

Curriculum Vitae

Amin Terouhid, Ph.D., P.E.

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Summary

Amin Terouhid, Ph.D., PE is a Principal Consultant with Adroit Consultants, LLC and an expert in the areas of construction management, construction claims, construction defects, and delay and damages analysis. He has more than 21 years of experience working on several large and mega projects internationally and throughout the U.S. He is the author of numerous scholarly articles and industry guidelines including a number of AACE International Recommended Practices, including RP91R-16 Schedule Development, RP 92R-17 Analyzing Near-Critical paths, RP89R-16 Management Summary Schedule, 130R-23: Demonstrating Entitlement to Cumulative Impact Claims in Construction, 129R-23: Linear Scheduling Methods (LSM), and 120R-21: Demonstrating Entitlement for Contract Change Orders or Claims - As Applied in Engineering, Procurement, and Construction. He is also the recipient of the 2018 AACE Technical Excellence Award.

Education

- 2013 Ph.D. in Construction Management, University of Florida, Gainesville, FL
- 2012 M.Sc. in Civil Engineering, University of Florida, Gainesville, FL
- 2002 and 2004 B.Ss. and M.Sc. in Industrial Engineering, Tehran Polytechnic

Professional Certificates and Awards

- Professional Engineer (P.E.)
- Certified Fraud Examiner (CFE)
- <u>Concrete Construction Special Inspector</u>, American Concrete Institute (ACI)
- Water Main Inspection Certificate, NYC Department of Design and Construction (DDC)
- AACE International (Association for the Advancement of Cost Engineering) Technical Excellence Award
- Planning and Scheduling Professional (PSP), The Association for the Advancement of Cost Engineering (AACE)
- <u>Design and Risk Management Professional (DRMP)</u>, The Association for the Advancement of Cost Eng. (AACE)
- Project Management Professional (PMP®), Project Management Institute (PMI)

Work Experience

May 2015 – Present Claims and Expert Services, Litigation Support, and Subject Matter Expert (SME) Services

Select Contract Claims Cases - Residential Projects

- '23: Construction defect case of a homeowner vs. general contractor, Union City, NJ. Assessed delays/damages, expert report.
- '23: Restoration Associated with Sandy Recovery Program-Coney Island Sites. Assessed delays/damages, expert report.
- '20: NYC Housing Authority, Sandy recovery program at East River houses. Differing site conditions and delay assessment.
- '19 thru '22: The Pointe at Turnbury, Monmouth Junction, NJ. Defect analysis and expert services, building enclosure.
- '19: Comcast Innovation & Tech Center including residential units, Philadelphia. Insurance claim, assessing claims for changes.
- '15 thru '18: The Views at Hudson Pointe, NJ. Inspected the site, assessed construction defects and prepared expert report.
- '15 thru '18: The Thread Condominium Assoc., Union City, NJ. Evaluated defects and prepared expert report.
- '15 thru '18: 125 N 10th St, Brooklyn, NY. Performed inspections, evaluated construction defects and prepared expert report.
- '15 thru '18: Bay View Community v. Acies. Performed building evaluation and served as an expert for litigation matter.
- '15 thru '18: Palms Place Condominium Hotel, Las Vegas, Nevada. Evaluated defects and prepared expert report.
- '15 thru'18: Residential project, Wanaque, NJ. Performed inspections, evaluated defects, assessed building enclosure.
- '16: Covenant House, 227-237 N. South Carolina Avenue, Atlantic City, NJ. Assessed extended general condition costs.
 '15: AERO Automatic Sprinkler Co. Claim, Chandler, AZ. LOP claim involving trades stacking, productivity loss & disruptions.
- '15: Build Group Inc. vs Alta Laguna LLC. Eval. of subcontractors' claims, time-related claims, and review of delay damages.
- '15: Federal project family housing. Assessed the surety claims including contract termination and identified damages.



Select Contract Claims Cases - Non-Residential Projects

- '23: D080 Reconstruction of Cross Collection Screw Conveyor System & Suction Piping in Primary Settling Tank 10-15 at Bowery Bay WWTP; Assessed delays, performed damages analysis, performed forensic delay analysis, and prepared expert report.
- '21: Defects present at a healthcare facility, Jersey City, NJ. Assessed construction defects, and performed damaged analysis.
- '20: VEC Engineering Construction N.V. (VEC) and Citgo Aruba Refining N. V. (CAR). International arbitration.
- '20: Replacement of the 86th Street Substation and Negative Return Reactors at 110th St, Delay and damages analysis.
- '20: Sanofi Flu Project (industrial process plant), claim preparation, and expert report preparation.
- '20: Matco Electric Co., Binghamton-Johnson City joint sewage treatment plant restoration and rehab. Delay, LOP, DRB
- '20 Matco Electric Co., Binghamton-Johnson City JSTP, C11 Solids Handling Electrical. Delay and LOP.
- '19: MBTA fare collection system implementation Project, Boston. Delay analysis, construction expert services.
- '19: Watergate hotel, Washington DC, Delay and loss of productivity analysis, and forensic assessment of project schedules.
- '19: Lattimer Construction of Proposed Well and Well House #9, City of Brigantine, Atlantic County, NJ. Expert report.
- '18: Termination of the CCP 166580-C011 Camps Construction, Arcelor Mittal Liberia Limited (AML) vs. RSI, Expert report.
- '18: Kings Highway Seven Station Project, Brooklyn, NY. Assess claims for changes, delay, & LOP and prep expert report.
- '17: Project: Ocean Breeze Indoor Horse Riding Arena. Assessed delays, critical and near-critical path, and delay damages.
- '17: LIRR Expansion Project. Assessed the proposed project schedule, and performed schedule constructability review.
- '17: Queensville West Sewage Pumping Station, Mettko, Town of East Gwillimbury. Assessed delay and damages claim.
- '17: The Shenandoah Weather Delay matter. Assessed the weather delays and quantified entitlement to time extension.
- '17: Open Pipeline- Spread 2 & 3 Dillonvale, Ohio. Assessed schedule and LOP, quantified damages, and expert report.
- '17: Academic classroom and office complex, West Chester University. Eval. of delays & extended general condition costs.
- '16: Dulles Corridor Metrorail Project Phase 2. Assessed termination of an electrical contractor, and quantified damages.
- '16: PS 62R Staten Island, NY. Assessed backcharges, changes, and delays related to a wiring and electrical contractors.
- '16: Union County Family Court Building Elizabeth, NJ. Assessed subcontractors' claims against the bond principal.
- '15: NYU Langone Medical Center, NY. Schedule and damages analysis, assessed disruptions/LOP resulted from changes.
- '15: Federal projects located nationally, evaluation of principal's claims against owners, and litigation support.
- '15: Federal Projects located internationally. Claims for changes and time-related claims related to a surety bond claim.
- '15: Rowan Univ., Glassboro, NJ. Schedule & damages analysis for an HVAC contractor, evaluated out-of-sequence work.
- '15: Stout St Health Center & Renaissance, St Lofts, Denver, CO. schedule and damages analysis, and prep expert report.
- '15: Carl R. Darnall Army Medical Center Replacement, Ft. Hood, TX. Assessed delays & damages arisen from changes.
- '15: Laughlin AFB Repair Runway at Spofford Aux. Airfield. Assessed reworks and delays related to the pavement contract.
- '14: Fort Peck, MT. Assessed delays, disruptions, and LOP affecting a drilling and anchor installation contractor.
- '14: Ruttan Mine, MB, Canada. T4C. Forensic review of claim documents, delay analysis, and prepared expert report.
- '14: NJ Turnpike Contract T300.176, Interchange 9 Improv., Milepost 83. Assessed surety claims and prep expert reports.
 '14: Waterloo WWTP Upgrade, Secondary Treatment and Digestion. Review of multiple REAs and claims for changes.
- '14: Solana Solar Power Plant, Phoenix, Arizona. Review of unpaid change order work, disruption, & interference claim.

Select Injury Cases

- '23: A construction worker vs. utility company in the State of NJ, Assessed causes of the injury and prepared expert report.
- '23: Retained by De Frank Law Group, LLC for the injury case of a homeowner due to the failures of the general contractor in meeting the standard of care, Community Grants Planning & Housing, NJ. Assessed causes of the injury, prep. expert report.
- '23: Vincenza Gregorewski vs. UE Bergen Mall Owner LLC, Urban Edge Properties LP. Assessed slip & fall case at a mall.
- '23: Retained by De Frank Law Group for the injuries of the homeowner caused by the failure of the construction contractor.
- Theresa Milazzo vs. Rees Carpentry, Reesman Ariel Estrada Ruano, Edvin Leonel Marroquin Ruano
- '23: Retained by McMahon, Martine & Gallagher, LLP for an injury of case of a construction worker at the New Brunswick Perfarming Arts Center project; Assessed causes of the injury, reviewed technical documents, and prepared expert report.
- '23: Injury case of a construction worker due to the fall of a stack of drywalls
- '22: Retained by Sahin & Watson, P.C. for a slip and fall case of a homeowner, NJ, Assessed causes, prepared expert report.
- '22: Retained by Nitsche & Dougherty to assess the injury of a construction worker, The Village of Bayberry North.
- '16: Slip and fall case of a homeowner; reviewed the backup documents, and claim backups, assisted in preparing expert reports.

Mar 2018- Present Principal Consultant, Adroit Consultants, LLC, Upper Saddle River, New Jersey

Providing construction claims, construction management consulting services, and construction expert services. Other service areas include project scheduling and control, value engineering, risk management, and inspection. Examples of key projects include:

<u>Claims and Expert Services, Litigation Support, and Subject Matter Expert (SME) Services (noted under Work experience related to May 2015 – Present)</u>



Construction Management Services

- '21 thru '24 (projected): CH058B Harold Structures Eastbound Reroute: Construction project scheduling and claims services.
- '23: Design-Build Services for Circulation Improvements At Grand Central 42nd Street Station: project scheduling services.
- Jan '19: NYCT Consultant CM and Inspection for ADA Upgrades of Gun Hill Road Station Dyre Avenue Line (IRT), Bronx, NY
- Oct '19: Dobco Green St. mixed use facility, office building and parking garage, Newark Parking Authority, Schedule updates
- Aug '19: Holly Frontier Tulsa FCCU Tar Option #7, refinery, Tulsa, OK. Schedule constructability review and risk assessment
- Nov '18: Parkland Burnaby FCC 2020 Phase 3 Turnaround Project, Schedule constructability review and risk assessment.

Value Engineering Services

- '23: Major Rehab Renovation of an agency building, Project risk assessment and value engineering assessments.
- May '21: VE Study 437868-1 SR-80 (Southern Boulevard) ramps and SR-7 (US-441). Assessed risks and value enhancements.
- Feb '21: Atlantic Ave VE FDOT Workshop (229658.4). Assessed project risks and value enhancing recommendations.
- Nov '20: US69, Southtown Blv. Tyler to 1-mile S. of FM2813, TxDOT Tyler Dist.: CM SME and assistant VE team leader.
- Oct '20: SH 63/LA 8 Bridge at the Sabine River VE Study, shared between Newton County, Texas and Vernon Parish, Louisiana
- Oct '20: I-95/Sunrise Blvd. Interchange, VE Workshop, Florida District 4: Served as the CM SME and assistant VE team leader.
- Aug '20: IMTT Pipeline cost est. review & risk analysis, facilitated the workshop, Bayonne, NJ, performed Monte Carlo analysis
- Jan '20: VE of Reconstruction of Primary Tanks at Bowery Bay WRRF, NY: Assisted in facilitation and served as the CM SME.
- May '19: Comcast Innovation and Tech Center, Philadelphia. Review of the design and estimate prior to and after VE studies

Select Training Services Provided

- Oct '21: Project risk management training workshop, The Construction Management Association of America (CMAA)
- Jun '21: SAVE International Facilitation and Creative Techniques used in Value Engineering Training, SAVE International
- Nov '20: AACE project planning and scheduling professional (PSP) certification training, AACE NY Metro Chapter
- Jul '20: TAP Electric/Forte, Project scheduling and delay analysis training to the project managers and executives
- Oct '19: AACE project planning and scheduling professional (PSP) certification training, AACE NY Metro Chapter
- Dec '19: TAP Electric/Forte, Project scheduling and delay analysis training to the project managers and executives
- Oct '18: Primavera P6 project planning & scheduling training to the NYCT's project control and management team in New York
- Jun '18: AACE decision and risk management (DRMP) certification training, AACE Conference and Expo, San Diego, CA
- Dec '18: AACE decision and risk management (DRMP) certification training, AACE Conference and Expo, Abuja, Nigeria

May 2014 – Mar 2018 Senior Project Manager / Consultant, <u>The Vertex Companies</u>, Long Island City, New York

Provided construction claim consulting services, include investigating construction claims, conducting schedule review and analysis, reviewing and evaluation of performance bond claims, claims for changes, termination, standard of care, and differing/unforeseen site conditions, and damages analysis. Examples of key projects include:

Claims and Expert Services, Litigation Support, and Subject Matter Expert (SME) Services (noted under Work experience related to May 2015 – Present)

Construction Management Services

- Feb '18: C-470 Express Lanes Project, The Colorado DOT, Reviewed the cost estimate, the reasonableness of its level of detail.
- Nov '17: Pier 6, Residential Project located at Parcel A and B, Brooklyn, NY. Reviewed the design and oversaw project progress.
- San Juan Water Treatment Facility, San Juan, Texas. Led construction planning and scheduling efforts and analyzed disruptions.
- Water Treatment Plant, Shenandoah, IA. Led construction planning and scheduling efforts and analyzed disruptions.
- Port Liberte II and III projects. Provided construction supervision, engineering, and CM services for renovation projects.
- DOT 69th Street Bridge North Bergen. Reviewed the design, oversaw project progress, and assessed the updated schedules.

Other Services

Provided prevention of disease and injury associated with building water systems (Legionella testing services)
 Weill-Cornell and Lower Manhattan hospitals

Aug 2009 – May 2014 Individual Project Management Consultant

Provided project and construction management services including PMO consultancy, project cost engineering, project risk management, and construction claim management services to clients, including Pinnacle Strategies, Inc. and targetbase.



Jun '01 – Aug 2009 AVEC Engineering Consultant

Construction Management Services

- Sep '07 Aug '09 Program Lead Project Control Engineer, Secunda Growth Program (SGP) Natural gas program, Sasol Technology (Pty) Ltd., Secunda, South Africa
- Feb '07- Aug '07: Cost-Based Project Control Office and ERP Consultant. 9th Olefin Complex, Arya Sasol Polymer Company, Asaluyeh, Iran
- Nov '06 Feb '07: Project Planning and Control Manager, AVEC Engineering Consultant. Gorgan Urea and Ammonia Project, Golestan Petrochemical Company, Gorgan
- Oct '05 Jun '06: Project Planning and Control Manager. ZAMYAD's 2nd Complex of Vehicles Manufacturing, SAIPA expansion engineering company (SEECO)
- Oct '03 Oct '05: Project Planning and Control Manager. Upgradation Project of ABYEK Cement Production Line no. 1, Abyek Cement Company

Operations Management Services

- Mar '03 Sep '03: Project Manager. Designing and Implementation of Automated Planning & Production Control System, Shahid Ghandi Cable Manufacturing Company (SGCC), Yazd,. Led the optimization modeling and production planning effort.
- Apr '03 Sep '03: Project Supervisor / Engineer. Samand Body Shop Project capacity study, balance, layout and station design, and value engineering and simulation services, Iran Khodro Co. (IKCO)
- Sep '02 Mar '03: Project Supervisor / Engineer. Trim II Assembly Line Project Capacity Study, Balance and Simulation, Iran Khodro Co. (IKCO). Conducted motion, time, and methods study, and value engineering services for preparing a balance scenario. Assisted the simulation team to model the assembly line and perform what-if scenarios to increase the throughput.
- Jun '01 Oct '01 Project Engineer, Design and Implementation of Project Management System based on AM/PM Methodology

Volunteer Positions

Oct 2018 – Present Exam Committee, National Council of Examiners for Engineering and Surveying (NCEES)

Select Publications

- SA. Terouhid, Concurrent Delays: Definitional and Procedural Considerations, ABA Forum on Construction Law, Dec 2019
- SA. Terouhid, M. Mirhadi Fard, Recommended Practice PS-19 Linear Scheduling Method (LSM), AACE International (The Association for the Advancement of Cost Engineering), under review
- SA. Terouhid, M. Mirhadi Fard, Recommended Practice CDR-05 Apportionment of Delay Damages, AACE International (The Association for the Advancement of Cost Engineering), under review
- SA. Terouhid. Effective <u>Facility Closure: A Risk Management Perspective. Project Management Institute (PMI)'s Knowledge Shelf</u>, 2018.
- M. Mirhadi Fard, SA Terouhid, <u>Recommended Practice 91R-16 Schedule development</u>, AACE (Association for the Advancement of Cost Engineering), Published in October 2017
- SA Terouhid, M. Mirhadi Fard, <u>Recommended Practice 92R-17 Analyzing Near-Critical Paths</u>, AACE (Association for the Advancement of Cost Engineering), Published in October 2017
- SA. Terouhid, M. Mirhadi Fard, <u>Recommended Practice 89R-16 Management Summary Schedule</u>, AACE's (Association for the Advancement of Cost Engineering), Published in October 2017
- SA Terouhid, M. Mirhadi Fard, <u>130R-23</u>: <u>Demonstrating Entitlement to Cumulative Impact Claims in Construction</u>, AACE (Association for the Advancement of Cost Engineering), 2022-2023
- SA Terouhid, M. Mirhadi Fard, <u>129R-23: Linear Scheduling Methods (LSM)</u>, AACE (Association for the Advancement of Cost Engineering), 2022-2023
- SA Terouhid, M. Mirhadi Fard, 120R-21: Demonstrating Entitlement for Contract Change Orders or Claims As Applied in Engineering, Procurement, and Construction, AACE (Association for the Advancement of Cost Engineering), 2022-2023
- SA. Terouhid, M. Mirhadi Fard, J. Charles Kibert, <u>Construction of manufactured homes: understanding the hazards and risks</u>, Professional Safety: Journal of the American Society of Safety Engineers, May 2017



M. Mirhadi Fard, SA. Terouhid, CJ. Kibert, , H Hakim, <u>Safety concerns related to the construction of modular and pre-manufactured buildings</u>, International Journal of Injury Control and Safety Promotion, Taylor & Francis, June 2015, DOI:10.1080/17457300.2015.1047865

Select Presentations

- Assessing the effects of adverse weather on construction project schedules. CMAA's (Construction Management Association of America) webinars, December 2019 (scheduled)
- Performing project schedule constructability reviews: What to look for. CMAA's (Construction Management Association of America) webinars, May 2019
- Assessing the adverse effects of schedule deficiencies from the claim management perspective, CMAA's (Construction Management Association of America) webinars, February 2019
- SA. Terouhid, Chris Carleo, Greg Sampson, The Need for Applying Project Management Strategies to Facility Closures and Acquisitions, AGC of America 2017 Contractors Environmental Conference (CEC), Crystal City, VA, Sep 2017
- SA. Terouhid, M. Mirhadi Fard. CDR2114: Structuring construction claim investigation processes to reduce cognitive bias, To be presented in the 2016 AACE (the Association for the Advancement of Cost Engineering) Annual Meeting
- SA Terouhid, Andrew Sargent, Construction claim visuals: an investigation into the common visuals used for preparing or assessing construction delay and productivity claims, AACE International's (the Association for the Advancement of Cost Engineering) 3rd Annual Northeast Total Cost Management Symposium, Valley Forge, PA, March 2016
- Andrew Sargent, SA. Terouhid, Key challenges in demonstrating lost productivity claims based on specialty industry studies, AACE International, 3rd Annual Northeast Total Cost Management Symposium, Valley Forge, PA, March 2016
- Pacing as a delay management mechanism, The monthly meeting of AACE (the Association for the Advancement of Cost Engineering) International's Connecticut Section, Middletown, CT, December 2015
- SA. Terouhid, D. Minchella, A Sargent, Pacing as a delay management mechanism, 2015 AACE (the Association for the Advancement of Cost Engineering) Annual Meeting, June 2015

Software Skills

- Construction Management: Bluebeam, Revit Structure, Revit Architecture, Revit MEP, Navisworks, GeoSlope, eQuest, ArcGIS
- Project Planning / Management: Primavera 6, MS Project, On-Screen Takeoff, Quick Books Pro, Pert Master, Claim Digger
- Simulation Software: Arena, Show Flow, Vensim, Cyclone, iThink, Stella
- Optimization Software: Lingo, Lindo, Win QSB
- General Software: MS Office, SQL coding, Crystal reports, Wordpress, SPSS, Minitab

Training

- 2012 TC-CSC RILEM Self Compacting Concrete, The American Concrete Institute (ACI)
- 2012 ACI 306R-10 Guide to Cold Weather Concreting, The American Concrete Institute (ACI)
- 2012 ACI 440.1R-06 Guide for the Design and Construction of Structural Concrete Reinforced with FRP Bars, The American Concrete Institute (ACI)
- 2012 ACI 440 Externally Bonded FRP Systems, The American Concrete Institute (ACI)
- 2011 Chemical Admixtures for Concrete, The American Concrete Institute (ACI)
- 2011 Foundations for Dynamic Equipment, The American Concrete Institute (ACI)
- 2011 Contractor's Guide to Quality Concrete Construction

 Formwork, The American Concrete Institute (ACI)
- 2011 Control of Cracking in Concrete Structures, The American Concrete Institute (ACI)
- 2011 Geotechnical and Concrete Mixture Reports, The American Concrete Institute (ACI)
- 2011 Cement Mill and Concrete Test Reports, The American Concrete Institute (ACI)
- 2011 Shoring and Reshoring for Multistory Concrete Buildings, The American Concrete Institute (ACI)
- 2011 Slabjacking, The American Concrete Institute (ACI)
- Nov 2010 Highway and Bridge Contracts Plan Reading, Florida Department of Transportation (FDOT)
- May 2009 OSHA (Occupational Safety and Health) 30 hour training, The Fluor Program for Construction Safety, Univ. of Florida

Membership (past and present)

- The Association for the Advancement of Cost Engineering (AACE International)
- Present Project Management Institute (PMI)
- ABA Forum on Construction Law
- SAVE International (the premier international society devoted to advancing and promoting the Value Methodology)
- American Society of Civil Engineers (ASCE)
- American Concrete Institute (ACI)