

Thomas J. Wheat, P.E.

Vice President

Areas of Expertise

Traffic Engineering
Traffic Signal, Signing and Striping Plans
Parking Lot Design
Traffic Calming
Traffic Control Devise Warrants
Traffic Control Plans
ITS

Education

Clemson University
B.S., Civil Engineering 1995
Virginia Tech University
Graduate Courses in Advance Transportation Engineering, 1999

Professional History

RK Engineering Group, Inc.
Partner/Vice President
2003-present
Sabra, Wang & Associates
Traffic Engineer
2000-2003
HNTB, Inc.
Traffic Engineer
1997-2000
Kane County Division of Highways
Civil Engineer
1993-1997

Representative Experience

Mr. Thomas Wheat, P.E., has been involved in the traffic engineering profession for over a decade managing and developing projects for both the public and private sectors. His versatile experience includes leading and assisting in the design and construction of traffic signal plans, traffic signal systems, ITS design, signing and striping plans, traffic control plans, and traffic calming measures. Mr. Wheat has worked professionally in the Washington D.C. and Chicago land areas before coming to RK Engineering Group, Inc. in 2003. He holds Professional Engineer licenses in the states of Maryland, Virginia, and California.

While at RK, Mr. Wheat has designed numerous traffic signal plans and signing and striping plans for various agencies, including Caltrans and Riverside County as well as the Cities of Beaumont, Hemet, Moreno Valley, Murrieta, Aliso Viejo, and Irvine. In addition to design work, Mr. Wheat has also worked on various traffic engineering studies including traffic impact studies and access management studies for various clients and agencies in Orange County and Riverside County. He has also performed an operational analysis for the City of Irvine using Synchro and SimTraffic to determine the impact of future traffic to an existing coordinated traffic signal system. He also uses his experience to review traffic signal and signing and striping plans for the City of San Jacinto and City of Perris.

Mr. Wheat had been working for consulting firms in the Washington D.C. area consulting for various public entities including the FHWA and various state and local agencies along the East coast before coming to RK. As a project manager and project engineer, Mr. Wheat's involvement in traffic engineering projects has ranged from his participation in very large projects including the design of traffic control plans for an interstate with multiple interchanges; to small projects involving the design of traffic calming measures at an elementary school.

Mr. Wheat has been actively designing traffic signal construction plans and traffic signal timing plans throughout his eight-year career. He has designed numerous traffic signal construction plans for various clients on state and local roadways. Several of the designs have involved new technologies for vehicle detection, including the use of video and microwave technologies in lieu of inductive loop detectors for both presence and advance detections.

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Affiliations

Licensed Professional Engineer

- California
- Virginia
- Maryland

Tau Beta Pi National Engineering Honor Society (B.S. Clemson University)

American Society of Civil Engineers (ASCE)
Member

Institute of Transportation Engineers (ITE)
Member

Mr. Wheat also has substantial experience in the operations side of traffic signals where he has created timing plans for individual signalized intersections, as well as signal systems by using modeling programs, such as Synchro and SimTraffic. He has had the opportunity to adjust and implement timing plans into individual field controllers, as well as a city's centralized signal system computer.

He has acquired experience in designing ITS systems for Closed Circuit Television Cameras (CCTV), Changeable Message Signs (CMS), and traffic signal interconnect systems for clients on the East coast. As well, he has provided assistance on a traffic signal system design for a city, which included the design of a citywide fiber optic communications backbone supporting CCTV, CMS, and real-time traffic data. Mr. Wheat has also designed construction plans to place CMS's at strategic locations throughout a city where traffic information was disseminated to the public, and has also helped design both the temporary and future ITS communications system for the Capital Beltway linking field technologies (CCTVs, CMS, sampling stations, etc.) to a central operations center miles away.

Mr. Thomas Wheat started his career at Kane County Division of Highways in the suburbs of Chicago, IL. Not only did his design career begin at the County, but he also gained valuable experience in overseeing some of the counties largest highway projects as both an assistant and resident engineer. Mr. Wheat worked directly with the contractors overseeing and inspecting the pavement, traffic signal, electrical and drainage construction. There he learned aspects of the construction process that have helped him in his career as a designer.