S97, F95

290H, Freshman Mentor Program, S97, S93, S91

(ii) Research Areas

VII. GRANTS AND CONTRACTS

Funded Proposals:

Title: Creating Value as a CEO Principal Investigators: James E. Rowings and Mark O. Federle Sponsor: The Electrical Contracting Foundation, Inc. Amount: \$52,014 (Completed by Jim Rowings after I left Iowa State) Duration: J Principal Investigators: James E. Rowings and Mark O. Federle Sponsor: The Electrical Contracting Foundation, Inc. Amount: \$62,589 Duration: January 1, 1996–February 28, 1997

Title: Consistency Review for Weitz Company Principal Investigators: Mark O. Federle Sponsor: The Weitz Company Amount: \$30,000 Duration: October 1, 1996–May 31, 1997

Title: Implementation of Benchmark Project Recommendations for Iowa DOT Offices of Construction (HR 381 Continued) Principal Investigators: Chuck T. Jahren and Mark O. Federle Sponsor: Iowa Highway Research Board Amount: \$27,540 Duration: September 15, 1996 to September 14, 1997

Title: Shop Burden Booklet Principal Investigators: Mark O. Federle and James E. Rowings Sponsor: Sheet Metal and Air Conditioning Contractors National Association Amount: \$16,452 Duration: July 21, 1995–November 30, 1995

Title: Analysis, Design, and Construction of Hydraulic Structures Principal Investigators: David T. Kao, Fouad S Fanous, and Mark O. Federle Sponsor: The Synthesis Coalition and the National Science Foundation Amount: \$29,000 Duration: October 1, 1994–September 30, 1995

Title: Optimizing Project Organizations Principal Investigators: James E. Rowings and Mark O. Federle Sponsor: Construction Industry Institute Amount: \$102,481 Duration: January 1, 1994–October 31, 1995

Title: Partnering in the Electrical Contracting Industry Principal Investigators: James E. Rowings and Mark O. Federle Sponsor: The Electrical Contracting Foundation, Inc. Amount: \$46,839 Duration: January 1, 1994–October 31, 1994 Title: Tools and Materials-Planning and Control Systems Principal Investigators: James E. Rowings and Mark O. Federle Sponsor: The Electrical Contracting Foundation, Inc. Amount: \$10,000 Duration: January 1, 1994–October 31, 1994

Title: Formalizing Total Quality Management Principal Investigator: Mark O. Federle Sponsor: Butler Construction Company Amount: \$51,017 Duration: August 23, 1993–December 31, 1994

Title: Analysis of Building Construction Recycling Efforts in Iowa Principal Investigator: Mark O. Federle Sponsor: College of Engineering Research Initiation Grants, Iowa State University Amount: \$2,200 Duration: October 1991-June 1992

Title: A Study of Leadership in Construction Principal Investigator: Mark O. Federle Sponsor: College of Engineering Research Initiation Grants, Iowa State University Amount: \$1,850 Duration: October 1990-June 1991

VIII. TECHNICAL PUBLICATIONS

Refereed Journals

- Jahren, Charles T. and Mark O. Federle, "Implementation of Quality Improvement for Transportation Construction Administration," *Journal of Management in Engineering*, ASCE, 15, 56 (1999).
- Rowings, James E., Jr., Mark O. Federle, and Jennifer Rusk, "Design-Build Methods for the Electrical Contracting Industry," *Journal of Construction Engineering and Management*, ASCE, 126, 15(2000).
- Federle, Mark O., and James E. Rowings, Jr., "Determining Shop Burden," *Cost Engineering*, aace International, October 1997, pp. 38-42.
- Rowings, James E., Jr., Mark O. Federle, and Sara Birkland, "Characteristics of the Craft Work Force," *Journal of Construction Engineering and Management*, ASCE, March 1996.
- Federle, Mark O. and Gerald W. Chase, "Applying Total Quality Management to Design and Construction,"

Printed October 5, 2012

- Pigneri, Steven C. and Mark O. Federle, "Predictive Model of Cost Overruns," *Proceedings of the American Association of Cost Engineers 1993 Annual Conference*, Dearborn, Michigan, July 1993
- Federle, Mark O. and David J. Harmelink, "Integrating Software into an Estimating Course," Proceedings of the International Cost Engineering Congress/American Association of Cost Engineers First World Congress, June 1992, pp. S.3.1-S.3.4.
- Federle, Mark O. and James E. Rowings, Jr., "A Model of Influences on the Construction Workforce," *Proceedings, American Society of Engineering Education*, North-Midwest Section Meeting, October 1991, pp. 7-1 - 7-7.

IX. RECENT TECHNICAL PRESENTATIONS

Invited Presentations

Lean Construction Units 1 and 2, Various Chapters AGC, 2012

Project Recordkeeping and Technology, AGC of Greater Milwaukee Safety and Management Training Day, Feb 28, 2012

"How to Mitigate Project Risk", Safety and Management Training Day 2010, AGC-Greater Milwaukee, Mar 9^{th,} 2010

"Risk Management for Contractors" – Builders Association of Chicago, Feb 23^{rd,} 2010

"STP Unit 6" Associated General Contractors of America Training and Development Conference, Atlanta GA, Oct 2009.

Numerous (more than 20) presentations at various technology conferences over the years 2000 to 2009 – because I was no longer an academic I did not keep track of them.

"Technology in Construction" KeyNote Speaker – Electrical Contracting Foundation Meeting, Cancun Mexico – January 2003.

"Graduate Student Opportunities at Iowa State University," Rose-Hulman Institute of Technology, December 4, 1998.

"Hotel Legos" (with Nicole Buscher) "*Vcmkp i*"vjg"*Tqcf*"*Nguu*"*Vtcxgngfö*, Sponsored by the Program for Women in Science and Engineering, Iowa State University, 4 Times in 1998.

Doug Powell and Mark Federle, *The Iowa State/TWC Alliance and OWL² Project*, Meridian Systems Annual Conference, October 24, 1998, Baltimore MD

"Project Management Short Course," Sheet Metal and Air Conditioning Contractors National Association Annual Convention, Nashville, TN, October 19, 1998.

Printed October 5, 2012

"Hotel Lego," (with Jim Rowings), Gifted Student Program, Iowa State University, November 14, 1992

"Research Activities in Construction Engineering," (with Ed Jaselskis), U.S. Corps of Engineers, Construction Engineering Research Laboratory, Champaign, Illinois, November 12, 1992

"Pen-Based Computers in Construction," Master Builders of Iowa Computer Users Group, June 17, 1992

Panel Member, "Project Planning and Control with Changing Workforce Demographics," *Construction Congress II*, American Society of Civil Engineers, April 14, 1991

Paper Presentations (Reviewed Abstract or Refereed Paper)

"Cost Engineering Issues for Design Build," *Proceedings of the aace International Meeting*, Cincinnati, OH, June 1998.

"Production Rates for International Projects in Asia," *Proceedings of the aace International Meeting*, Cincinnati, OH, June 1998 (Paper written by Enno Koehn, presented by Mark Federle).

"Top-Down, Back to Front Project Planning," *Proceedings of the aace International Meeting*, Cincinnati, OH, June 1998 (Paper written by Fred Rahbar and Jim Rowings presented by Mark Federle).

Federle, Mark O., David T. Kao, and Fouad S. Fanous, "Computer Integrated Analysis, Design, and Construction of Hydraulic Structures," 1995 American Society for Engineering Education Annual Conference, Anaheim, CA, June 28, 1995

"Bridging the Gap between Education and Industry" Technology Day", Moderator, ConstrucTech Magazine, Chicago, IL, Sept 14, 2011.

"From the Outside Looking In: Valuable Insights to the Construction Process by Building Owners" Moderator, Associated General Contractors of Wisconsin Summer Meeting, July 20, 2011.

Session Moderator (Room Host) - Three Sessions, *aace International Meeting*, Cincinnati, OH June 1998.

Session Moderator, Transportation Research Board 76th Annual Meeting, Session 100, "Good Faith Efforts from the Prime Contractors Perspective," January 1997

Session Moderator, "Afternoon Session," 1995 American Society of Civil Engineers - Iowa Section Annual Meeting, Ames, IA, September 15, 1995

Session Moderator, "Integration of Design and Construction," 1995 American Society for Engineering Education Annual Conference, Anaheim, CA, June 28, 1995

Session Moderator, "Academic-Industry as Partners for Construction Engineering Education," American Society for Engineering Education Annual Convention, Edmonton, Alberta, Canada, June 28, 1994

Session Moderator, Transportation Research Board 71st Annual Meeting, Session 14-B, "Determinants of Disadvantaged Business Enterprises Program Effectiveness," January 1992.

X. EXTENSION AND OUTREACH ACTIVITIES

Short Courses Taught:

Timberline Estimating Short Course, Ames, Iowa, January 5, 1995, November 21, 1994, January 17, 1994, November 22, 1993, March 13, 1993, January 9, 1993, and November 21, 1992

Webinars Taught:

Lean Construction In Electrical Contracting, National Electrical Contractors Association, taught 4 times.

Leadership, Associated General Contractors of America's Project Manager Development Program, taught 4 times.

Risk Management, Associated General Contractors of America's Project Manager Development Program, taught 4 times.

Project Administration Associated General Contractors of America's Project Manager Development Program, taught 7 times.

"Labor Management Partnering," (with Jim Rowings), NECA - Quad Cities Chapter and IBEW, January 8, 1997.

"Von Maur Store Remodel," (with Jim Rowings), Russell Construction Company, Bettendorf, IA January 2, 1997.

Meredith Expansion Project,

"Subcontractor Management" Associated General Contractors of America, 2008, taught 4 times.

"Pre-Project Planning and Field Management," Associated General Contractors of Wisconsin, March 2009.

"Executive Leadership Challenge," Master Builders of Iowa, 2006, 2007 taught 2 times.

"Leadership Workshop" Associated General Contractors of America, 2006 to 2008, Taught 3 times.

"Cost Implications Important to Apprentices," Mechanical Contractors Association of Iowa and Local #33, 5 Sessions, Spring 1998, Fall 1998, Spring 1999.

"Supervisory Training Program" Mechanical Contractors Association of Iowa, 4 sessions (Taught 4 times), Spring 1999, Fall 1998, Spring 1998 and Fall 1997.

"Elements of Electrical Contracting" National Electrical Contractors Association, 6 times (with Jerry Rounds).

Estes 2000 Training, Spring 1997, (with Jim Rowings).

"Project Manager's Training Course," National Electrical Contractors Association, 17 times.

"Leadership and the Field Manager," with Bob Anderson, *Hkgnf*"*Ocpcigtøu*"*Ngcfgtujkr*" *Series*, Master Builder's of Iowa, October 14, 1998

"Project Manager's Training Course," Sheet Metal and Air Conditioning Contractors National Association, 3 times.

"Foreman's Training," Clifford R. Gray Company, Schenectady, NY, November 12, 1998

"Foreman's Training," Winger Mechanical Corporation, Ottumwa, IA, December 2, 1998, and April 7, 1998

"Executive Management Training Short Course" National Electrical Contractors Association of Iowa, (with Jim Rowings), January 18th, 1997

Estes 2000 Training, Fall 1996, (with Jim Rowings).

"Earning Trust," Butler Construction's Superintendent Conference, Kansas City, Missouri, November 1994 (2 times), December 1994 "Subcontractor and Supplier Management" (with Jim Rowings), *Hkgnf*"*Ocpcigtuø*" *Leadership Series*, Master Builder's of Iowa, Des Moines, IA, November 30, 1994

"Cost Awareness" (with Jim Rowings), *Hkgnf*"*Ocpcigtuø*"*Ngcfgtujkr*"*Ugtkgu*. Master Builder's of Iowa, Des Moines, IA, November 16, 1994

"Planning and Scheduling" (with Jim Rowings), *Hkgnf*"*Ocpcigtuø*"*Ngcfgtujkr*"*Ugtkgu*. Master Builder's of Iowa, Des Moines, IA, November 2, 1994

"Team Management" (with Jim Rowings), *Hkgnf*"Ocpcigtuø"Ngcfgtujkr"Ugtkgu. Master Builder's of Iowa, Des Moines, IA, October 19, 1994

"Leadership" (with Jim Rowings), *Hkgnf*" Ocpcigtuø"Ngcfgtujkr"Ugtkgu. Master Builder's

Fred Rahbar Rifat Sonmez	Committee Member Committee Member	Spring 1997 Spring 1996	Dissertation Dissertation
Master's San Soo Lee	Committee Member	Summer 1997	Thesis
Brad Sonnenberg	Committee Member	Summer 1996	Non-Thesis
Steve Bakley	Committee Member	Summer 1994	Thesis
Gad Roitman	Committee Member	Fall 1993	Thesis
Tim Hielkema	Committee Member	Summer 1993	Thesis
Kevin Behling	Committee Member	Spring 1993	Thesis
Gurivinder Virdi	Committee Member	Spring 1993	Non-Thesis
Yvan Rodriguez	Committee Member	Fall 1992	Thesis
Cem Sahin	Committee Member	Summer 1992	Thesis
Rifat Sonmez	Committee Member	Summer 1992	Thesis
Guillermo Recarte	Committee Member	Fall 1991	Thesis

XIII. PROFESSIONAL ACTIVITIES

ABET Evaluator for Construction Engineering and Construction Engineering Technology, 2010 to present

The BAT Academy (AGC Building, Architecture, & Technology Leadership Academy at Bay View High School), Committee Member, 2009 to present

AGC of Greater Milwaukee, Construction Leadership Council, Committee Member, 2009 to present

Editorial Board, International Journal of Construction Education and Research, 2011-present

AIC CCC Exa

Rose- 1999 to present

Professional Memberships

American Society of Civil Engineers, Fellow, 2009, Member, 1982-present Special Editor for the *Journal of Construction Engineering and Management*, Chair, February 1, 1996 – July 1999

The American Institute of Constructors, Constructor Level, April 1995-present CPC Exam Writing Subcommittee member, 2009 to present

Sigma Lamda Chi, Member, April 1992-1999.

Consulting

Member, College P&T Committee, 2012

Chair, Engineering Management Masters Review Committee, 2010-present

Member, Technology Committee, 2010 to present

University Committees:

Member, New Buildings Sustainability Committee, 2011 to present

Member, Student Organization Policy Advisory Committee, 2011 to present

IOWA STATE UNIVERSITY ACTIVITIES

Leadership ISU, Fall 1996

Facilitator, Succeeding with Students, Fall 1995

University Committees

Faculty Senate Committee on Faculty Governance and Structure, Fall 1996-Summer 1998

College Committees

Promotion and Tenure Review Committee, Fall 1997 to Summer 1999

Professional Development Committee, Fall 1997 to Summer 1999

Basic Program Committee, Fall 1996 to Fall 1997

Ad