Exponent®
Engineering & Scientific Consulting

Matt Grant, P.E.

Managing Engineer | Construction Consulting
Houston
+1-832-325-5717 | grantm@exponent.com

Professional Profile

Mr. Grant has 15 years of experience as a professional in the construction industry, and he has been appointed as an expert and assisted the named expert on numerous occasions. Mr. Grant's expert work covers quantum, delay, and technical disciplines for sectors ranging from buildings and infrastructure, industrial and manufacturing, power and utilities, oil and gas, and petrochemicals. He provides expert witness services for construction claims related to contractor standard of care, construction completions, commissioning, safety incidents, productivity issues, project planning, schedule delays, cost & damage analysis, and forensic investigations to support domestic and international clients during mediation, arbitration, and litigation.

Additionally, Mr. Grant can support clients by providing project management advisory services to ensure successful project execution. His project experience includes refineries, natural gas processing plants, LNG facilities, combined cycle power plants, power transmission and distribution, petrochemical facilities, offshore oil platforms, offshore wind, module fabrication for onshore and offshore facilities, industrial manufacturing facilities, commercial buildings, and infrastructure projects.

Mr. Grant is experienced in the execution of complex capital projects with a heavy concentration on large projects in the oil, gas, and energy industries. His industry experience includes project management, program management, field supervision, commissioning, project engineering, cost estimating, project controls, planning, scheduling, and project management software implementation.

Prior to joining Exponent, Mr. Grant worked as a consultant on capital projects where he advised clients on project cost and performance issues. He focused on leveraging market and client project data to draw insights used for contractor selection, budgeting, contract delivery method decisions, contract negotiations, and performance analysis.

Prior to consulting, he worked for ten years at a construction and engineering company in various positions where he was directly involved in all phases of a project's life cycle with a focus on projects in the oil, gas, and energy industries. He became a company expert in utilizing project data for use in project management decisions on a wide range of issues related to safety, schedule, productivity, safety, procurement, labor, and cost.

Academic Credentials & Professional Honors

M.S., Civil Engineering, The Ohio State University, 2012

B.S., Civil Engineering, The Ohio State University, 2009

Licenses and Certifications

Professional Engineer Civil, Louisiana, #PE.0050210

Professional Engineer Civil, Texas, #152082

Academic Appointments

Graduate Teaching Associate, Engineering, The Ohio State University, 2010-2012

Prior Experience

Solution Manager, McKinsey & Company, 2021-2023

Various Positions, Kiewit Corporation, 2011 – 2021

Professional Affiliations

Association for the Advancement of Cost Engineering (AACE) – Houston Gulf Coast Section member

American Society of Civil Engineers (ASCE) member

Project Experience

Industrial – Blast Furnace Complex

Testified in international arbitration and provided analysis related to standard of care and performance issues on a new-build blast furnace complex EPC project. Provided expert opinions on contractor's performance leading up to mechanical completion milestone achievement and through commissioning operations. Additionally, provided expert opinion on contract responsibilities for owner and contractor and if the parties met an expected standard of care.

Power Generation – Combined Cycle Power Plant

Provided expert quantum testimony and analysis of a contractor's alleged damages primarily stemming from a change order request related to small bore piping welding and installation scope increase on a remeasurable, unit rate contract. Performed an investigation into the small bore piping scope and compared to contract requirements for supplying unit rates for specific piping sizes and material types. Investigated and provided analysis of additional damage claims related to electrical, instrumentation, and housing costs alleged by contractor. Completed an expert report and expert witness deposition services during the case.

Commercial Building – Replacement Cost Estimation

Designated expert to provide analysis and cost estimation for the full replacement of alleged defective overhead lighting fixtures at a corporate campus. Cost estimate included escalated material costs that used consumer pricing indices and construction installation costs that levered national database of historical construction costs.

Infrastructure – Damage and Replacement Assessment

Designated expert to provide forensic investigation, analysis, and damage repair cost estimation for alleged damages incurred on a parking lot that was used by a production company. Leveraged historical satellite imagery to build a timeline of previous work and damages observed at the parking lot to distinguish between pre-existing damages and new damages. Provided cost estimate for repair costs associated with damaged areas that did not include pre-existing damages.

Commercial Building – Construction Site Safety Incident

Performed expert analysis of provided documentation in construction site safety incident litigation case for contractor standard of care. Incident involved a personal injury to a worker on a construction site that involved a general contractor and multiple subcontractors. Completed an expert report during the case.

Commercial Building – Construction Site Safety Incident

Provided expert testimony and analysis of provided documentation in construction site safety incident litigation case for contractor standard of care issues. Incident involved temporary traffic control during construction which required a review for compliance with Manual of Uniform Traffic Control Devices (MUTCD). Completed an expert report and expert witness deposition services during the case.

Industrial – Steel Fabrication Facility

Provided analysis of claims against contractor related to adherence to design drawings and construction quality procedures. This required application of forensic investigation of all supplied documents related to alleged rework claims. In-depth analysis of individual claims was required to accurately report actual issues and to assign the rework cost to the appropriate, responsible party.

Oil & Gas – LNG

Provided expert analysis of contractor’s performance during construction to commissioning handover phase of project. Leveraged information from contractor’s proprietary commissioning management system software to provide a data backed view of contractor’s performance during the commissioning phase of the project. Cross referenced dates in commissioning management system with contractor communications to support view that contractor’s poor execution during commissioning phase of project lead to safety incidents, construction quality issues, and overall project delays.

Utilities – Power Transmission/Distribution

Provided program and project management services to power utility company for the execution of projects involving their existing transmission and distribution assets. Lead the development of project scope, design, budget, planning, and construction execution for multiple projects which required the additional direction of land, environmental, and permitting groups in supporting project execution.

Petrochemical – Ethane Cracker and Polyethylene Units

Lead cost estimate validation efforts for advising owner on how to best manage project risk through a mix of negotiation levers to use with contractors and recommendations for best contract delivery methodologies to address inflation issues affecting labor, material, and freight costs. Developed probabilistic models for cost and schedule assessments that were compared to industry benchmarks.

Renewables – Offshore Wind Generation

Lead all planning efforts for engineering, procurement, fabrication and installation of an offshore wind substation which required the coordination of multiple companies spread across different countries.

Performed cash flow analysis that team leveraged to ensure payment milestones terms aligned with a positive cash flow during project execution.

Oil & Gas – Module Fabrication

Implemented new project management software system used for cost tracking/forecasting, quantity installation tracking, earned value management, field crew productivity, schedule integration, change management, and project reporting. This required direction and training of multiple project teams on how to set up and use new systems as they switched over from legacy systems.

Oil & Gas – Refinery

Lead planning and execution for the installation of mechanical and piping systems for a new hydrogen reformer unit inside an operating refinery. Provided field engineering solutions to engineering design scope gaps that met strict structural and fire permitting requirements for the State of California. Specifically, developed support details and hydro testing procedures for permitting compliance needed for piping systems that were not part of original design scope.

Oil & Gas – LNG

Directed field crews in the installation of process piping and fire control systems for liquefaction and gas processing units within existing LNG facility. Responsible for compliance with engineering drawings and quality control testing requirements while monitoring productivity requirements needed to meet schedule. Orchestrated remaining work completion for sub-system handovers to support commissioning schedule requirements.

Power Generation – Combined Cycle Power Plant

Lead the installation, testing, and commissioning of fire and gas detection systems for a combined cycle power plant. Designed field routing of fiber optic network from new fire panels through existing facility to main control room due to scope gaps in how system interfaced with existing facility in original engineering design. Directed field work to ensure system turnover supported operations team requirements for starting up steam and combustion turbines.