



**Exponent**<sup>®</sup>  
Engineering & Scientific Consulting

## Gayathri Shetty, CCM, PMP, LEED AP

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### Professional Profile

Ms. Shetty has over 19 years of Project Management and Dispute resolution experience. In her career, she has worked for a heavy civil contractor and as a construction manager on several Federal Projects.

Ms. Shetty has managed all phases of the construction process from pre-design to post-construction with special emphasis to project scheduling and change management. She has experience in all facets of construction Project scheduling, from building baseline schedules and updates to reviewing Contractor schedules proactively and in forensic schedule analysis. Ms. Shetty has supported her clients in analyzing construction claims related to schedule delays and cost and damage analysis for mediation, arbitration and litigation.

Ms. Shetty also specializes in probabilistic risk assessment using Monte Carlo simulation to assess risk exposure and evaluate mitigation strategies to minimize risks and their associated impacts on construction projects. Ms. Shetty's projects have included historic federal building renovation, residential and commercial building construction, nuclear power plants, hospitality, high transit rail systems, road and bridge projects, oil and gas projects, genomic research, and high containment laboratories and water treatment plants.

Prior to joining Exponent, Ms. Shetty worked in the Project Management Group for Hill International. She spent 6 years on the modernization of the historic Supreme Court in Washington, DC. As the owner's representative, she was responsible for schedule management, management and close-out of cost, and schedule-related claims as well as the final close-out of the project.

### Academic Credentials & Professional Honors

M.S., Engineering, Rensselaer Polytechnic Institute, 2002

B.E., Engineering, University of Mumbai, India, 2001

### Licenses and Certifications

Certified Construction Manager (CCM)

LEED Accredited Professional

Project Management Professional (PMP)

## Prior Experience

Project Manager, Hill International, 2008-2014

Scheduler, Fru-Con Construction Corporation, 2007-2008

Consultant, Warner Construction Consultants, 2003-2007

## Professional Affiliations

Women in Construction, Washington DC

Construction Management Association of America, CMAA

Association for the Advancement of Cost Engineering, AACE

Project Management College of Scheduling, PMCOS

## Languages

Hindi

## Publications

Shetty G, Freas R and Lackey A. Schedule Effectiveness versus Specification Compliance, Which Should Prevail, AACE International 2020

Shetty G and Domingo R. The Art of Decoding Manipulated Schedules for Forensic Schedule Analysis, AACE International 2019

## Presentations

Shetty G and Lackey A. Schedule Effectiveness versus Specification Compliance, Which Should Prevail, CMAA National Conference 2022

Shetty G, Freas R and Lackey A. Schedule Effectiveness versus Specification Compliance, Which Should Prevail, AACE International Conference 2021

Shetty G and Domingo R. The Art of Decoding Manipulated Schedules for Forensic Schedule Analysis, AACE International Conference, New Orleans, 2019

Freas R and Shetty G. Winter Weather Shutdowns and their Impact on Measuring Delays, Project Management College of Scheduling, Vancouver, 2018

Freas R and Shetty G. Rescuing Troubled Projects from Failure to Recovery, CMAA National Conference, Washington DC, 2017

Shetty P, Wright S, McDowell M. Melting, Crystallization, and Alloying Dynamics in Nanoscale Bismuth Telluride. Nano Letters 2021; 21:8197-8204.

Sandoval S, Cortes F, Klein E, Lewis J, Shetty P, Yeh D, McDowell M. Understanding the Effects of Alloy Films on the Electrochemical Behavior of Lithium Metal Anodes with Operando Optical Microscopy. Journal of The Electrochemical Society 2021; 168:100517.

Mujica M, Mohabir A, Shetty P, Cline W, Aziz D, McDowell M, Breedveld V, Behrens S, Filler M.

Programming Semiconductor Nanowire Composition with Sub-100 nm Resolution via the Geode Process. Nano Letters 2022; 22:554-560.

Kondekar N, Shetty P, Ho L, Li Y, West M, McDowell M. Preferential growth of crystalline MoS<sub>2</sub> on patterned Ni channels in contact with Au thin films. 2021 IEEE 16th Nanotechnology Materials and Devices Conference (NMDC) 2021.

Wang C, Thenuwara A, Luo J, Shetty P, McDowell M, Zhu H, Posada-Pérez S, Xiong H, Hautier G, Li W. Extending the low-temperature operation of sodium metal batteries combining linear and cyclic ether-based electrolyte solutions. Nature communications 2022. 13.

## Project Experience

### **New Construction/ Program Management**

Developed and managed a master schedule for the construction of five new buildings and two rehabilitated buildings in NASA's Langley Research Center. Managed the schedule for the pre-design, design, construction and post-construction phases of the award-winning Langley Headquarters Building.

Responsible for reviewing the general contractor's baseline schedule and subsequent updates for the new FBI headquarters building.

On a hospital project, spent a month on-site conducting interviews with job site personnel and reviewed contemporaneous documents to evaluate the overall delay to the project and composed a detailed report on the electrical services provider's Requests for Equitable Adjustment.

Assisted in overall damage quantification for a \$75 million disruption claim. Reviewed and analyzed payment applications and time sheets to ascertain labor productivity. Developed a chronology of the issues based on correspondence review.

Assisted a real estate developer in evaluating claims for delay and disruption on a mixed use, high rise commercial project in downtown Philadelphia.

Supported a General Contractor in the evaluation of alleged delays and disputed change orders by a Subcontractor who was terminated for default on a residential project.

Performed schedule, entitlement and cost analysis of contractor's claim for delay, extended jobsite and home office overhead, increased scope, and idle equipment costs on a multi-story residential project.

Performed a risk assessment and conducted multiple schedule charettes to identify the risk exposure and mitigation strategies on a new, state of the art, courthouse in San Diego.

Assisted in analysis of project delay and cost overrun and participated in dispute resolution deliberations for an embassy project. Developed comprehensive work-product presentations for the mediation.

Assisted a General Contractor in developing time extension requests on a high-rise residential complex.

### **Building Renovation**

Serving as the owner's representative, provided construction management services for the first major renovation of the 335,000 SF U.S. Supreme Court Building while it was fully occupied. As a project manager, was in charge of project controls and the close out phase of the project, in charge of project schedule progress and delay analysis, change order negotiations, as-built schedule development, and close out of over 2500 punch list items. Completed a detailed delay analysis and presented the findings in

a rebuttal report to the contractor's \$16 million-time extension claim.

Facilitated scope definition, procurement and management of multiple contracts required to complete final fit-out of Export Import Bank's offices.

#### Transportation

Assisted a design build joint venture with preparation of a request for equitable adjustment regarding design changes, delay, acceleration, lost productivity and additional management and supervision costs on ten-mile heavy rail rapid transit project extension.

Conducted an independent assessment of the Subcontractor's delay claims against the Owner on an international Transit project.

On a state highway project where a contractor failed to complete the work timely, analyzed the contractor's claim for delay and damages, demonstrating that the claim was overstated and unsupported.

#### Hospitality

Represented the surety in overseeing the renovation progress and management the contractor's renovation schedule and time extension requests on a \$100 million resort renovation in the Caribbean Islands.

#### Healthcare

Provided cost and damage analysis resulting from an explosion on a new hospital construction. Analyzed delay and productivity impacts to the subcontractors scope of work.

Provided schedule and cost control, change order negotiation and assessment of delays and impact to the completion of a major hospital expansion.

#### Water Pollution Control

On water pollution control plant, was responsible for maintenance of the general contractor's 6,000 activity cost and resource loaded baseline schedule for the expansion of a water pollution control plant (\$130 million project). Prepared weekly and monthly update reports analyzing the progress of the work. Created and incorporated fragnets in the schedule to support delay analysis. Duties also included management of weekly subcontractor meetings to monitor work progress.

Created a comprehensive performance report detailing project issues for litigation purposes on a wastewater treatment project. Conducted contract compliance review and risk assessment, surveyed the site to assess staffing and labor productivity, and developed an electronic document control system for litigation support.

Conducted a schedule and cost risk assessment to ascertain the costs and schedule impacts to a Clean Water Conveyance System Program due to a one year postponement.

#### Oil & Gas

Engaged by a major US Oil company to analyze a contractor's more than \$100 Million delay claim associated with the development of a deep ocean offshore oil field off the coast of Africa. The work included a schedule delay analysis related to an undersea pipeline.

Evaluated the design, procurement and management performance of an EPCM contractor on a large LNG plant development project located on an island in Australia on behalf of a major oil and gas company, and assisted counsel in documenting poor contractor performance

## Nuclear Power Plant

On a nuclear reactor construction project, evaluated a large number of engineering and design change requests claimed by a design build contractor as being regulatory-driven and therefore the owner's responsibility. Found that the claim was unsupported, and that the requests were almost entirely due to the contractor's errors or to ease fabrication.

Represented a General contractor on a combined cycle powerplant project to assess the merits of alleged delays by its mechanical subcontractor. Reviewed project schedules and contemporaneous documents to assess extent of Project delays and entitlement for delays. Findings indicated the mechanical subcontractor was responsible for the delays.