**ANDREW J. CHANG**
**Managing Director**

---

**PROFILE:** Seventeen years of experience working with both high-level executives and operations staff on sensitive issues under tight deadlines in both the private and public sectors. Eight years strategy and operations consulting experience with emphasis on customer analysis and market entry strategies. Twelve years public policy development and implementation experience in California State government. Extensive experience working with a broad array of stakeholders to design, implement and monitor organizational initiatives.

**PROFESSIONAL EXPERIENCE:**

10/11 – present **Andrew Chang & Co, LLC** Sacramento, CA
***Managing Director***
- Provide market entry and strategy consulting to Fortune 1000 companies with an emphasis on private sector interaction with government. Private sector specialization in assessing and identifying new market opportunities and developing strategies to enter new markets. Public sector emphasis on public policy, economic and public finance analysis and operations management consulting.

07/09 – 10/11 **Chang & Adams Consulting** Sacramento, CA
***Managing Director***
- Provide market entry and strategy consulting to Fortune 1000 companies with an emphasis on private sector interaction with government. Private sector specialization in assessing and identifying new market opportunities and developing strategies to enter new markets. Public sector emphasis on public policy, economic and public finance analysis and operations management consulting.

04/07 – 07/09 **Forward Observer, Inc.** Sacramento, CA
***Vice President***
- Provide business intelligence and strategy consulting to Fortune 1000 companies to support market entry initiatives. Provide business-political risk and due diligence assessment for investment companies. Conduct fiscal, economic and public policy assessments.

08/04 – 04/07 **California Department of General Services** Sacramento, CA
***Chief Deputy Director***
- Chief Financial and Operations Officer of a state department with $1 billion annual operating budget, thirteen business units and 4,000 employees. Oversaw the state's procurement and real estate operations. Also responsible for the state's telecommunications, automobile fleet, printing, warehousing, insurance and school construction operations.
- Special assignment to the Governor's Office to serve as chief staff economist for the Governor's Council of Economic Advisors. Facilitated Council meetings, prepared written briefings for the Governor on policy issues for consideration and assisted Council members with original research to present at the Council meetings.
- Special assignment to the California Department of Corrections and Rehabilitation to assess the agencies procurement operations and develop recommendations to improve procedures and operations.

06/00 – 08/04 **A.T. Kearney, Inc.** San Francisco, CA
***Senior/Engagement Manager*** (06/02 – 08/04)
- Lead teams to develop strategies for new lines of business for a Fortune 1000 technology company, a national consumer products consortium and an international consumer products retail company.
- Lead teams to develop strategies to both acquire and sell technology services, R&D and manufacturing business units.
- Analytic and modeling methods subject matter expert. Finance and Accounting business processes subject matter expert.

***Associate Management Consultant*** (06/00 – 06/02)
- Conduct research and develop recommendations for various clients in the high technology and consumer products industries.

08/03 – 10/03 **Californians for Schwarzenegger** (Temporary leave from A.T. Kearney, Inc.) Santa Monica, CA
***Chief Economist/Deputy Policy Director***
- Principal economic, tax, energy and budget staff advisor for Arnold Schwarzenegger's gubernatorial campaign.

12/98 – 02/00 **MGT of America, Inc.** Sacramento, CA

***Senior Management Consultant***

- Implemented studies to improve finances and operations for Cleveland Unified School District, Florida State University and the California Resources Agency.

10/95 – 12/98 **California State and Consumer Services Agency** Sacramento, CA

***Assistant Secretary for Policy and Operations***

- Executive of a government agency with an annual operating budget of $1.3 billion, twelve departments and over 14,000 employees.
- Under supervision of the Secretary, guided agency and department policies, budgets and strategic plans.

05/95 – 10/95 **Personal Staff of Governor Pete Wilson** Sacramento, CA

***Chief Economist/Deputy Issues Director***

- Managed the development of national tax, trade, environment, agriculture and crime policies for Governor Pete Wilson's presidential campaign.

09/93 – 05/95 **California Office of the Governor** Sacramento, CA

***Deputy Chief Economist***

- Lead research teams to assess the economic and fiscal impact of tax, economic development, health care and immigration policies.

**EDUCATION:** **University of Michigan** Ann Arbor, MI

***Master of Business Administration Essentials*** (1 of 30 A.T. Kearney consultants selected globally to participate in a tailored executive MBA program.)

**Georgetown University** Washington, DC

***Master of Public Policy***

**University of California** Berkeley, CA

***Bachelor of Arts***

# Kathleen L Higgins

Water Resources Technical Lead

## Education

M.S., Civil Engineering, California State University at Long Beach, 1987
B.S., Civil Engineering, California State University at Long Beach, 1984

## Professional Registrations

Professional Engineer: California

## Distinguishing Qualifications

- Expert in hydraulic analysis and design of detention basins, channels, levees and other flood protection and stormwater management facilities
- Extensive experience in all aspects of water resources engineering including hydraulics/flood control, stormwater management, highway drainage, water supply studies, and watershed management

## Relevant Experience

Ms. Higgins is a senior water resources engineer for CH2M HILL's Southern California Office, responsible for water resources projects including hydraulics/flood control storm water management, highway drainage, water supply, water rights, and watershed management. Ms. Higgins has extensive experience in all aspects of water resources engineering and planning ranging from preparation of comprehensive drainage master plans to the design of major flood control and highway drainage facilities.

## Representative Projects

**Senior Consultant; Floodplain and Water Quality Analysis, for SR-79 Environmental Analysis/ Project Report, Hemet, CA.** Responsible for floodplain and water quality analysis for environmental planning for 19-mile expressway. She is also responsible for reviewing and providing technical guidance for floodplain analysis including preliminary design of BMPs and drainage structures.

**Project Manager for the Haster Basin Preliminary Design Study, County of Orange Resources and Development Management Department.** Managed the preliminary design of the 220-acre foot Haster Retarding Basin. Evaluated a number of alternatives for the inflow and outflow options for the basin including preliminary design of a pump station for outflow of the stored water volume.

**Project Manager for Arundell Barranca Deficiency Study for the Ventura County Watershed Protection District.** This project involved the analysis of 25000 lineal feet of the channel system for existing and future conditions, the existing level of protection was determined, deficiency areas identified, and alternatives were recommended to provide 100-year level of protection. The analysis included detention basin analysis benefit cost analysis, flood plain identification, preliminary cost estimates, and recommendation of a preferred alternative.

**Project Manager for Camarillo Hills Drain 30 Percent Design Study for the Ventura County Watershed Protection District.** This project involved the analysis of 25,000 lineal feet of the channel system for existing and future conditions, the existing level of protection was determined, deficiency areas identified, and alternatives were recommended to provide 100-year level of protection.

# Wilfred Hsu

Water Quality Technical Lead

## Education

M.S., Civil and Environmental Engineering, University of California, Los Angeles, 1997
B.S., Civil and Environmental Engineering, University of California, Berkeley, 1996

## Professional Registrations

Registered Professional Civil Engineer: California, 2000 (No. C61156))

## Relevant Experience

Mr. Hsu is a civil engineer with the Water Business Group in CH2M HILL's Southern California office. He has more than 15 years of experience in the environmental consulting industry and has worked on numerous projects as a project manager, task manager, and project engineer. Mr. Hsu's experience includes stormwater quality and management, BMP design, TMDL implementation, and NPDES compliance.

## Representative Projects

**Task Manager; Highland Fairview Stormwater Quality Analysis for World Logistics Center Specific Plan, Riverside County, California; 2011 to 2012.** Managed the stormwater quality analysis for the World Logistics Center Specific Plan, a development of modern high-cube logistics warehouse distribution facilities on approximately 3,814-acres of land in eastern Moreno Valley. Water quality issues were determined for the project and LID treatment BMPs were identified to meet NPDES permit requirements.

**Project Manager; Total Maximum Daily Load (TMDL) Implementation Plans for City of Los Angeles, Bureau of Sanitation Watershed Protection Division; Los Angeles County, California; 2008-2011.** Managed the development of the implementation plan for the Los Angeles River Metals TMDL for the City's Stormwater Program. The project assists the City in complying with existing and pending TMDL requirements and implementation of water quality improvement projects.

**Task Manager; California Department of Transportation (Caltrans) Corridor Stormwater Management Studies; Los Angeles County, California; 2006 to 2012.** Managed the corridor stormwater management studies for multiple corridors throughout Los Angeles County, totaling over 350 miles of Caltrans freeways and highways. The primary objectives of the studies were to evaluate potential locations for Caltrans-approved Treatment BMPs, including infiltration devices, media filters, detention devices, and biofiltration strips and swales.

**Project Manager; Caltrans TMDL Assistance; Los Angeles County, California; 2011 to 2012.** Reviewed TMDL development documents prepared by the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). Prepared written comments on the review of documents and provided suggested courses of action to Caltrans with respect to development of TMDL implementation plans and schedules.

**Task Manager; Caltrans Storm Water Data Report, Various Counties, California; 2006 to 2012.** Managed multiple Caltrans Storm Water Data Reports (SWDRs), including the I-710 Pavement Rehabilitation Project, the US-101/SR-23 Interchange Improvement Project, the California High-Speed Train Merced-to-Fresno Corridor Project, and the SR-79 Realignment Project. The purpose of an SWDR is to assess project impacts to storm water quality and to minimize those impacts by incorporating appropriate BMPs to the project.

DAVID TAUSSIG & ASSOCIATES
Public Finance and Urban Economics
5000 Birch Street, Ste. 6000, Newport Beach, CA 92660

# PROFESSIONAL QUALIFICATIONS

**David Taussig and Associates, Inc. ("DTA")** is a public finance and urban economics consulting firm specializing in infrastructure and public services finance. Our firm, which provides public finance consulting services to both public and private sector clients, has offices in Newport Beach, San Francisco, Fresno, and Riverside, California, as well as branch offices in Chicago, Illinois, and Dallas, Texas, to service our clients in the Midwestern and Southwestern United States. Additional information on DTA is available on our website (www.taussig.com).

Since its establishment in 1985, DTA has completed consulting assignments for more than 2,500 clients in ten states. During this period, the firm has been involved in the formation of more than 1,500 public finance districts, with total bond authorizations exceeding $50 billion. Our financing programs have utilized a variety of public financing mechanisms such as Assessment Districts ("ADs"), Community Facilities Districts ("CFDs"), Certificates of Participation, Tax Allocation Bonds, Sewer and Water Revenue Bonds, Marks-Roos Bond Pools, Landscaping and Lighting Districts ("LLDs"), Integrated Financing Districts, and various types of fee programs.

While DTA is primarily known for its specialized expertise in the design and administration of Community Facilities Districts ("CFDs") and various types of 1913/1915 Act Assessment Districts ("ADs"), as well as the issuance of a variety of types of municipal debt, the firm also provides fiscal and economic impact and development impact fee consulting services, and is experienced in grant writing for federal and State grant and tax credit programs. All of these capabilities are frequently combined with our infrastructure finance consulting services to develop public infrastructure and services financing strategies and plans.

DTA's consulting services include:

- Public Infrastructure and Public Services Financing Strategies
- Special Tax and Assessment Engineering
- **Fiscal and Economic Impact Analyses**
- Proposition 218 and AB 1600 Compliance Studies
- Redevelopment (Dissolution) Finance
- Federal and State Grant and Loan Applications
- Economic Development and Revitalization Studies
- Public Improvement Construction Management Services

In addition to the planning and implementation of financing mechanisms, DTA is involved in the fiscal and economic analysis of land development impacts, project feasibility studies, and economic development studies. DTA staff has prepared over 350 fiscal impact reports ("FIRs") estimating the revenue and cost impacts of various land use decisions on cities, counties, and special districts.

DTA has also prepared approximately 275 fee justification studies and analyses throughout California, as well as in other States, involving fees for a variety of public improvements, including transportation, water, sewer and flood control facilities, fire and police stations, parks, libraries, and other types of infrastructure. DTA has recently prepared such studies for the Cities of Blythe, Brawley, Calexico, Cathedral City, Live Oak, Mammoth Lakes, Paso Robles, Perris, Red Bluff, San Francisco, San Jacinto, San Luis Obispo, and Torrance, as well as for the Counties of Colusa, Riverside, Santa Barbara and San Bernardino, among others. Additionally, DTA is currently working on a comprehensive review and update of the City of Palo Alto's Development Impact Fee Program.

# TEAM MEMBERS

DAVID TAUSSIG
President | dtadavid@taussig.com
*Project Role: Principal-in-Charge*

Mr. Taussig has over 35 years of experience in the fields of real estate finance and urban economics. His areas of expertise include municipal finance programs for infrastructure and public facilities development, fiscal and redevelopment impact analysis, and land development project feasibility studies.

Mr. Taussig has an extensive background in computerized financial analysis. Since founding DTA in 1985, Mr. Taussig has developed a number of state-of-the-art analytical methods and modeling approaches, as well as personally directed the formation of more than 1,000 public financing districts, and the subsequent sale of tax-exempt municipal bonds. These districts have funded public infrastructure and services for a variety of types of residential and non-residential development, and have included several hundred master planned communities built throughout California, as well as in several other western states. Mr. Taussig's work has involved both the preparation and implementation of financing plans, and his public sector clients have included virtually every major county, urban center, and city within California, as well as hundreds of special districts. He has provided similar consulting services to many of the largest land development firms in the State. The financing programs implemented by Mr. Taussig have ranged from land-secured Community Facilities Districts to redevelopment tax-increment programs and lease revenue-based Certificates of Participation. He is also responsible for DTA's successful efforts related to funding opportunities under the American Recovery and Reinvestment Act and various tax credit programs.

Mr. Taussig has also overseen the preparation of numerous feasibility and impact studies involving the computerized analysis of project cash-flows and/or impacts on public agencies and landowners. This has assumed project management responsibilities for several dozen AB 1600 Development Fee Justification Studies, including recent studies prepared on behalf of the cities of Blythe, Coachella, Live Oak, Paso Robles, Perris, Red Bluff, San Luis Obispo, Torrance, and Tustin, as well as the Counties of Riverside, Santa Barbara, and Colusa. He has also been responsible for the preparation of over 100 fiscal impact studies utilized by public agencies to determine the impact of new development or annexations on a municipality.

Prior to establishing his own firm, Mr. Taussig was Director of Finance for Gfeller Development Company, where he was responsible for all take-out and construction financing for the Company's residential projects and infrastructure. He also prepared development project proformas that were used by prospective lenders and joint venture partners to evaluate the Company's proposed projects.

Mr. Taussig was previously employed for six years by Mission Viejo Company (MVC) where, as Manager of Housing and Community Development, he was involved in the planning and financing of two planned communities encompassing over 50,000 homes. Mr. Taussig was responsible for a substantial portion of MVC's mortgage financing and infrastructure financing during that period. He also worked for five years in the public sector as the administrator of a federal housing and community development program, and as a land-use planner. Mr. Taussig's educational background includes a Masters in City Planning from the University of California at Berkeley and a B.A. in Economics from Cornell University. He has received full certification from the American Institute of Certified Planners.

NATHAN PEREZ, ESQ.
Vice President | nperez@taussig.com
*Project Role – Project Manager*

Mr. Perez has a background in law, economics, business administration, and statistical analysis. Since joining DTA, Mr. Perez has been involved in all aspects of the formation and implementation of numerous Mello-Roos Community Facilities Districts located throughout California, with responsibilities related to the development of tax spread proforma analyses and the preparation of rate and method of apportionments, Public Reports, and overlapping debt analyses.

Mr. Perez also has expertise in the preparation of development impact fee studies. This includes considerable work related to the preparation of facilities needs lists and the apportionment of infrastructure and services costs to a variety of land uses based on benefit criteria. He has also specialized in the apportionment of costs and the setting of service levels for the construction and maintenance of law enforcement and fire protection facilities, open space acquisition, parkland, transportation facilities, drainage facilities, government services facilities, community centers, and library facilities. Furthermore, he has also completed nearly 35 fiscal impact reports and 20 economic development analyses for a variety of residential, commercial, and mixed-use developments throughout California.

Finally, his experience as an attorney has allowed Mr. Perez to effectively and efficiently evaluate dozens of state and Federal legal, regulatory, and administrative frameworks related to public finance and infrastructure development.

Prior to joining DTA, Mr. Perez worked for the Boston office of an international law firm, where he advised sponsors, managers, and investors on the tax aspects of fund formation and investment. Mr. Perez is admitted to the bar in both Massachusetts and California. Mr. Perez received his law degree from Harvard Law School, and his B.A. in Economics and History, with highest distinction, from the University of North Carolina at Chapel Hill.

Mr. Perez is an active member of the Urban Land Institute, the California Bar Association, and the Hispanic National Bar Association.

# DAVID OATIS

Owner and CEO

David Oatis was a firefighter for 15 years before founding FPS. David has pioneered new methods and formats for Fire Master Plans and Fire Protection Plans. David's years of experience, knowledge and understanding of the complexities of fire planning have allowed him to be successful when others have failed.

## Background

David has worked on a large number of fire prevention projects over the past few years. These include:

- Fire Code Adoption committees (several adoption sequences)
- Wildland Interface working committees (Bates Bill 377 and all of the VHFHSZ implementation after that)
- Presentations to BIA, Buster's Task Force in Riverside County, Planning commissions, City Councils and other governmental organizations.
- Input to State and Local officials on WUI mapping, standards and implementation issues

David has done a great deal of Pro bono work in Orange County after the Santiago Fire (2008) and the Freeway Complex Fire (2009) helping those who lost their homes get through the process of rebuilding under the new codes.

Firesafe, through David's leadership, has taken on many unique and challenging projects, including building over old landfills, new technology projects such as the solar projects in the desert areas and many difficult projects in the wildland interface that other consultants have turned down as being too difficult or impossible with the existing restrictions on the property.

David Oatis was influential in the evolution and refinement of current Fuel Modification design in Southern California. These plans were merged into Fire Protection Master Plans and builders including Ladera Ranch, Rancho Mission Viejo, The Irvine Ranch, Shea's Tustin Airbase, Lennar's Great Park and other have relied on the expertise of FPS to design and supervise the construction of the fire protection measures for their communities.

## Professional Experience

Paid Call Firefighter - San Clemente Fire Department for 9 years (1985 – 1994)
Fire Inspector - San Clemente Fire Department for 9 years (1985 – 1994)
Fire Inspector – Orange County Fire Authority for six years (1994 – 2000)
Hazard abatement - San Clemente (1985 – 1994)
Wildland Interface Inspector San Clemente and OCFA (1985 – 2000)
Consultant (2000 to present)

**Select Project Summary**

A-Town (redevelopment of the Anaheim Platinum Triangle)
Boy Scouts of America – Outdoor Education Center
Boulevards at South Bay – shopping mall over landfill
City of Santa Paula, California
Craig Realty – Marblehead Outlet Mall
First Solar – several large solar energy project in the California desert areas
Fusco – Mountain Park
Habitat for Humanity – Multiple Locations
Hearthside Homes - Brightwater
Highland-Fairview – Aqua Bella
Irvine Apartment Communities – All Communities including housing at San Diego University
The Irvine Company – Portola Hills, East Orange, Westpark, Shady Canyon, Newport Coast
Legacy Park/Shea – Tustin Marine Corp Base Redevelopment
Lennar – Central Park West
Rancho Mission Viejo – Overall Ranch, Ladera Ranch, Coto De Caza
Shea Homes – Tonner Hills
St. Margaret's Episcopal School
Standard Pacific Homes
Suncal – All Projects
Talega Community
The Great/Park Lennar– El Toro Marine Base Redevelopment
University of California Irvine

# GENE F. BEGNELL

Fire Protection Consultant

## EDUCATION

Masters Degree in Public Administration - California State University; Long Beach, May 1985
Bachelor of Science Degree in Fire Administration - CUM LAUDE - California State University; Los Angeles, September 1981
Associate of Arts Degree in Fire Science - Antelope Valley College, Lancaster, California, January 1980
Executive Fire Officer Program - National Fire Academy, December 2004
Certified Fire Officer - State Board of Fire Services, State of California, October 1989
Master Instructor - State Board of Fire Services, State of California
Certified ICS Positions - Strike Team Leader, Group/Division Supervisor (20 years)
Extensive professional studies and experience in:

- Fire Prevention Administration (including technical aspects and Code Committee work)
- Disaster Administration and Planning (past member of Interjurisdictional Planning Committee for San Onofe Nuclear Generating Plant)
- Financial Administration and Economic Development
- Community Relations and Public Information
- Personnel Management and Labor Relations (both Union and Management side)
- Resource Deployment, Master Planning and Strategic Planning

## FIRE SERVICE CAREER

Thirty-eight years of progressive experience in fire administration, prevention and suppression. Twenty Two years as a Chief Officer:

| | | |
|---|---|---|
| Battalion Chief | 18 yrs. | Orange Co. Fire Authority |
| Fire Chief/Fire Marshal/Battalion Chief | 8 yrs. | San Clemente F.D. |
| Training Officer | 3 ½ yrs. | Newport Beach F.D. |
| Asst Fire Chief /Inspector/Training Officer | 3 yrs. | Federal Fire Service |
| Firefighter/Engineer/Crew Chief | 6 ½ yrs. | Federal Fire Service/U.S.A.F. |

**Career Achievements** (selected)

- Strategic Services Chief for Orange County Fire Authority - Strategic and advance planning, modeling, forecasting and environmental review of new projects
- Transition Coordinator for Orange County Fire Authority (Moved from County Department to Joint Powers Authority as full service organization)
- Developed and implemented a computerized records management system
- Established and codified Fire Department response standards
- Completed the rewrite of San Clemente Multi-Hazard Emergency Plan
- Contributing author to "Standards of Cover" Handbook ($4^{th}$ and $5^{th}$ editions) for CFAI and development of the teaching and instructional materials for the SOC process

- Published professional journal articles and teach seminars on deployment nationally
- Resource deployment planning for OCFA, San Clemente, El Cajon, Chula Vista, Corona, Eastside Fire and Rescue (Washington State) and San Jose Fire Departments
- Assisted in the development of deployment software (Optima Corp, University of Arizona, Deccan)

**Specialized Experience**

- Experience in all phases of firefighting including: structural, industrial, airport crash rescue, wildland, high-rise, and shipboard
- Management of several traditional and non-traditional divisions/programs:
  - Fire Prevention and Hazardous Materials Program
  - Fire Investigations (Arson/Fire Cause Determination)
  - Communications and Emergency Planning Divisions
  - Department Safety Officer, Training Officer & Paramedic Coordinator
  - Weed Abatement, City Zoning enforcement and Animal Control
- Experience in labor relations and in contract negotiations (labor and management sides)
- Instructor for California Community College System and California State Fire Marshal's Office
- As the Transition Coordinator during the establishment of the OCFA, developed departmental functions including purchasing, investment plans, employee health services contract, roles and responsibilities matrix and organizational value statements
- Fire defense planning, fuel modification, Fire Master Planning, Fire Protection Plans, EIR response/analysis, CEQA review and other fire protection issues throughout the plan planning and land use process.
- Fire/EMS deployment planning, analysis and implementation
- Statistical analysis of performance and performance measures

# HIGHLAND FAIRVIEW PROJECT TEAM

## Iddo Benzeevi - President and Chief Executive Officer

Mr. Benzeevi is the president of Highland Fairview. Mr. Benzeevi has extensive development experience with commercial, industrial and large scale mixed-use master planned developments. He is adept at developing livable and exciting places for people to live, work and enjoy. His unique vision and expertise includes the technical direction and management of large, multi-disciplined teams, including facilities planning and programming of civil infrastructure systems.

## Danette Fenstermacher - Chief Operating Officer Executive Vice President

Danette Fenstermacher has held a variety of executive real estate development positions spanning over 35 years. Prior to joining Highland Fairview, she was Senior Vice President & Executive Committee member of Mission Viejo Company, the master planner and developer of over 38,000 acres of land, 87,000 residential units and more than 32 million square feet of nonresidential property in California and Colorado. She also served as the Company's President of the Financial Services entity. Prior to joining Mission Viejo Company, she was with PricewaterhouseCoopers. Ms. Fenstermacher is a Certified Public Accountant and a California Real Estate Broker.

## Joe Anfuso - Chief Financial Officer

Prior to joining Highland Fairview, Mr. Anfuso was the CEO of Florsheim Homes, with operations in CA and NV, from 2006 - 20011. Mr. Anfuso directed all operational, financial and administrative functions for the 29 year old company. Previously, Joe was the CFO for Shea Homes San Diego from 2001-2006. Joe was responsible for the financial operations and strategic planning of San Diego's largest privately held homebuilder, with revenues in excess of $425 Million. Before Shea, Joe practiced various aspects of public accounting, ranging from forensic accounting and investigative auditing to accounting for private industry as both an internal auditor and controller. Joe is a CPA, obtaining his BBA in Accounting and MBA from the University of San Diego. Joe also possesses a California Real Estate Brokers and General Contractors License. Joe is the chairman of the Residential Real Estate Committee for Burnham-Moores Center for Real Estate. Recognized as an industry expert, Joe has been a frequent contributor on CNBC television, discussing the housing and real estate markets.

## HIGHLAND FAIRVIEW PROJECT TEAM

**Wayne Peterson - Vice President Community Planning**

Wayne Peterson has over 34 years of entitlement experience with cities and counties throughout Southern California including master community planning and site-specific high-rise residential, large-scale commercial/industrial, recreational, and mixed-use projects. Previously at Mission Viejo Company, he directed the California entitlement program for 17,000 acres, 51,000 units and 16.5 million square feet of nonresidential property, at the Mission Viejo and Aliso Viejo projects. Mr. Peterson is very adept in the CEQA process leading numerous entitlement efforts involving EIR's, mitigation measures, development agreements and Conditions of approval.

**Brian Hixson, P.E. - Vice President of Land Development**

Brian Hixson has held executive positions at top civil engineering firms for over 25 years, including RBF Consulting. He is an experienced project manager, specializing in residential and commercial development projects. He has direct design engineer experience, including grading and drainage improvements, agency coordination, tract layout, utility design and permitting requirements, for all types of land development projects. Mr. Hixson has managed and processed projects to approval with County of Riverside, City of Moreno Valley, Riverside County Flood Control, Eastern Municipal Water District and other jurisdictional and utility agencies in within the Inland Empire.

**Jack Stones - Vice President of Vertical Construction**

Jack Stones has over 40 years of construction and construction management experience. His experience as a seasoned construction manager, entailed the development of all types of commercial buildings from the pre-construction design phase, value engineering, purchasing, and construction management. Prior to joining Highland Fairview construction, Mr. Stones owned his own company where he provided Design-Build services for Restaurants and Hotels throughout the United States. In 1988 he joined R D Olson Construction for 16 years where he managed construction on numerous types of buildings; Commercial, Industrial, Commercial Office, Health Care, Retail, Education, Civic, Worship, Hospitality, Network Operating Centers, Country Clubs, Airport Terminal and Command Center, Hotel New Construction, Hotel Renovation, Residential & Multi-Unit Housing, Vacation Ownership Properties, Resort & Spa, Restaurant & Entertainment, Office & Mixed Use. Mr. Stones continued his career with Diffenbaugh Construction as a Project Executive handling Industrial Warehouse, Retail, New Hotels, Health Care & Worship facilities. Mr. Stones Joined Highland Fairview in 2008 and was instrumental in the completion of the 1.8 million square foot Skechers facility in Moreno Valley.

# ROBERT F. RIHA, PG, CEG

Senior Vice President/Senior Principal Geologist

## Education

- B.S., Geological Sciences, San Diego State University, San Diego, California, 1985

## Professional Registrations

- California Certified Engineering Geologist - 1921 Exp. 2/2014
- California Professional Geologist – 5866 Exp. 2/2014
- Nuclear Gauge Certification / 1985

## Professional Summary

For the past 15 years, Bob Riha has been the Senior Principal and the Managing Director of Leighton's Temecula office. He has over 25 years of professional experience performing and managing geotechnical assessments for planning and construction. His experience includes onsite geological investigations and services during design and construction for large tentative tracts, commercial developments, educational facilities and geotechnical investigations of distressed structures.

Mr. Riha has completed and supervised slope stability studies, landslide remediation design, site-specific geologic faulting, liquefaction, and dynamic settlement evaluations, evaluation of rock rippability and seismic hazard studies. Mr. Riha's duties also include field identification and evaluation of soil materials and bedrock, and observe, test, and document earthwork, foundation and pavement construction activities. Mr. Riha has also performed and managed staff performing field density testing (field compaction control) during rough grading and all phases of underground utility construction, foundation and pavement construction. He has been responsible for ensuring that work performed is in accordance with the project geotechnical report, recommendations of the soils engineer, improvement plans and specifications, and applicable agency ordinances.

These services have been performed at all stages of project development, from feasibility and planning of new work through construction, forensic studies, expert witness and remedial work related to failed structures. Mr. Riha's clients include private owners, residential and commercial/industrial developers, school districts, and public agencies.

## Project Experience

### Commercial

- **Skechers Logistics Facility, Moreno Valley, CA.** Principal Geologist for 85 acre, 1,820,000 square foot distribution facility. The multi-phased investigations determined active earthquake faults; evaluation of compressible soils; and provided detailed remedial earthwork evaluations. Geotechnical evaluations were also performed for the widening of adjacent SR-60 and a large RCFC box culvert which parallels one side of the building foundations. The fault investigations included over 7,000 feet of exploratory trenches reaching depths of up to 30 feet. This study allowed development planning in areas previously restricted in City EIR documents.

- **Golden Triangle, Murrieta, CA**. Principal Geologist for a proposed 64-acre, mixed-use commercial development that will include office buildings, retail/entertainment centers, hotel, parking structures, and associated underground utilities, driveways, parking lots, and off-site improvements.

- **Professional Hospital Supply Building, Temecula, CA.** Principal Geologist for geotechnical observation and testing services during rough grading and construction of onsite and off-site improvements. The project includes up to 20-foot high geogrid type retaining walls and up to 50-foot high cut slopes (1.5H:1V) which requires detailed geologic mapping to evaluate remedial grading necessary to ensure long-term stability. This is a 609,000-square-foot headquarters and distribution center located at the northwest corner of Dendy and Winchester Roads.

- **Promenade Mall Expansion, Temecula, CA.** Principal Geologist during the geological and geotechnical investigation and percolation studies for proposed onsite WQMP systems. This included extensive field work and laboratory resting to assess various foundation design options in consideration of the heavy load to be exerted by the four-story parking structure.

- **City of San Diego, CA.** Coordinated and performed extensive subsurface geotechnical evaluation of 79-acre commercial site located along potentially active La Nacion fault zone.

- **City of Vista, CA.** Project Manager during grading operations for 60-acre commercial center. Performed site-specific evaluation of deep alluvial soils with high groundwater levels and high potential for expansion to design support of multi-story buildings and realignment of major drainage channel.

- **City of Vista, CA.** Geotechnical evaluation of dynamic settlement potential before and after remedial implementation for support of 125,000-square-foot commercial building.

- **Encinitas Towne Center, Encinitas, CA.** Project Manager/Project Geologist for retail center development.

- **Jefferson Avenue Business Center, Murrieta, CA.** Project Manager/Project Geologist.

- **Marbella Golf and Country Club, San Juan Capistrano, CA.** Supervised staff geologists and performed geologic mapping and site-specific evaluation of several large landslide stabilizations during hillside grading. Involved >20 million cubic yards of remedial earthwork.

- **Promenade Mall, Temecula, CA**. Project Manager/Geologist for geotechnical evaluation and grading of the 79-acre site, on an alluvial plain less than one-half mile from the active Wildomar fault and within a defined liquefaction hazard zone.

- **RogersDale USA Entertainment Complex, Murrieta, CA**. Project Manager/Geologist for studies on a 64-acre site in the “Golden Triangle” area.

- **Silverhawk Development, Murrieta, CA**. Project Manager/Geologist providing the geotechnical evaluation of the commercial pads and residential parcels.

- **Pavement Failure – Peer Review/Expert Witness , Perris, CA.** Mr. Riha provided field and document review during geotechnical analysis and consulting during the determination of large in-tract pavement failures. Consultant reports were reviewed, independent analysis performed and clarification requests to involved design consultants prepared. Expert witness testimony provided during arbitration hearings with overall findings in favor of owner.

- **Master Planned Community (confidential client), Orange County, CA.** Performed geotechnical analysis for settlement concerns on deep sewer lines.

## Master-Planned Community

- **The Villages (Teneja), San Jacinto, CA.** Principal Geologist providing all necessary geologic and geotechnical management of personnel and technical direction during site geotechnical and geologic studies for the 475-acre residential and mixed-use development. The geologic and geotechnical engineering studies supported the project Specific Plan and EIR. The site contained a State of California Earthquake Fault Hazard Zone and Leighton's fault investigation included over 13,300 lineal feet of exploratory trenches reaching depths of up to 25 feet. This study was approved by the County of Riverside and allowed development planning in areas previously restricted by State AP Zones.

- **Geologic Constraints Study, Park Hill, Mixed Used, San Jacinto, CA.** Senior Principal Geologist coordinating and overseeing geologic constraints study on 320 acres of land with extreme topographic relief in southern San Jacinto. The property is bounded by and contains two active fault zones. The study included extensive aerial photographic analysis, field mapping, excavation and down hole logging of large-diameter boreholes and trenches for analysis of onsite fault activity. The locations of active faults were determined and a geologic report including a geologic constraints and land use restrictions was prepared. Over 12,700 lineal feet of fault trench up to 25 feet deep were excavated, logged and reported. All geologic work was performed under review by County of Riverside Geologist.

- **Moreno Highlands Bel Lago, Moreno Valley, CA.** Principal Geologist during site specific fault investigation and preliminary studies of a 2,000-acre, mixed-use development. The fault investigation included over 14,500 lineal feet of exploratory trenches reaching depths of up to 30 feet to expose the San Jacinto fault. This study allowed development planning in areas previously restricted in City EIR documents. City of Moreno Valley contracting geologic reviewing consultant accepted all work completed by Leighton.

- **Harveston, Temecula, CA**. Principal Geologist for this 550-acre residential and commercial planned development. Additional studies were performed to support the use of onsite soils to create the man-made lake liner, which prevented the need to import, impermeable clay materials. Recommendations were crafted to suit the needs of four homebuilders and one apartment boulder and various commercial builders.

- **Chardonnay Hills, Temecula, CA**. Principal Geologist for this 250-acre site. Geotechnical services during grading, street paving, and home construction; included geotechnical services and concrete inspection for a 96-inch-diameter cast-in-place storm drain pipeline.

- **Copper Canyon Development, Murrieta, CA.** Principal Geologist and Manager for geotechnical design and construction grading.

- **Geologic Constraints Study, San Joaquin Hills, CA**. Project Geologist coordinating and performing geologic constraints study on 1,800 acres of land in northern San Joaquin Hills. Study included extensive aerial photographic analysis, field mapping, excavation and downhole logging of large-diameter boreholes and trenches, seismic refraction survey for determination of bedrock rippability characteristics, and preparation of a geologic report including a geologic constraints map.

- **Proposed New Boat Launch Facility Improvements, City of Lake Elsinore, Riverside County, CA**. Principal Geologist during the preliminary geotechnical investigation, including site review of available information, site reconnaissance to observe and document the current surface conditions.

- **WatersEdge, Riverside County, CA.** Project Geologist during the preliminary geotechnical investigation, which included seismic design parameters, liquefaction analysis, settlement potential, natural slope stability and preliminary foundation design considerations were developed.

- **Murrieta Hills Specific Plan, Murrieta, CA.** Project Manager/Geologist for the Murrieta Hills Specific Plan area rock rippability update. Evaluation of rock hardness was performed to determine limits on excavation with conventional earthmoving equipment.

- **Temeku Hills Country Club, Temecula, CA**. Project Manager for geotechnical aspects of the master-planned residential and golf community.

- **Tucolata Hills and Silverhawk Specific Plan Areas, Riverside, CA**. Project Geologist for geotechnical portion of the EIR documents, tentative tract maps, and rough grading plan reviews. Site specific fault explorations were completed to define the active Murrieta Hot Springs fault and provide land use restrictions for this fault zone. Fault studies accepted by County of Riverside geologist and Planning Departments.

- **Victoria Grove, Lake Mathews Area, Riverside County, CA**. Project Geologist coordinating geologic constraint study, subsurface investigations and plan reviews for the approximately 1,000-acre development. Extensive hard rock evaluations were performed to development a strategy on excavation and placement of large volumes of oversize rock materials during the hillside grading process.

- **Whittier Fault, Yorba Linda, CA**. Project Geologist providing site-specific fault investigations on property adjacent to an active fault.

- **Winchester 1800, Inc., French Valley, Riverside County, CA.** Project Manager/Geologist for the geotechnical evaluation and plan reviews.

- **The Cove, San Jacinto, CA.** Principal Geologist during design and construction of the 250-acre, 500-lot residential subdivision. Specific studies were required to evaluate ground fissures, slope stability, storm drain and detention basin alignments, rock rippability and settlement of alluvial soil.

- **Aquabella, Moreno Valley, CA.** Principal Geologist for the 760-acre residential and commercial planned development. Additional studies were performed to evaluate the Riverside County Flood Control (RCFC) earthen berm, concrete lined, Line F Channel traversing the site along with two bridge spans. Recommendations were crafted to provide suitable grading recommendations as well as drainage provisions in areas supporting wetland habitat areas above the channel area. Provided geologic oversight and consultation during rough grading.

- **Greer Ranch and Vineyard Developments, Murrieta, CA**. Principal Geologist during the tentative map design review of proposed residential developments.

- **Line F Channel, Moreno Valley, CA.** Principal Geologist for the Moreno Highlands residential and commercial development. Provided geologic studies from EIR through current construction. Studies were performed to evaluate the Riverside County Flood Control earthen berm, concreted line, Line F Channel along with two bridge spans. Grading recommendations, as well as drainage provisions in areas supporting wetland habitat areas above the channel area were provided.

## Municipal Infrastructure

- **Moreno Valley Recreation and Conference Center, Moreno Valley, CA.** Project Geologist for geotechnical investigation. Leighton worked closely with the project architect and structural engineer to provided practical recommendations to mitigate differential settlement potential using earthwork techniques in lieu of a costly foundation system. The project included joining the city hall and police facilities with a 25-acre civic center master plan that includes a 42,000-square-foot community center.

- **City Library, Temecula, CA.** Principal Geologist during geotechnical observation and materials inspection and testing during construction. Grading of this steep hillside property required careful geologic observation to confirm a stable hillside to prepare to receive the foundation supporting fill soils. Nearly continuous observation and testing was performed to assure compliance for compacted fill soils and site grading.

- **Civic Center and Parking Structure, Temecula, CA**. Principal Geologist during the planning and design of the new Civic Center, parking structure and Mercedes and Main Street improvements. Geologic studies were provided to confirm lack of onsite faulting or liquefaction potential.

- **Proposed Water Park Peer Review, Temecula, CA**. Engineering Geologist performing peer review of development geotechnical report for a proposed water park located at the corner of Diaz Road and Dendy Parkway. The results of the review were submitted to the City of Temecula in a formal report outlining deficiencies and recommending corrective action plan. All reports were approved and project is awaiting development.

## Schools- DSA

- **Rancho Mirage High School, Palm Springs, Rancho Mirage, CA.** Principal Geologist for geotechnical investigation and construction for the 48-acre High School No. 4 site. Preliminary geotechnical report was prepared to fulfill the Geotechnical and Engineering Geology requirements of the California Building Code (CBC) Title 24 for development of the proposed high school. Principal for geotechnical and materials testing during construction.

- **Lake Elsinore Middle School, Lake Elsinore, CA.** Project Manager and Geologist during revitalization and expansion project. The project was a very complex project combining remodeling, seismic retrofit, and adding new permanent classrooms.

- **Lakeside High School, Lake Elsinore, CA.** Project Geologist during construction of new high school. Performed subgrade observations and evaluation during pool construction, pavement subgrade evaluation and provided mitigation recommendations for pavement subgrade stabilization.

- **Martin Luther King Middle School, Oceanside, CA.** Project Geologist and Manager during grading and construction for the Oceanside USD.

- **Sunnymead Elementary School, Moreno Valley, CA.** Principal Geologist for geotechnical investigation for the 6-acre elementary school site. Report was prepared to fulfill the geotechnical and Engineering Geology requirements of the California Building Code (CBC) Title 24 for development of the proposed high school. This report summarized the geotechnical findings, conclusions and geotechnical design and construction recommendations for the proposed school development.

- **Murrieta Mesa High School, Murrieta, CA.** Principal Geologist for geologic investigation for the 65-acre Murrieta Mesa high School. Reports were prepared to fulfill the Geotechnical and Engineering Geology requirements of the California Building Code (CBC) Title 24 for development of the proposed schools. The report summarized the geologic and geotechnical findings, conclusions and geotechnical design and construction recommendations for the proposed school developments. A subsurface exploration consisted of the excavation, logging and sampling of exploratory fault trenches. Trenching concluded that active faulting was determined to exist at the High School site. Land use restrictions were prepared and the campus building layout adjusted to accommodate these findings. All geologic reports accepted by CGS and DSA.

- **Great Oak High School, Temecula, CA**. Principal Geologist and Project manager during site grading/construction and all materials testing.

- **Erle Stanley Gardner Middle School, Temecula, CA.** Principal Geologist and Project manager during site grading/construction and all materials testing.

- **Sykes Elementary School, Murrieta, CA.** Principal Geologist for geotechnical investigation for the 12-acre Sykes Elementary School. Report was prepared to fulfill the Geotechnical and Engineering Geology requirements of the California Building Code (CBC) Title 24 for development of the proposed high school. This report summarized the geotechnical findings, conclusions and geotechnical design and construction recommendations for the proposed school development. A subsurface exploration consisted of the excavation, logging and sampling of 22 exploratory borings and one fault trench. Trenching concluded that faulting had not occurred onsite and allowed the planning of the school to continue.

- **Ortega High School, Lake Elsinore, CA.** Project Geologist during construction. For the fast-track construction schedule, Mr. Riha managed the geotechnical consulting and materials testing and inspections to assure that the project would be built to project specifications, ahead of schedule, and within budget. Close coordination with the district and a ground modifications contractor was necessary to meet the site development schedule.

- **Vista Murrieta High School, Murrieta, CA.** Project Manager and Project Geologist for geotechnical investigation for the 58-acre site. Report was prepared to fulfill the Geotechnical and Engineering Geology requirements of the California Building Code (CBC) Title 24 for development of the proposed school. This report summarized the geotechnical findings, conclusions and geotechnical design and construction recommendations for the proposed school development. A subsurface exploration consisted of additional geologic mapping of the site conditions and the excavation, logging and sampling of 11 exploratory backhoe pits and 14 hollow stem auger borings.

## Transportation

- **Lasselle Street Road Widening, Moreno Valley, CA.** Project Manager during the Preliminary Geotechnical Exploration for the proposed road widening of Lasselle Street; work included stability analysis of the rock slope after planned removal, and provided rock slope protection mitigations. Consultation was also provided to the project design civil engineer and City representatives during reparation of final construction design documents.

- **Newport Road Realignment, Riverside County, CA.** Project Geologist for geotechnical investigation and construction of Newport Road realignment between Winchester Road (SR79) and Menifee Road (approx. 5.9 miles) in Riverside County. Included steepened cut slopes requiring rock bolt anchors to construct a stable slope configuration.

- **Ground Motion Study, La Jolla, CA.** Project Manager. Coordinated and performed a geologic evaluation of an ongoing slope movement (due to a deep-seated landslide) on the eastern slopes of Soledad Mountain on Desert View Drive. Study included excavation and downhole logging of large-diameter boreholes to depths exceeding 160 feet in hillside terrain, and the installation of numerous slope monitoring instruments.

- **I-15 Widening, Winchester Road overpass, and SR-79 North Widening, Temecula, CA.** Project Geologist. Sampling, laboratory testing and field density testing of earthwork construction, aggregate base and asphalt materials. Testing was performed in accordance with the Caltrans and City of Temecula requirements. Materials inspection included observation and testing during construction of tie-back retaining walls.

- **La Sierra Realignment and Widening, Lake Matthews Area, Riverside County, CA.** Project Manager/Geologist during design and construction of the road widening which required rock bolt anchoring and hydro-auger construction to provide stable cut slopes.

- **SR-74/Riverside Avenue Improvement Project, Lake Elsinore, CA.** Principal Geologist and Project Manager during widening of SR-74 along the newly constructed Lakeside High School.

- **SR-79 North, Santa Gertrudis Creek Undercrossing, Temecula, CA.** Project Geologist during the design and construction of the new and widened SR-79 bike lane undercrossing.

- **French Valley Airport Hangar / Taxiway Expansion, Murrieta, CA**. Principal Geologist during the supplemental geotechnical investigation for the hangar and taxiway expansion project. Developed alternate methods to prepare soil subgrade to provide options to the developer, which would reduce construction costs.

## Water Infrastructure

- **EMWD Regional Water Reclamation Facility Expansion and Upgrade, Temecula, CA.** Principal Geologist and Senior Reviewer. Performed a detailed geotechnical investigation for the expansion and upgrade phase of this project. This project consisted of two new 80-foot-diameter digesters, one clarifier, a maintenance building, two out-of-compliance and one tertiary-effluent storage ponds, and associated pipelines.

- **EMWD Booster Pump Station and Pipelines, Scott Road, Menifee, CA.** Principal Geologist and Senior Reviewer of a subsurface geotechnical investigation for a two-mile pressurized water pipeline and a booster pump station. Provided field geotechnical testing and consulting services during grading and construction of the booster pump station and pipeline construction.

- **EMWD Perris Water Filtration Plant Phase II, Perris, CA.** Principal Geologist. Provided field geotechnical testing and consulting services during the expansion phase II- Raw Water Augmentation Pump Station and associated pipeline construction.

- **EMWD 21-inch Diameter Sewer, Jefferson Avenue, Via Montezuma and Del Rio Road, Temecula, CA.** Principal Geologist/Senior Reviewer. Performed a subsurface geotechnical investigation for the 21-inch diameter gravity sewer pipeline and investigated the feasibility for pipe jacking and bursting of existing pipe along the alignment.

- **Elsinore Valley Municipal Water District's Mission Trail Transmission Main Replacement, Lake Elsinore, CA.** Principal Geologist. Performed a geotechnical investigation for replacement of approximately 7,000 linear feet of existing 24-inch diameter polyvinyl chloride (PVC) waterline with a new 24-inch diameter ductile iron pipe (Dip Class 300).

- **Elsinore Valley Municipal Water Districts, Lake Elsinore, CA.** Project Manager and Project Geologist for design and construction of A-4 pump station and Temescal Canyon intertie pipeline. These projects consisted of excavation of below grade sewer lift station in soft ground conditions with shallow ground water requiring de-watering systems. The soft wet-well subgrade was stabilized, and the deep inlet/outlet pipeline also required de-watering during backfill. All work was performed within Caltrans right-of-way. The Intertie Pipeline project consisted of approximately two miles of 30-inch ductile iron pie crossing unexplored variable geotechnical conditions. Soft ground conditions were encountered that required specific evaluation and stabilization recommendations. Micro-tunneling and pipe jacking was performed though a hard, granitic rock hill side.

- **Irvine Ranch Water District, Orange County, CA.** Project Geologist for geotechnical feasibility studies on four 6-million-gallon water reservoirs and associated pumping facility. Six locations were independently evaluated for hillside stability including landslide evaluations. Evaluation methods included historical aerial photograph review, down-hole logging of large diameter borings was performed to evaluate the subsurface geologic conditions. Detailed geologic analysis was performed and recommendations for site selection were provided.

- **Metropolitan Water District, Riverside County, CA.** Project Geologist to determine the need for and the design of protective slabs covering two 90-inch San Diego pipelines at the Victoria Grove, Silverhawk, Temeku Hills and Chardonnay Hills residential projects. Subsurface borings and test pits were excavated to determine existing conditions and design criteria was developed in close coordination with District personnel.

- **Perris Valley Lateral "B" Stage 2, Moreno Valley, CA.** Principal Geologist during site geotechnical investigation for 2-mile long channel widening design for RCFC. Study provided remedial grading recommendations for the 13-foot-high channel embankments at two bridge crossings.

- **Temecula Valley RWRF 18-MGD Upgrade and Storage Expansion, Temecula, CA.** Principal Geologist and Senior Reviewer. Performed a detailed geotechnical investigation for the expansion and upgrade that consisted of two new 80-foot-diameter digesters, one clarifier, and maintenance building, two out-of-compliance and one tertiary-effluent storage pond, and associated pipelines.

## Honors and Associations

- Seismological Society of America - Member

- Association of Engineering Geologist, Member

- Building Industry Association, (BIA) Member, Riverside County Chapter

# M. KEVIN OSMUN
## PRINCIPAL CIVIL ENGINEER

### PROFESSIONAL HISTORY

| | |
|---|---|
| 1988 to Present | LOR Geotechnical Group, Inc.<br>Principal Civil Engineer |

### EXPERIENCE SUMMARY

Mr. M. Kevin Osmun has over 20 years experience in the environmental field. Mr. Osmun directs LOR Geotechnical Group's environmental operations and has conducted over 500 Phase I Environmental Site Assessments for the private and public sectors. The properties have ranged from agricultural to commercial/industrial. In addition to his experience with environmental assessments for property transfers, he has managed projects that require mitigation prior to and during development. Mr. Osmun is well versed in hazardous waste sampling and characterization methodologies in soil and groundwater regimes and risk assessments. Projects have ranged from leaking USTs, solid waste landfills, TSD facility closures to single spill response. LOR Geotechnical Group, Inc. is one of three firms that provides report review for underground storage tank closure for the County of San Bernardino, Fire Department Hazardous Materials Division.

### EDUCATION

B.S. Civil Engineering, Wayne State University, Northridge, 1975

### PROFESSIONAL REGISTRATIONS

California, Professional Engineer, CE 55116

### PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

# DAVID ATWATER

ENVIRONMENTAL PLANNER

LSA

## EXPERTISE

Data Collection, Research, and Analysis

Environmental Analysis/ Community Planning

California Environmental Quality Act

National Environmental Policy Act

Geographic Information Systems (GIS)

## EDUCATION

California State Polytechnic University, Pomona; B.S. in Urban and Regional Planning with an Interdisciplinary Minor in Geographic Information Systems Applications; June 2006.

## Continuing Education

Rio Hondo College; Geographic Information Systems coursework; July 2005.

## PROFESSIONAL AFFILIATIONS

American Planning Association (APA)

Association of Environmental Professionals (AEP)

## PROFESSIONAL RESPONSIBILITIES

Mr. Atwater coordinates and conducts research and provides analysis for LSA's environmental and planning projects subject to the laws of the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). He coordinates and contributes to the preparation of professionally written documents, which are submitted or publicly presented including Initial Studies, Environmental Impact Reports, Environmental Assessments, and Environmental Impact Statements through researching technical resources and providing accurate analysis, contributing to the overall production of environmental documents. Mr. Atwater has experience utilizing Geographic Information Systems (GIS) for analysis in planning-related applications. He also has experience conducting air quality modeling utilizing the Urban Emissions (URBEMIS) 2007 computer model to estimate project-related air emissions. Prior to working with LSA, Mr. Atwater had one year of professional experience working with the West Basin Municipal Water District as its GIS Project Planner for numerous water quality projects in western Los Angeles County.

## PROJECT EXPERIENCE

- Addendum to the General Plan Update Final Program EIR, City of Loma Linda, San Bernardino County, California
- Adelanto Towne Center Environmental Impact Report, City of Adelanto, San Bernardino County, California
- Amendments to the Victoria Gardens Master Plan Initial Study and Supplemental Environmental Impact Report, City of Rancho Cucamonga, San Bernardino County, California
- Circuit 1533 Feeder Load Relief Project Initial Study Mitigated Negative Declaration, City of Riverside, Riverside County, California
- High Desert Gateway Shopping Center, City of Hesperia, San Bernardino County, California
- Hospitality Mixed-Use Retail Center, City of San Bernardino, San Bernardino County, California
- Interstate 15/Railroad Canyon Road Interchange Project, City of Lake Elsinore, Riverside County, California
- Marble Canyon Quarry – High Wall Extension, County of San Bernardino, United States Forest Service
- South Perris Industrial Environmental Impact Report, City of Perris, Riverside County, California
- Tehachapi Upland Multiple Species Habitat Conservation Plan Environmental Impact Statement (EIS), United States Fish and Wildlife Service

## PROFESSIONAL EXPERIENCE

Environmental Planner, LSA Associates, Inc., Environmental Planning Consultants. September 2006–present.

GIS Project Planner, West Basin Municipal Water District, Carson, California. August 2005–August 2006.

# KELLY CZECHOWSKI

SENIOR ENVIRONMENTAL PLANNER

## EXPERTISE

CEQA and NEPA

Community Impact Assessments

Relocation Impact Reports

Water Quality Assessment Reports

## EDUCATION

University of California, Riverside, Bachelor of Science in Environmental Sciences, 2005.

University of California, Riverside, Bachelor of Arts in Economics, 2005.

## Continuing Education

University of California, Riverside, University Extension, *Urban Drainage*, January–March 2008.

University of California, Riverside, University Extension, *Geology Continuing Education Series: Groundwater and Related Issues*, March 2007.

University of California, Los Angeles, University Extension, *California Water Projects and Urban Water Supplies: Environmental Compliance for Water Resources Projects and Practical Approaches*, December 2006.

University of California, Riverside, University Extension, *Storm Water Regulations and Management*, May 2006.

University of California, Riverside, University Extension, *Watershed and Storm Water Regulations and Management*, September–November 2005.

## PROFESSIONAL RESPONSIBILITIES

Ms. Czechowski provides research, assistance, and coordination for a variety of LSA's environmental planning projects subject to review under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). She assists and coordinates with staff in the preparation of initial studies, environmental impact reports, environmental assessments, and environmental impact studies for commercial, industrial, public facility/infrastructure, and residential projects. Her duties have included the research, analysis, and identification of environmental impacts, utilizing knowledge of principles and concepts of various scientific and engineering disciplines and contributing to the overall production of environmental and planning documents. Her assignments range from preparing and coordinating the completion of initial studies, environmental impact reports, environmental assessments, and environmental impact studies based on technical documents to locating facts and findings associated with individual projects and providing assistance to staff. Her assignments also include the preparation and coordination of technical studies dealing with relocation, community, environmental justice, and water quality issues.

## PROJECT EXPERIENCE

- Atlantis Gardens Initial Study, City of Azusa, Los Angeles County, California
- Walnut Benson Residential Initial Study, City of Chino, San Bernardino County, California
- Adelanto Towne Center Environmental Impact Report, City of Adelanto, San Bernardino County, California
- High Desert Gateway Shopping Center Environmental Impact Report, City of Hesperia, San Bernardino County, California
- Yucca Valley Retail Specific Plan Environmental Impact Report, Town of Yucca Valley, San Bernardino County, California
- Perris Marketplace Environmental Impact Report, City of Perris, Riverside County, California
- Wal-Mart Supercenter at Canyon Crossings Environmental Impact Report, City of Riverside, Riverside County, California
- South Perris Industrial Environmental Impact Report, City of Perris, Riverside County, California
- UPS Freight Facility Environmental Impact Report, City of Rialto, San Bernardino County, California

## Continuing Education (Continued)

University of California, Riverside, University Extension, *Water Quality Basins and Bio-swales for the Inland Empire Region: Requirements, Design, Native Plants and Implementation*, October 2005.

## PROFESSIONAL EXPERIENCE

Senior Environmental Planner, LSA Associates, Inc., Environmental Planning Consultants, November 2010–present.

Environmental Planner, LSA Associates, Inc., Environmental Planning Consultants, October 2007–November 2010.

Assistant Environmental Planner, LSA Associates, Inc., Environmental Planning Consultants, July 2005–October 2007.

Planning Intern, City of Riverside Planning Department, Riverside, California. August 2004–July 2005.

Air Quality Administrative Intern, South Coast Air Quality Management District, Diamond Bar, California. July–September 2003.

## PROFESSIONAL AFFILIATIONS

Association of Environmental Professionals (AEP), Vice President of Programs January 2010–present.

Association of Environmental Professionals (AEP), Newsletter Editor January 2008–December 2009.

## PROJECT EXPERIENCE (CONTINUED)

- Kline Ranch Environmental Impact Report, City of Rialto, San Bernardino County, California
- Gateway South Warehouse Facility Initial Study, City of San Bernardino, San Bernardino County, California
- Gateway North Building 2 Initial Study, City of San Bernardino, San Bernardino County, California
- Arantine Hills Specific Plan Environmental Impact Report, City of Corona, Riverside County, California
- La Verne Village Mixed Use Initial Study, City of La Verne, Los Angeles County, California
- Sanderson Square Specific Plan Environmental Impact Report, City of Hemet, Riverside County, California
- Upland Crossing Specific Plan, City of Upland, San Bernardino County, California
- Colton Crossing Rail to Rail Grade Separation, City of Colton, San Bernardino County, California
- I-15/Railroad Canyon Road Interchange Project, City of Lake Elsinore, Riverside County, California
- Rancho Vista Boulevard Grade Separation Project, City of Palmdale, Los Angeles County, California
- Baseline Bridge Replacement Project, City of Highland, San Bernardino County, California
- Davis Road Bridge Replacement and Road Widening Project, Monterey County, California
- Imperial Valley Solar Project SA/DEIS and FEIS, Imperial County, California
- McCanna Ranch Water Company Pipeline Initial Study, City of Perris, Riverside County, California
- Huntington Beach Desalination Project Growth Inducement Evaluation, City of Huntington Beach, Orange County, California
- I-215/State Route 60 East Junction High Occupancy Vehicle Connector Project, Riverside County, California
- West Valley Water District Wellhead Treatment System Initial Study, City of Rialto, San Bernardino County, California
- I-10/Tippecanoe Avenue Interchange Project, City of San Bernardino and City of Loma Linda, San Bernardino County, California
- Greenspot Road Bridge at Santa Ana River, City of Highland, San Bernardino County, California

# KENT NORTON, AICP, REA

SENIOR ENVIRONMENTAL PLANNER

## EXPERTISE

CEQA and NEPA Compliance

Registered Environmental Assessor

## EDUCATION

California State University, Fullerton, California. M.S., Environmental Studies with an emphasis in Urban and Regional Planning. 1983. His thesis on "Land Use Planning for Sources of Non-Ionizing Electromagnetic Radiation" was published in 1984 by the National Technical Information Service as a handbook for planners when dealing with cellular telephone towers, high voltage power lines, microwave communication towers, radio and television broadcast towers, etc.

California State University, Fullerton, California. B.A., Biology. 1978.

## PROFESSIONAL AFFILIATIONS

American Institute of Certified Planners (AICP), #9601, 1993.

Registered Environmental Assessor (REA), Class I #06827, State of California. 1996.

Association of Environmental Professionals (AEP), State of California President 2006–2009

AEP, Inland Empire Chapter Director, 2005–2006.

AEP, Inland Empire Chapter, Board Officer, 2000–2005.

National Association of Environmental Professionals (NAEP), 2007–2009.

American Planning Association (APA), Inland Empire Section, member, 2000–present.

## PROFESSIONAL RESPONSIBILITIES

Mr. Norton has prepared and managed the preparation of hundreds of CEQA and NEPA compliance documents that include Initial Studies, Environmental Assessments, Categorical Exclusions and Exemptions, Negative Declarations, and Environmental Impact Reports (EIRs). His projects have ranged from small urban infill subdivisions to the development of over 13,000 acres of land in the high desert near Barstow, and EIRs for approximately a dozen large specific plan projects in Riverside and San Bernardino Counties. He has prepared EIRs for complex development projects on the former Kaiser Steel Mill, the Ontario Mills Mall property, and the Sierra Lakes Specific Plan project in Fontana. He has managed several award-winning projects including the Los Alamos Hills Master Plan and EIR for park and school facilities in Murrieta, the Coldwater Reservoir EIR in Beverly Hills, the Padua Park EIR in the City of Claremont, and the MacArthur Park Master Plan EIR in the City of Los Angeles. He also managed preparation of a comprehensive Environmental Impact Statement (EIS) for the closure and reuse of Griffiss Air Force Base in Rome, New York. As a Registered Environmental Assessor, Mr. Norton has prepared dozens of Phase 1 Environmental Site Assessments (ESAs) dealing with hazardous materials on vacant and developed sites.

Mr. Norton is the immediate past state president of the Association of Environmental Professionals (AEP), and has conducted numerous workshops and training sessions for students and professionals on the basics of CEQA compliance. He is still a Director-At-Large on the AEP State Board and is the chair of the AEP Emerging Issues Committee. He is also a member of the American Institute of Certified Planners (AICP) and the American Planning Association (APA).

## PROJECT EXPERIENCE

- General Plan, City of Indian Wells, Riverside County, California
- General Plan and EIR, City of Diamond Bar, Los Angeles County, California
- University Hills Specific Plan EIR, City of San Bernardino, San Bernardino County, California
- Roripaugh Ranch Specific Plan and EIR, City of Temecula, Riverside County, California
- Sierra Bella Specific Plan EIR, City of Corona, Riverside County, California
- Rancho El Rivino Residential Specific Plan EIR, City of Rialto, San Bernardino County, California

## PROFESSIONAL EXPERIENCE

Senior Environmental Planner, LSA Associates, Inc., Riverside, California. September 2010–present.

Director of Environmental Services, The Planning Center. November 2009–June 2010.

Director of Environmental Services, Michael Brandman Associates. October 2002–November 2009.

Director of Environmental Services, The Keith Companies. May 1995–October 2002.

Independent Consultant. August 1994–May 1995.

Environmental Planner, South Coast Air Quality Management District. June 1993–August 1994.

Senior Scientist, Tetra Tech. September 1992–June 1993.

Senior Project Manager, Cotton-Beland Associates. March 1992–September 1992.

Project Manager, Planning Network. January 1980–February 1992.

Facilities Planner, Placentia Unified School District. January 1980–January 1988.

Environmental Planner, PRC Toups Corporation. November 1977–January 1980.

## PROJECT EXPERIENCE (CONTINUED)

- P&V High Desert Development EIR, San Bernardino County, California
- Marketplace at Main Street Project EIR, City of Corona, Riverside County, California
- Renaissance Specific Plan EIR, City of Rialto, San Bernardino County, California
- Sunny Cal Specific Plan EIR, City of Beaumont, Riverside County, California
- EIS for Closure and Reuse of Griffiss Air Force Base, City of Rome, Oneida County, New York
- CEQA and NEPA Compliance for Riverside Freeway (SR-91) Auxiliary Lane, City of Riverside, Riverside County, California
- NEPA Compliance for Various Road Projects, City of Moreno Valley, Riverside County, California
- CEQA and NEPA Compliance for Improvements to Foothill Boulevard (Route 66), City of Fontana, San Bernardino County, California
- EIS/EIR for Metro Gold Line Extension to Pasadena, Los Angeles Metropolitan Transit Authority, Los Angeles County, California
- Greenspot Road Improvements, City of Highland, San Bernardino County, California
- High School #3 EIR & Elementary School, Palm Springs Unified School District, Riverside County, California
- South Ontario High School, Chaffee Joint Union High School District, San Bernardino County, California
- Desert Hot Springs Elementary School Mitigated Negative Declaration (MND), Palm Springs Unified School District, Riverside County, California
- Police and Public Works Facilities EIR, City of San Gabriel, Los Angeles County, California
- Cedar Glen Disaster Recovery EIR, City of Lake Arrowhead, San Bernardino County, California
- Los Alamos Hills Master Plan EIR for Park and School Facilities, City of Murrieta, Riverside County, California
- MacArthur Park Master Plan EIR, City of Los Angeles, Los Angeles County, California
- Padua Hills Park EIR, City of Claremont, Los Angeles County, California
- Ferraro Soccer Fields MND, City of Los Angeles, Los Angeles County, California
- Jurupa Business Park EIR, City of Fontana, San Bernardino County, California
- Calvary Chapel Initial Study/MND, City of Highland, San Bernardino County, California

# LYNN CALVERT-HAYES, AICP

PRINCIPAL

## EXPERTISE

Environmental Policy and Analysis

CEQA and NEPA

## EDUCATION

San Diego State University, B.S. in Geology, San Diego, 1979.

## PROFESSIONAL AFFILIATIONS

American Institute of Certified Planners (AICP), Certification No. 9870.

American Planning Association (APA).

Association of Environmental Professionals (AEP).

Financial Vice President/CFO 2012-present.
State Conference Committee 2002.
Executive Vice President 1994–1999.
Southern California Regional Director 1993–1995.
Inland Empire Chapter Director 1991–1993.
Inland Empire Chapter Treasurer 1990–1991.
State Legislative Committee 1992–1993.

Inland Geologic Society.

Board of Directors of Riverside Land Conservancy 1997–2006.

## PROFESSIONAL RESPONSIBILITIES

Ms. Calvert-Hayes has more than 26 years of experience in land use plans, public agency cases, general and comprehensive environmental analysis (California Environmental Quality Act [CEQA] and National Environmental Policy Act [NEPA]), geology, soils and seismicity analysis, surface mining and reclamation plans, public agency case processing, preparation of environmental documents on Habitat Conservation Plan (HCP) and Multiple Species Habitat Conservation Plan (MSHCPs), transportation projects, residential and commercial specific plans, mixed-use developments, materials recovery facilities (MRF), surface mining permits, mitigation monitoring programs, and other specialized planning documents.

Ms. Calvert-Hayes's professional history includes experience as a project manager at Chambers Group; environmental planner/project manager for J.F. Davidson Associates in Riverside, California; a planner with the City of Banning, California; and an environmental technician with the County of San Bernardino, California. Ms. Calvert-Hayes has also taught Geology for the Redlands Unified School District gifted student program and is a guest lecturer on CEQA at the University of California, Riverside. She was also on the State Board of the Association of Environmental Professionals for 12 years and is a member of the Environmental Law Section of the California State Bar.

## PROJECT EXPERIENCE

- Adelanto Towne Center Environmental Impact Report (EIR), City of Adelanto, San Bernardino County, California
- Avenue 48/Dillon Road Grade Separation, City of Coachella, Riverside County, California
- Base Line and Boulder Avenue Improvements, City of Highland, San Bernardino County, California
- Base Line and Victoria Avenue Roadway Improvements, City of Highland, San Bernardino County, California
- Base Line Bridge Replacement at City Creek, City of Highland, San Bernardino County, California
- Boulder and Baseline Avenue HCP EA, City of Highland, San Bernardino County, California
- Boulder Avenue Bridge Replacement and Roadway Improvements, City of Highland, San Bernardino County, California
- Canyon Meadows Development, City of Chino Hills, San Bernardino County, California
- City of Indio General Plan 2020 Update and EIR, City of Indio, Riverside County, California
- Citrus Village II (Wal-Mart) EIR, City of Corona, Riverside County, California

March AFB Restoration Advisory Board 1997–1998.

California State Bar, Environmental Law Section

## PROFESSIONAL EXPERIENCE

Principal, LSA Associates, Inc. Riverside, California. 1996–present.

Project Manager, Chambers Group. 1991–1996.

Environmental Planner/Project Manager, J.F. Davidson Associates, Riverside, California. 1989–1991.

Planner, City of Banning, California. 1987–1989.

Environmental Technician, County of San Bernardino, California. 1985–1987.

## PROJECT EXPERIENCE (CONTINUED)

- Colton Rail to Rail Grade Separation, San Bernardino Associated Governments (SANBAG), City of Colton, San Bernardino County, California
- Fifth Street Bridge and Roadway Improvements Environmental Documentation, City of Highland, San Bernardino County, California
- Fifth Street Bridge Biological Assessment and EA, City of Highland, San Bernardino County, California
- Gene Autry Trail and Bridge Widening, City of Palm Springs, Riverside County, California
- GPA 96-03B and 97-01 and VCPAs 96-01 and 97-01/Edison Company EIR, City of Rancho Cucamonga, San Bernardino County, California
- Greenspot Road Realignment and Bridge over the Santa Ana River, City of Highland, San Bernardino County, California
- High Desert Gateway Shopping Center, City of Hesperia, San Bernardino County, California
- I-10 Widening Between Orange Street and Ford Avenue, City of Redlands, San Bernardino County, California
- Indian Avenue/I-10 Interchange Improvements, City of Palm Springs, Riverside County, California
- Interchange Widening of Monterey Avenue and New Interchange at Cook Street and I-10, City of Palm Desert, Riverside County, California
- Iowa Avenue Grade Separation, City of Riverside, Riverside County, California
- Loma Linda Comprehensive General Plan Update, EIR, and EIR Addendum, City of Loma Linda, San Bernardino County, California
- Magic Mountain Parkway Extension EIR/Environmental Impact Statement (EIS), City of Santa Clarita, Los Angeles County, California
- Milliken Avenue and Archibald Avenue Grade Separations, City of Ontario, San Bernardino County, California
- Nutmeg Avenue Extension, City of Murrieta, Riverside County, California
- Oak Valley & SCPGA Golf Course Specific Plan EIR, County of Riverside, California
- Oak Valley Specific Plan Addendum, City of Calimesa, Riverside County, California
- Promenade EIR, City of Redlands, San Bernardino County, California
- Stratford Ranch Industrial EIR, City of Perris, Riverside County, California
- World Logistic Center EIR, City of Moreno Valley, Riverside County, California
- Victoria Gardens Mall EIR, City of Rancho Cucamonga, San Bernardino County, California
- Vogel Moreno Valley EIR, City of Moreno Valley, Riverside County, California

# MEGHAN MACIAS

PRINCIPAL/TRANSPORTATION PLANNER

## EXPERTISE

Transportation Planning and Traffic Impact Assessment

Access and Site Plan Analysis

Parking Demand and Shared Parking Studies

## EDUCATION

University of California, Irvine, Master of Urban and Regional Planning, 1998.

California State University, Fullerton, B.A., Geography, 1996.

## PROFESSIONAL MEMBERSHIPS

Institute of Transportation Engineers

Orange County Traffic Engineering Council

## PROFESSIONAL EXPERIENCE

Principal, LSA Associates, Inc., Riverside, California, 2009–present.

Senior Transportation Planner, LSA Associates, Inc., 1999–2009.

Transportation Planner, California Department of Transportation (Caltrans), District 8, 1998–1999.

Intern, Planning and Programming, Orange County Transportation Authority (OCTA), 1997–1998.

## PROFESSIONAL RESPONSIBILITIES

Ms. Macias' primary responsibilities include preparation of technical analyses of land development projects, including comprehensive traffic impact analyses, traffic operations analyses, and parking studies. Ms. Macias has prepared traffic analyses for numerous and varied projects throughout California, including regional retail centers, college campuses, mixed-use projects, and special events. In addition to her expertise in traffic engineering and operations analysis methodologies, Ms. Macias works closely with environmental staff to prepare technically sound and defensible Environmental Impact Report level analyses and traffic sections for environmental documents.

Ms. Macias' provides strategic transportation planning services to public- and private-sector clients. Her work focuses on providing mobility solutions for local agencies, developers, and campus environments. Ms. Macias has prepared transportation and parking management plans and trip reduction plans for numerous and varied projects throughout California, including master planned developments, college campuses, mixed-use projects, and special events. Ms. Macias has prepared Transportation Demand Management (TDM) plans for development project compliance with air quality regulations, and has assisted large and small employers in developing and implementing Trip Reduction Plans.

## PROJECT EXPERIENCE

- Moraga Canyon Sports Fields, Piedmont, California
- Coachella Valley Music and Arts Festival Traffic Operations Analysis, Indio, California
- Upper Santa Ana River Wash, San Bernardino County, California
- West Civic Center Parking Master Plan, Westminster, California
- San Miguel Ranch TIA, San Luis Obispo County, California
- Hoag Memorial Hospital Presbyterian TDM Plan, Newport Beach, California
- Imperial Valley Commons, El Centro, California
- Santa Barbara Cottage Hospital, Santa Barbara, California
- I-15 Baseline Road Interchange, Riverside County, California
- Laguna Canyon Road (State Route 133) Widening Project Report/Environmental Documentation, Orange County, California
- Laguna Canyon Road Widening Project Report/Project Study Report, Orange County, California
- I-5 Widening Environmental Impact Report/Environmental Impact Study On-Call Services, Caltrans District 7, Los Angeles, California
- Eastshore State Park Master Plan, Alameda and Contra Costa Counties, California

## PROJECT EXPERIENCE (CONTINUED)

- Richmond Greenway, Richmond, California
- Campus Centre, Irvine, California
- Community College Master Plan Circulation Planning and Design Services, Los Angeles and San
- Bernardino Counties, California
- City of Irvine Bicycle Transportation Plan, Irvine, California
- Seven Vines Traffic Impact Analysis, Livermore, California
- Los Medanos College Traffic Impact Analysis, Pittsburg, California
- Diablo Canyon Power Plant Parking Operations Plan, San Luis Obispo County, California
- Diablo Canyon Power Plant Trip Reduction Plan, San Luis Obispo County, California
- Our Lady Queen of Angels (OLQA) Church Construction Parking Phasing Plan and Parking Management Plan, Newport Beach, California
- Park Place Master Plan Circulation Planning, Irvine, California
- Bicycle and Pedestrian Safety Study, Santa Rosa Junior College, Santa Rosa, California
- Palm Springs Unified School District Traffic Impact Analyses, Desert Hot Springs, California
- Folsom Lake State Recreation Area (SRA) General Plan EIR/EIS, Sacramento, El Dorado, and Placer Counties, California
- Melrose Triangle Traffic Impact Analysis, West Hollywood, California
- 8759 Santa Monica Boulevard Traffic Impact Analysis, West Hollywood, California
- Beverly Place Mixed-Use Development Traffic Impact Analysis, West Hollywood, California
- De Anza College Transit Center, Santa Clara Valley Transportation Authority, Cupertino, California
- Pilarcitos Quarry (West Coast Aggregates) Trip Generation and VMT Analysis, Half Moon Bay, California
- Clayton Community Church, Clayton, California

# RON BRUGGER

SENIOR AIR QUALITY SPECIALIST

## EXPERTISE

Air Dispersion Modeling

Human Health Risk Assessment

Noise Modeling

Regulatory Analysis and Permitting

## EDUCATION

University of Wisconsin-Madison, B.S., Mechanical Engineering, 1983.

Trinity Consultants, Air Dispersion Modeling Course, 1994.

Blue Scape Environmental, Air Toxics Health Risk Assessment and HARP Course, 2004.

Blue Scape Environmental, Rule 1401 Health Risk Assessment Course, 2005.

Lakes Environmental, Air Dispersion Modeling Workshop and AERMOD Course, 2007.

## PROFESSIONAL EXPERIENCE

Senior Air Quality Specialist, LSA Associates, Inc., Irvine, California, 2003–present.

## PROFESSIONAL RESPONSIBILITIES

Mr. Brugger is a Senior Air Quality Specialist at LSA with over 19 years of experience in air emission modeling, human health risk assessment, noise modeling, regulatory analysis, and permitting and landfill gas modeling. Mr. Brugger's direct experience with all industry-standard environmental models assures a thorough analysis using the best analysis methodology.

He has recently conducted the CEQA air quality analysis, health risk assessment, and/or noise analysis for: Banning Business Park for the City of Banning, River Springs Charter School for the City of Riverside, 24th Street Widening for the City of Bakersfield, the Walmart Expansion for the City of Poway, the Valero Ethanol Transloading Project for the County of San Bernardino, Loma Bonita Residences for the City of San Dimas, and Grand Terrace Town Square in the City of Grand Terrace.

He is proficient with the use of the AERMOD, ISCST3, HARP, SCREEN3, EMFAC2007, URBEMIS 2007, CALINE4, FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108), SOUND32 noise model, and Traffic Noise Model (TNM) 2.5. He is also responsible for measuring noise levels with the Larson Davis models 720, 820, and 824 noise meters.

Mr. Brugger has contributed his energy efficiency, sustainability, and global climate change impact analysis expertise in developing the Energy, Sustainability, and Global Climate Change sections for residential, commercial, and industrial development projects as well as roadway improvement projects. Specific projects include the following:

- Banning Business Park, City of Banning
- Mountain Grove Citrus Plaza, County of San Bernardino
- Poway Walmart Expansion, City of Poway
- SR-91 Corridor Improvement Project EIR, Caltrans
- General Plan Update, City of Rancho Palos Verdes
- Vogel Industrial Park, City of Moreno Valley
- Newport Beach City Hall, City of Newport Beach
- Pedley Affordable Housing, County of Riverside
- Del Mar Fairgrounds, City of Del Mar
- Clay Street Business Park, County of Riverside

## PROFESSIONAL EXPERIENCE (continued)

Air Quality and Health Risk Specialist, TRC Companies, Inc., environmental consultants, Southern California, 1992–2003.

Senior Software Engineer, BDM International, Inc., engineering services consultants, Southern California, 1989–1992.

Missile Systems Analyst and Systems Expert, Fleet Analysis Center, Department of the Navy, Southern California, 1983–1985.

## PROJECT EXPERIENCE (CONTINUED)

- Air Dispersion Modeling, Various Clients, Various States (mostly California)
- Big Bear Disposal, San Bernardino County, California
- Hanford Municipal Airport Improvements Project, Kings County, California
- Grand Terrace Town Square, San Bernardino County, California
- Banning Business Park, Riverside County, California
- Defense Reutilization and Marketing Office, Meridian Business Park Project, Riverside, California
- Clay Street Industrial Park, Riverside County, California
- Vogel Industrial Park, Moreno Valley, California
- Central Park Master Plan Amendment, Rancho Cucamonga, California
- Caltrans Statewide On-Call Environmental Service, Throughout California
- South Orange County Transportation Infrastructure Improvement Project, Orange County, California
- Mid County Parkway, Riverside County, California
- SR-91 HOV Lanes, Riverside, California
- Vacek Project, Desert Hot Springs, California
- Jamboree & Richter Residential, Irvine, California
- Shady Creek Medical Center, Irvine, California
- Long Beach Home Depot, Long Beach, California
- Main and Iowa Traffic Signalization Project, Colton, California
- Melrose Triangle EIR, West Hollywood, California
- Western Way Recycling, Perris, California
- Teller/Campus, Irvine, California
- High Desert Gateway, Hesperia, California
- Gateway South, San Bernardino, California
- Hospitality Mixed-Use, San Bernardino, California
- La Habra Homes, La Habra, California
- Barranca/Millikan, Irvine, California

# RAYMOND V. HUSSEY, AICP

ASSOCIATE

## EXPERTISE

Environmental Analysis

Transportation Planning/Engineering

## EDUCATION

California Polytechnic State University, San Luis Obispo, Master of City and Regional Planning, 1993.

University of California, Davis, Bachelor of Science in Environmental Policy Analysis and Planning, 1982.

## PROFESSIONAL AFFILIATIONS

American Institute of Certified Planners (AICP), Certification No. 12937

American Planning Association (APA)

Association of Environmental Professionals (AEP)

Building Industry Association (BIA)

Institute of Transportation Engineers (ITE)

## PROFESSIONAL EXPERIENCE

Associate, LSA Associates, Inc., Riverside, California. 1998–present.

## PROFESSIONAL RESPONSIBILITIES

Mr. Hussey manages the Environmental and Planning groups in LSA's Riverside office. His primary duties include managing and preparing environmental documents (CEQA and NEPA) for public and private development projects throughout Southern California. His experience includes preparation of categorical exemptions/exclusions, initial studies, and environmental impact reports for roadway widening, transit centers, retail centers, commercial centers, industrial warehouses, residential subdivisions, and Specific Plans. As project manager, Mr. Hussey works directly with the agency contact persons and project applicants and manages, coordinates, and conducts all LSA work efforts, including review of technical reports to ensure CEQA and NEPA compliance. As a result of this experience, he has developed a comprehensive understanding of the environmental issues associated with the environmental review of projects and has developed and expertise in the procedures required by CEQA and NEPA.

## PROJECT EXPERIENCE

- Citrus Village II EIR, Corona, Riverside County, California
- Green River Ranch Specific Plan EIR, Corona, Riverside County, California
- Kline Ranch Industrial Warehouse EIR, Rialto, San Bernardino County, California
- ProLogis Industrial/Warehouse EIR, Rialto, San Bernardino County, California
- Rancho Vista Boulevard Widening Project IS/MND and EA, Palmdale and Caltrans District 7, Los Angeles County, California
- Rancho Vista Boulevard Widening Project IS/MND and CE, Palmdale and Caltrans District 7, Los Angeles County, California
- 20th Street West IS/MND, Palmdale, Los Angeles County, California
- Green River Road Widening Project IS/MND, Corona, Riverside County, California.
- Recycled Waterline IS/MND, Corona, Riverside County, California
- San Jacinto Retail Center EIR, San Jacinto, Riverside County, California
- Swift Transportation Facility Draft EIR, Rialto, San Bernardino County, California
- The Crossings EIR, Corona, Riverside County, California
- Upper Santa Ana River Wash Land Management and Habitat Conservation Plan EIR, San Bernardino County, California
- Valley Central Shopping Center EIR, Lancaster, Los Angeles County, California
- West Valley Water District Wellhead Treatment System IS/MND and Addendum, Rialto, San Bernardino County, California

## PROFESSIONAL EXPERIENCE

Previous Experience 1987–1998:

- Transportation Planner, Penfield & Smith Engineers, civil engineering consultants, Santa Barbara, California.
- Transportation Planner, Associated Transportation Engineers, consulting transportation engineers and planners, Santa Barbara, California.
- Transportation Planner, Willdan Associates, transportation planning and engineering consultants, Sacramento, California.
- Transportation Planner, TJKM Transportation Consultants, transportation planning and engineering consultants, Sacramento, California.
- Transportation Analyst/Engineer, Transportation Development Review Section, City of Irvine, Irvine, California.
- Intern, Transportation Planning/Traffic Engineering Division, City of Oxnard, Oxnard California.

CORPORATE
RESUME

# Cori Wilson

**Project Role: Air Quality/Climate Change Expert**

## Overview

- 7 Years Experience
- Bachelor of Science, Environmental Science - University of Washington, Bothell

**Cori Wilson** is an Air Quality and Greenhouse Gas Specialist with seven years of experience in the authorship of air quality and greenhouse gas analyses. Cori's analyses are known for their technical accuracy, thoughtful mitigation measures, and innovative approaches. Cori regularly co-authors papers on the topic of greenhouse gases for the Association of Environmental Professionals.
Cori's analyses are tailored to the type of project and the air district in which the project is located. In general, greenhouse gas analyses contain emission quantification of construction and operational impacts, consistency with California's most recent strategies to reduce State emissions pursuant to Assembly Bill 32, identification of project design features to reduce emissions, application of mitigation measures (if necessary), and a finding of significance. Cori's air quality analyses include an estimation of short-term and long-term criteria pollutant emissions. She is an expert with the URBEMIS and CalEEMod models, yet can supplement the model with her own emissions calculations. She conducts carbon monoxide hotspot analyses using the EMFAC and Caline4 models. She also prepares localized significance threshold analyses and health risk assessments utilizing the AERMOD dispersion model. She uses appropriate air district and State guidance to produce legally defensible analyses.

## Related Experience

Cori prepared greenhouse gas and/or air quality analyses for the following projects.

### Commercial Projects

- **Gosford Village Shopping Center and the Panama Lane Shopping Center, City of Bakersfield.** The Gosford Village and the Panama Lane shopping centers are two projects within a three mile radius of each other both consisting of a Walmart and related commercial shopping centers. These projects were completed in early 2007 and had among the first climate change analyses for CEQA. Cori developed the approach to address climate change, which was used by other Lead Agencies in California because at the time, there was no regulatory guidance on this issue.
- **Almond Plaza, County of San Bernardino.** The project includes the construction of approximately 59,000 square feet of commercial retail uses, a 180-room hotel, 149,000 square feet of office space, 5,000 square feet of restaurant uses, and 3,500 square feet of a fast food restaurant.
- **Standard Center, Tuolumne County.** The project consists of 40,922 square feet of retail buildings.
- **Milpitas Walmart Expansion Project, City of Milpitas.** The project is the expansion of an existing Walmart.
- **Murrieta Marketplace, City of Murrieta.** The project involved a regional shopping center, park-and-ride, and a dedicated wetlands area.
- **Creekside Marketplace, Fremont.** The project consists of 524,000 square feet of commercial uses near an existing landfill.

- **Merced Truck Stop (Tentative Parcel Map No. 11325), Kern County.** The project includes construction of a truck stop, gasoline station, oil and lube facility, truck and car wash, convenience store, restaurants, and hotel.
- **Pomona/Rincon Medical Office Center and Hospital, City of Chino Hills.** An air quality analysis was prepared for the project, which considered two options for the project site: 1) the project with a hospital (with and without an emergency room); and 2) the project with a second medical building in place of the hospital. The project site is located next to a freeway; therefore, the analysis also assessed the potential impact of the freeway on the proposed hospital.
- **Travel Plaza in Thunder Bay, Ontario, Canada.** The project consists of a truck stop, including a convenience store, restaurant, and gasoline, diesel, and propane fueling stations. Cori prepared a unique Air Quality Impact Analysis that assessed the impact of project-related and mobile emissions at sensitive receptors using the U.S. EPA dispersion model, AERMOD. GIS technology was used in combination with AERMOD to produce concentration isopleths for nitrous oxides, carbon monoxide, diesel particulate matter, and benzene. Health risks from exposure to benzene were assessed. Emissions were estimated using the U.S. EPA emission factor model, MOBILE6, and the California Air Pollution Control Officers Association's Air Toxics Hot Spots Program methodology. Canadian regulations and anti-idling technology were also discussed in the report. An Odor Impact Analysis was also prepared to determine odor impacts from the proposed development on nearby sensitive receptors. Cori was called as an expert witness in the Canadian court and testified regarding the technical accuracy of the analyses she prepared.
- **William J. Carroll Government Center, County of Solano.** The project consisted of a 35,000 square foot two-story County public health facility and clinic and associated site improvements located on 2.78 acres in the City of Vacaville. The Health facility and clinic would be operated by the Solano County Health and Social Services Department.
- **Wasco Center Walmart, City of Wasco.** The project involves the addition of square footage to a previously approved Walmart building.
- **Sheriff Station, Palm Desert, Riverside County.** The project consists of a proposed sheriff station.
- **West Hollywood Peer Review.** Cori prepared a peer review of the air quality and climate change analyses for the 8801 Sunset Boulevard project in the City of West Hollywood.
- **Newport Beach Learning Center, City of Newport Beach.** The project consists of the demolition of existing structures and construction of a three-story learning facility. Cori prepared air quality and greenhouse gas analyses for the project.
- **Fahrens Park Plaza, City of Merced.** The project consists of the development of a more intense use on an existing commercial retail site.
- **Chick-fil-A, City of Sunnyvale.** The project consists of a 4,350 square foot Chick-fil-A restaurant.
- **Mira Loma Retail Center, Riverside County.** The project consists of two alternatives with fast food restaurant and a specialty retail or convenience store.
- **Needles Fire Station No. 31, County of San Bernardino.** The project consists of the development of a fire station.

### Industrial and Warehouse Projects

- **City Creek Maintenance Project, County of San Bernardino.** The project includes maintenance activities for existing flood control facilities and completion of emergency activities.

- **Rialto Commerce Center, City of Rialto.** The project consists of the construction and operation of 3,659,000 square feet of industrial and warehouse uses on 158.9 acres.
- **Highland Fairview Corporate Park, City of Moreno Valley.** The project consists of the construction of 2.4 million square feet of logistics, 200,000 square feet of commercial, and a retail component. A comprehensive climate change analysis included an emissions inventory and an onsite and offsite (carbon offsets) mitigation measure feasibility analysis. The cumulative analysis included a description of the potential of the project to contribute to the emissions associated with international trade.
- **North Basin Groundwater Protection Project, Orange County Water District.** The Orange County Water District conducted investigations of a portion of the Orange County Groundwater Basin within the cities of Fullerton and Anaheim and found concentrations of volatile organic compounds that are in excess of drinking water standards. The project includes construction and operation of a pump-treat-recharge system to remediate the groundwater contamination. The project is being designed to extract adequate amounts of contaminants while minimizing the risk of contamination migration into portions of the Orange County Groundwater Basin that are used for potable water supplies.
- **Miraloma Recharge Basin, Orange County Water District.** The project involves the construction and operation of an approximately 13-acre groundwater recharge basin.
- **Burris and Lincoln Basins Reconfiguration and Five Coves Pipeline Project, Orange County Water District.** The project involves the reconfiguration of two groundwater recharge basins and the construction of a pipeline system. The analysis took into account the "adaptation" benefits of the project by mitigating the effects of climate change by recharging groundwater basins.
- **Mid Basin Injection Well Pilot Project, Orange County Water District.** The project is a pilot program that involves the construction and operation of a mid basin injection well and monitoring well onsite within the City of Fountain Valley and the construction and operation of a mid basin monitoring well on a site in the City of Santa Ana. The purpose of the project is to test the effectiveness of a mid basin injection well system in the Orange County Groundwater Basin. Based on the results of the pilot program, a series of additional injection wells could be constructed.
- **Linda Vista Reservoir and Pump Station Project, City of Anaheim.** The project consists of upgrading and replacing existing water storage and pumping facilities and developing new facilities to meet future water demands.
- **Public Safety Enterprise Communication Project, Riverside County.** The project involves the expansion of the County's communication system through the construction of 45 radio tower sites. The analyses took into account the fact that the project sites spanned two air districts and three air basins by expanding the background information and utilizing appropriate thresholds where necessary.
- **Pacific Rail Industries Metal Shredding Operation, Colton.** The project involves the installation and operation of a metal shredding operation as an expansion of an existing scrap metal facility and an increase in the volume of transloading (transfer of goods between rail car and truck for distribution).
- **Overton Moore Properties Distribution Center, Perris.** An Air Quality Analysis and Health Risk Assessment Report was prepared that estimated the health risk from operational related diesel particulate matter and construction emissions using the U.S. EPA dispersion model, ISCST3.
- **Jaden Warehouse/Distribution Facilities, Mead Valley.** An Air Quality Impact Analysis and Health Risk Assessment Report was prepared for the project, which included four warehouses totaling 170,228 square feet of floor space.

- **Barstow Industrial Park, City of Barstow.** The project consists of the development of a maximum of 10.9 million square feet of industrial and related development. The Climate Change Analysis included an assessment of potential greenhouse gas reductions from the use of rail on the project site.
- **Granite Mine Expansion, City of Twentynine Palms.** The project involves the expansion of an existing sand and gravel mine with accompanying concrete and asphalt facilities. Emissions associated with the concrete and cement manufacturing industries were explored in the Climate Change Analysis report. Greenhouse gas emissions from the proposed expansion were quantified.

### Residential and Mixed-Use Projects

- **Tentative Tract Map 34271, City of San Jacinto.** The project is the construction of 154 single-family residential units on 45 acres.
- **Tentative Tract Map 36243, City of San Jacinto.** The project is the construction of 43 single-family residential units on 11.55 acres.
- **Tentative Tract Map 62757, City of Lancaster.** The project is the subdivision of approximately 160 acres into 650 residential lots.
- **Edgewater Communities, City of Chino.** The project is the construction of residential units on land previously designated for open space and agriculture. The climate change analysis included a discussion on smart land use and the conversion of agriculture to sprawling communities.
- **Stonefield Tentative Tract Map 18393, Chino Hills.** The project is the development of 28 single family residential units in a location with variable terrain.
- **Sky 19 Development, Bakersfield.** The project is a residential development. The analysis assessed regional and cumulative air quality impacts. Mitigation measures and compliance with the San Joaquin Valley Air Pollution Control District's Indirect Source Review Rule 9510 reduced air quality impacts to less than significant.
- **Ashlan Locan II, City of Clovis.** The project consists of the development of 196 residential units on 17.78 acres.
- **Sierra Bella Specific Plan EIR, Corona.** The project consists of residential uses on variable terrain, which would require substantial grading near existing residential uses. An Air Quality Impact Analysis and Health Risk Assessment was prepared, which examined potential health risks associated with diesel particulate matter and fugitive dust generated during grading activities. URBEMIS was used in conjunction with AERMOD to estimate future concentrations.
- **Renaissance Specific Plan, City of Rialto.** The project accommodates 17.4 million square feet of business and commercial uses (835,200 square feet of which is existing and expected to remain), 1,746 residential units, one school, two community parks, and multiple neighborhood parks. It is located on 1,510 acres in the City of Rialto on and adjacent to the Rialto Municipal Airport.
- **Rich Haven Specific Plan, City of Ontario.** The analysis assessed the conversion of existing dairies to a mix of residential, employment centers, and an activity core. The Climate Change Analysis included a greenhouse gas emission inventory (methane and nitrous oxides) for the existing cattle and hog farming. Greenhouse gas emissions from the proposed residential and commercial uses were also estimated and the net increase of emissions with project implementation was determined. Project specific thresholds were derived to determine the level of significance in regard to the project's impact on climate change as well as the impact of climate change to the project.

- **Colinas del Oro, Riverside County.** The project consists of residential and retail uses on steep slopes that would require substantial grading. Mitigation and project alternatives were proposed to reduce localized impacts during grading to less than significant at the nearest sensitive receptor.
- **940 Main Street Project, City of Half Moon Bay.** The project consists of subdividing the existing 1.83-acre parcel into 12 lots to allow for future residential development.
- **Merrill Gardens at Lafayette, Lafayette.** The project would include 72 independent/assisted living apartments, a 17-bed memory care facility, and approximately 6,000 square feet of retail.
- **Lugonia Avenue Housing, Housing Authority of San Bernardino.** The project consisted of 39 single-family residential units and 189 multi-family residential units.
- **Rancho Summit, Tentative Tract Map 18741, Rancho Cucamonga**. The project consists of the development of 53 residential lots on 40 acres.
- **Tentative Tract Map 18122, City of Rancho Cucamonga.** The project would allow the development of 76 single-family residences on 53 acres.
- **Rubidoux Affordable Housing, Mustang Lane, Plot Plan 24395, City of Jurupa Valley.** The project consists of a 22-unit low-income apartment development on 1.12 acres.

### Recreation Projects

- **Silverlakes Recreational Complex, Norco.** The project consists of a variety of multi-use recreational facilities including soccer fields, equestrian show-grounds, and/or a community event. Cori prepared air quality and greenhouse gas analyses for the project.
- **Bakersfield State Vehicular Recreational Area, County of Kern.** The air quality section in support of a DEIR was prepared for the project, which involves the construction and operation of a state vehicular recreational park. The park would be used for all-terrain vehicles, motorcycles, and 4-wheel drive vehicles operated on maintained trails and within fenced activity areas. The air quality analysis was conducted in accordance with San Joaquin Valley Air Pollution Control District methodology that estimated air quality impacts using a combination of modeling techniques: URBEMIS; U.S. EPA AP-42 emission factors; ISCST3; VISCREEN; and NONROAD.
- **Burris Basin Recreation Area, City of Anaheim.** The project consisted of a 14-acre passive recreation/nature park within an existing 116-acre ground water percolation basin/wildlife habitat area currently referred to as the Burris Basin. Cori prepared an Air Quality and Climate Change Analysis Report for the project.

## Climate Action Plans, General Plans, and Greenhouse Gas Inventories

**City of Palm Springs Greenhouse Gas Inventory.** MBA prepared a greenhouse gas inventory for the City of Palm Springs. Community and government business as usual emissions were estimated for the years 1990, 2000, 2005, 2008, 2012, 2020, and 2035. Compliance emissions were also estimated, which take into account greenhouse gas reductions from adherence of State regulations adopted under the authority of AB 32. The inventory utilizes ICLEI's Clean Air and Climate Protection Software as well as calculations prepared specifically for the City.

**City of Hesperia Climate Action Plan.** Cori managed and prepared a Climate Action Plan for the City. The Plan outlines a course of action for the City government and the community of Hesperia to reduce per capita greenhouse gas emissions 29 percent below business as usual by 2020. The Plan includes baseline and projected business as usual inventories for 2020 and General Plan buildout. The Plan provides strategies and implementation actions to achieve target reductions compared to business as usual scenarios, quantifies emission reductions anticipated from state and City of Hesperia measures and provides a monitoring program to track

progress, and includes a thorough discussion of climate change adaptation policies and measures to minimize the potential impacts of climate change on future development. The Plan received a Merit Award from the Association of Environmental Professionals in 2011.

**City of San Ramon Climate Action Plan.** Cori assisted on the preparation of a Climate Action Plan for the City of San Ramon. The Climate Action Plan is the City's primary strategy for ensuring that the buildout of the General Plan 2030 will not conflict with the implementation of Assembly Bill (AB) 32. The Climate Action Plan is designed to reduce community related and City operations related greenhouse gas emissions to a degree that would not hinder or delay implementation of AB 32. The purpose of the Climate Action Plan is to: outline a course of action for the City government and the community of San Ramon to reduce greenhouse gas emissions 15 percent below 2008 levels by the year 2020 and adapt to effects of climate change, and provide clear guidance to City staff regarding when and how to implement key provisions of the Climate Action Plan.

**City of San Ramon General Plan Update**. Cori prepared the air quality and greenhouse gas analysis for the General Plan Update EIR.

## Awards

**2011 Merit Award from the Association of Environmental Professionals** for the City of Hesperia Climate Action Plan.

## Professional Publications

**California Community-wide Greenhouse Gas Baseline Inventory Protocol White Paper, Association of Environmental Professionals (AEP).** Cori and Dave Mitchell prepared two sections in this paper. One section provides guidance on how to estimate greenhouse gas emissions from stationary and area sources and the other section provides guidance on how to estimate greenhouse gas emissions from purchased electricity. The paper was finalized in June 2011. Website: www.califaep.org/docs/WhitePaper_June2011.pdf

**California Emissions Estimator Model (CalEEMod) Beta Tester.** The South Coast Air Quality Management District requested that Cori beta test CalEEMod prior to its release in 2011. She prepared a memorandum to the District with recommendations for the model.

Wilson, C. **Climate Change Risks and CEQA.** Association of Environmental Professionals Environmental Monitor, Fall, 2009. The article provides suggestions on how climate change risks can be addressed in the context of CEQA.

Wilson, C. **Greenhouse Gas Threshold Development.** Association of Environmental Professionals Environmental Monitor, Summer, 2009. The article presents an update on the process of greenhouse gas threshold development by air districts, cities, and counties.

**Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents.** Cori was a primary author on this paper prepared on behalf of the California Association of Environmental Professionals. The paper outlined various approaches that a Lead Agency could take to address climate change and greenhouse gases in a CEQA document. The paper also contained a summary of climate change legislation, CEQA requirements, and mitigation to reduce impacts. The paper was finalized on June 29, 2007, and incorporated comments from the environmental sector and the building sector.

## Professional Presentations

**"City of Palm Springs Greenhouse Gas Inventory."** Cori presented at the City of Palm Springs 3rd Annual Sustainability Summit in November 2010. She discussed the basics of greenhouse gases and provided a summary of the results of the City's greenhouse gas inventory.

**"Clear Skies Ahead: Clearing the Smog about Air Quality Analysis."** Cori, Dave Mitchell, and Steve Smith presented at the Association of Environmental Professionals State Conference. The presentation described step by step how to answer the air quality questions contained in Appendix G of the CEQA guidelines.

**"A Planner's Guide to Air Quality Issues in Land Use Planning."** In 2006, Cori moderated and presented at the American Planning Association, California Chapter Conference, Orange County, California. The presentation focused on the California Air Resources Board's Air Quality and Land Use Handbook.

**"Global Climate Change, CEQA, and NEPA."** In 2007, by request of the California State Lands Commission, Cori Wilson presented on various topics, including climate change legislation and litigation and a multi-step approach for assessing climate change in National Environmental Policy Act (NEPA) documents.

**"A Change in the Air."** Cori discussed how to address climate change in CEQA documents at the Building Industry Show.

**"How to Analyze Greenhouse Gas Emissions and Determine Significance in CEQA Documents."** Cori presented for the Fresno Chapter of the Association of Environmental Professionals, January 17, 2008.

## Professional Affiliations

- Association of Environmental Professionals, California, 2005-2011
- Association of Environmental Professionals, Climate Change Committee, 2009-2011

CORPORATE
RESUME

# Kenneth J. Lord, Ph.D., RPA

**Director, Natural/Cultural Resources**

## Overview

- 30 Years Experience
- Doctorate degree, Archaeology – University of Texas, Austin
- Bachelor's degree, Anthropology – University of Pittsburgh

**Kenneth Lord** possesses over 30 years of professional experience in the areas of environmental consulting, cultural resources management, and environmental assessment of major transmission and development projects. He has managed multi-disciplinary teams preparing Environmental Impact Studies (EISs) and Environmental Impact Reports (EIRs) that have been used by the Federal Energy Regulatory Commission, US Army Corps of Engineers, and State of California agencies in licensing pipeline projects in California and the western United States. He has been involved in management of the construction/ environmental compliance monitoring associated with a variety of development projects.

Dr. Lord's experience encompasses the reconnaissance, feasibility, and environmental impact aspects of a variety of project types. He is knowledgeable about California's county environmental documentation procedures and regulations, as well as other federal and state environmental laws, regulations, and guidelines. He prepared and supervised the preparation of EIRs, EISs, and Biological Assessments in accordance with NEPA and CEQA rules and regulations.

## Relevant Project Experience

### Government Land Use Planning and Community Development

**Apple Valley Re-entry Facility, California Department of Corrections and Rehabilitations.** Biology and Cultural Resources lead for the preparation of the EIR and Environmental Compliance Program. The proposed SCRF site is located on San Bernardino County property adjacent to the West Valley Juvenile Detention and Assessment Center located approximately two miles north of Victorville on the east side of Interstate- 15. The federal regulatory agencies that had jurisdiction over this project in the realm of biological, regulatory and cultural resources concerns included the U.S. Department of the Army Corps of Engineers, and U.S. Fish and Wildlife Service. Biological, regulatory, and cultural resources reports have been completed for the project. Potential issues with loss of endangered species habitat and jurisdictional issues with the CDFG have been identified. Informal discussions with U.S. Fish and Wildlife and CDFG have occurred.

### Land Development

**Burns Ranch Project, Riverside County.** Served as Project Manager for the 64-acre Burns Ranch Project located in Riverside County, CA. This project included completion of both biological and cultural resources tasks in compliance with Riverside County regulations. A biological assessment of the property was completed by the MBA team. Cultural resources were identified on the property and MBA cultural resources specialists prepared a cultural resources testing plan for the project.

**Twin Creek Development, Riverside County.** Serving as Project Manager for the Twin Creeks Development in Western Riverside County, Dr. Lord and the MBA team are providing biological and regulatory support for this 680-acre development. The primary objective of the project is to provide the client with a Riverside County Biological Assessment, Jurisdictional Delineation as well as to assist the client with the Habitat Evaluation and Acquisition Negotiation. The MBA team has successfully completed these tasks and is now in the process of obtaining US. Army Corps of Engineers, California Department of Fish and Game and Regional Water Quality

Control Board permits.

**Juniper Flats Development, Riverside County.** Serving as Project Manager for the Juniper Flats Development Project in the Nuevo Area of Riverside County, Dr. Lord and the MBA team of biologists, regulatory staff, and cultural resources personnel provided a full biological assessment and completed HANS negotiations for this 413-acre project. The MBA team also completed cultural resources surveys including documentation to determine the significance of the site. The MBA regulatory staff is currently processing all required permits for the project.

### Water Projects

**Los Osos Wastewater Project EIR, County of San Luis Obispo.** Co-managed the preparation of technical appendices for natural and cultural resources and providing sections of an EIR for the construction and operation of a wastewater facilities project in the Community of Los Osos in San Luis Obispo County. The natural resources technical studies and the EIR section included natural resources, jurisdictional delineations, consultations on endangered species, and development of appropriate mitigation. These activities were performed by MBA staff. In addition, technical studies for archaeological, historical, architectural, and Native American concerns are being completed. These studies included detailed Native American consultation on a CEQA and federal level, as well as completion of Section 106 consultation. Finally, a Native American participation plan was completed to provide Native American and archaeological monitoring for the project.

### General City/County Consulting

**Mt. Olympus and Wilderness Gardens Preserves, County of San Diego Department of Parks and Recreation.** Project Manager of multi-disciplinary study of over 1,400 acres of Preserve lands within the North County Multiple Species Conservation Plan. Four different types of reports were prepared: yearlong biodiversity reports for Mt. Olympus and Wilderness Gardens, vegetation management reports for both preserves; cultural resources inventory reports for both preserves; and a public access plan for the Mt. Olympus Preserve. All reports will be utilized as the County prepares Resource Management Plans for the Preserves.

**Santa Ana River Trail, County of Riverside Parks, City of Corona, and City of Norco.** Project manager for the preparation of a joint EA/MND for the Santa Ana River Trail segment between Hidden Valley County Park and Prado Dam at SR 71. Primary activities include determining feasible routes through MSHCP lands and areas with substantial biological resources on U.S> Army Corps of Engineers lands.

### Phase I Cultural Resources

**Kona Road III Project Cultural Resources Survey, French Valley Area.** Project Manager for a Phase I cultural resources survey and paleontological review of a 4.65-acre property project located in the French Valley Area of unincorporated Riverside County, California, for John Laing Homes.

**Merrill Avenue Project Cultural Resources Assessment, City of Chino.** Project Manager for a Phase I cultural resources assessment and paleontological records review for the Albers and Van Vliet Dairy Farms, a project located in Chino, San Bernardino County, California for Watson Land Company.

### Biological Assessment

**Parsons – SR91/SR71 Interchange Improvement Project Natural Environment Study in the City of Corona, Riverside County.** Project manager of a Biological Assessment and Assessment of Jurisdiction Waters and Wetlands for the Caltrans sponsored SR91/SR71 Interchange Improvement under the direction of Parsons. This project entailed preparation of a Biological Assessment, Habitat Assessment and MSHCP Consistency Analysis, Natural Environment Study Report and Jurisdictional Waters Delineation Report.

## Professional Affiliations

- Association of Environmental Professionals

- Riverside County Certified Archaeologist #100
- Registered Professional Archaeologist #11821

CORPORATE
RESUME

# Michael H. Dice, MA, RPA

## Senior Cultural Resource Specialist/Project Manager

## Overview

- 25 years experience in Cultural Resource Management
- Master's degree, Anthropology – Arizona State University, Tempe. 1993
- Bachelor's degree, Anthropology – Washington State University, Pullman. 1986
- Registered Professional Archaeologist (RPA 2000)
- Certified Archaeologist in Riverside County (#101), County of Orange and the County of San Diego.

**Michael H. Dice, MA, RPA**, Senior Cultural Resource Specialist and Project Manager, has more than 25 years experience performing record searches, archaeological surveys, archaeological site testing projects, and data collection projects on private and public lands in the Southwestern United States. He has authored or co-authored more than 200 Cultural Resources Inventory Reports required for CEQA and/or NEPA level documents. His management experience within CRM involves producing proposals, hiring and managing field and office cultural resource personnel, writing draft and final reports to various Clients and Lead Agencies, and managing costs effectively. Michael has extensive experience with California Native American Tribes, having provided direct consultation and coordination with the Agua Caliente Band, Gabrielino tribal officials, Juaneño tribal officials, the Morongo Band, the Serrano Band, and the Temecula Band of Luiseno Indians (Pechanga).

## Relevant Project Experience

### Prehistoric and Historic Archaeology

**Cultural Resource Assessment of The Las Montanas Marketplace Project, City of Indio, CA. M-To Management, Inc., Los Alamitos, CA. (2010-2011).** Mr. Dice performed an archaeological survey of 95 acres in the northern section of the City of Indio in support of an EIR for a new private developmental project. The project area was believed, through museum research, to contain three prehistoric archaeological sites. MBA cultural resource staff provided the proponent with an exploratory testing study that will effectively clear the project of specific mitigation measures for the sites in question. Because one of the sites was determined significant within an adjacent project area, that sites had to be cleared from the project. Work was undertaken before the City accepted the Initial Study. Consultations with local Tribal Authorities took place.

**Cultural Resource Assessment of The Salton Sea Solar Project, Riverside County, CA. Reese-Chambers Systems Consultants Inc., Somis, CA. (2009-2010).** Mr. Dice performed an archaeological survey and protohistoric ceramic scatter assessment on approximately 480 acres just north of the Salton Sea in the County of Riverside. The purpose of the study was to evaluate seemingly vacant property as part of an analysis for potential impacts during construction of a new solar panel complex. Two sites were identified and will have to be Phase III collected prior to construction. Consultations with local Tribal Authorities took place.

**Phase 1 Cultural Resource Assessment of the Badlands Landfill and Lamb Canyon Landfill Expansion Projects, Riverside County, California. Riverside County Waste Management Department (2010).** Mr. Dice performed an archaeological survey on a total of 1600 acres adjacent to the existing Badlands Landfill and the Lamb Canyon Landfill in the County of Riverside. The purpose of the study was to evaluate adjacent property as part of an analysis for potential impacts during expansion of the Landfills. Several new resources were detected and recorded during the study. While RCWMD will not construct for several decades, the sites will be avoided when land development takes place in the site areas. Consultations with local Tribal Authorities took place.

**Cultural Resource Assessment of the Van Norman Dam and Chatsworth Dam Complexes. Los Angeles Department of Water and Power (2008-9).** Mr. Dice performed an archaeological survey and historic landscape

assessment of the Van Norman Dam complex plus the Chatsworth Dam in western Los Angeles County for the Los Angeles Department of Water and Power. For the first time, the history of the complex was detailed and Program-level recommendations for historic evaluations of these significant engineering complexes were made. LADWP plans to remove the upper Van Norman Dam and replace it with a newly designed covered Dam in order to reduce water supply pollutants. Soils on the floor of the Chatsworth Dam will be used for fill. The project was written under CEQA Guidelines because LADWP will not be using federal monies. Future work will involve Section 106 because certain permits will be required when the project reaches a Project-level analysis.

**Cultural Resource Assessment, Phase II Historical evaluation and Phase IV Monitoring for the Sketchers Industrial Park Project, City of Moreno Valley, California. Highland-Fairview Operating Partners (2004-2011).** Mr. Dice undertook a Phase 1 survey of the Sketchers property in addition to other properties controlled by the Client, headed a team of cultural professionals performing historic building evaluations, then headed up a field crew of monitors during the earth-moving phase of complex construction in 2010. Wholly seen through by Mr. Dice, several historic era buildings were examined. Consultations with local Tribal Authorities took place.

**Phase 2 Testing Evaluation of Historic Site CA-SBR-11567H, the Empire-Fontana Project (ACOE #200301127), City of Fontana, California (2005).** Mr. Dice undertook an evaluation of a historic archaeological site for the City of Fontana in order to gain permits for developmental impact from the Army Corps of Engineers. Several abandoned historic foundations, trash dumps, remnant buildings and a possible prehistoric isolated within the historic property were examined and quantified. The report was submitted and accepted by Mr. Steve Dibble of the Army Corps LA District.

**Phase 2 Testing and Phase 3 Excavation of the Loring Ranch Project, Rubidoux-Jurupa Area, County of Riverside, California. Mastercraft Homes, Inc. (2004).** Mr. Dice undertook an evaluation of two historic archaeological sites on vacant land located west of the Santa Ana River and southeast of the Flabob Airport. Cultural Resource Staff determined that two mid-1800's trash deposits were located on the property and tested the sites for significance. Because the sites were felt to reflect a period in history when Chinese immigrants were forced into limited economic means, the sites were determined to represents "truck farms" developed between 1870 and 1900.

### Historic Building and Landscape Assessments

**Section 106 Cultural Resource Assessment and Technical Evaluation of the McCoy and Garibaldi Laterals, Merced Irrigation District. Fremming, Parson & Pecchenino, Consulting Civil Engineers, Merced, CA. (2010).** Mr. Dice performed an archaeological survey and historic landscape assessment of two Laterals within the Merced Irrigation District in support of the District's plans to use federal funding (Bureau of Reclamation) to repair segments of the Laterals. Mr. Dice determined that the MID should be considered a potential Historic District for listing on the National Register. Modifications to the Laterals as a result of the undertaking will have No Adverse Effect to the potential Historic District that is the MID. Consultations with local Tribal Authorities took place.

**Three Historic Assessments of the Southside Park, the Del Paso Regional Park and the Chorley Park. City of Sacramento, California (2010).** Under contract with the City of Sacramento Parks and Recreation Department, Mr. Dice produced three technical studies in order to fulfill Section 106 requirements. The Department requested these studies because the Department requires Recreation Trails and Land and Water Conservation funding programs. Each park exhibited a landscape more than 50 years old, and certain older internal structures, that allowed each Park to be considered potentially eligible for the National Register at the local level of analysis. We determined that the Southside Park and the Del Paso Park are potentially eligible for the NR but that the specific projects would have no impact on their eligibility qualities. The Chorley Park was determined not significant. Consultations with local Tribal Authorities took place.

**Historic Building Evaluation of the San Gorgonio Inn, City of Banning, CA. (2010).** Mr. Dice evaluated a historic-era structure originally built in 1884 and rebuilt in 1930 for significance at the State (CEQA) level of analysis. The

City proposed to demolish the structure and the report supported an EIR written by Ernest Perea of Romo Planning Group Inc., Covina. Mr. Dice performed a historic background assessment and developed a thematic context with which the structure could be evaluated against. The results of this research showed that the building did not qualify for listed on the National or State Register, but that the location of the Inn was considered locally significant. This was not a popular decision, especially with Steve Lech, but the research showed that the results were justified. After reading the report, the City chose to attempt to preserve Googie-styled signage off-site.

**Historic Building Evaluation of the F&M Artesia Branch Bank, City of Long Beach, CA. (2009).** Mr. Dice evaluated a structure built in 1961 for significance at the State (CEQA) and City of Long Beach Historic Property level of analysis. The City had proposed to demolish the structure complex and the technical report supports an IS/MND written in City Format for the proponent, Jeffrey Tartaglino of Palm Desert Development. Mr. Dice performed a historic background assessment and developed a thematic context with which the structure could be evaluated against. Because the structure was found significant at the local level of analysis, the City required a photographic assay of the building: this was incorporated into the finished document.

**Historic Building Evaluation of the Premiere Lanes Bowling Alley, City of Santa Fe Springs, CA. (2009).** Mr. Dice evaluated a structure built in 1960-61 for significance at the State (CEQA) level of analysis. The City had proposed to demolish the structure complex and our technical report supported an EIR written by Sandra Bauer of Bauer Consulting Inc., Irvine. Mr. Dice performed a historic background assessment and developed a thematic context with which the structure could be evaluated against. The City will allow the removal of the building through demolition but save Googie-styled signage associated with the structure.

**Historic Building Survey, Washington Boulevard and Consolidated Redevelopment Projects, City of Santa Fe Springs, CA.** Mr. Dice conducted a historic building survey for two redevelopment project areas located in the City of Santa Fe Springs, County of Los Angeles. The Washington Boulevard Redevelopment project area is located in the City of Santa Fe Springs' side of Washington Boulevard, and is bisected by Sorensen Avenue. The purpose of the study was to identify those properties more than 45 years old that may be demolished during planned Redevelopment in the next 25 years. The Consolidated Redevelopment Project Area is located near Gateway Plaza at the intersection of Telegraph Road and Painter Avenue west of Carmenita Road. A program-level historic context was developed and existing properties preliminarily assessed against that historic context. The results showed that more 140 individual properties more than 45 years old were located in and near the Redevelopment project area. The evaluation of the historic context and existing properties will allow the City, for the first time, to recommend that the significance of old buildings be considered when undertaking redevelopment in the City limits.

**Historic Resource Assessment and Phase II Recommendation for the Alfa Leisure Property, City of Chino, CA.** This study was a CEQA and NEPA-compliant assessment of the old Chino Sugar Mill, including an historic building survey and photographic assay. The Mill building housed one of the first commercial ventures in the City, opening in the 1880's. The results of the study showed that the structure was a locally significant structure but could not be saved within a reasonable monetary expenditure as the structure was completely unstable from an earthquake standpoint. Mr. Dice recommended that a photographic assay and additional historic analysis be undertaken before the structure would be allowed to be demolished.

## Professional Affiliations

- Member, California Historical Society
- Member, National Trust for Historic Preservation
- Member, Registry of Professional Archaeologists

CORPORATE
RESUME

# Scott Crawford, MA

## Section Manager of Natural Resources

## Overview

- 18 Years Experience
- Master's degree, Biological Science – California State University, Fullerton
- Bachelor's degree, Environmental Biology – California State University, Northridge

**Scott Crawford, MA**, senior biologist, has over 18 years experience conducting herpetological, mammalian and avian surveys and ten years experience preparing jurisdictional delineation for regulatory permits. Scott's expertise includes conducting focused surveys for sensitive wildlife species including fairy shrimp, California gnatcatcher, Red-Legged Frog, Arroyo Toad, Least Bell's Vireo, Western Spadefoot, Western Pond Turtle and Burrowing Owl. He is also well versed in documenting biological resources and drainage systems using Geographic Information Systems.

## Related Experience

### Trails and Recreation Projects

**San Diego County Parks.** Conducted biodiversity baseline surveys to document all the flora and fauna on two potential county parks, each of which were over 700 acres. Wildlife surveys included pitfall traps for reptiles and insects, funnel traps for snakes, small mammal trapping through the use of Sherman live traps, remotely operated cameras to detect nocturnal wildlife, scent stations to track mammals, conducting avian and botanical surveys, and installing bat detection equipment to record bat calls for specie identification analysis.

**Wildlife Movement Corridor Study, Los Angeles and Orange Counties.** Conducted a year-long study of wildlife movement within the Tonner Canyon property in the Los Angeles and Orange Counties. Surveys included spot counts for birds, scent stations for tracks, and photo stations for active wildlife movement photographs. The survey was conducted for a 5-day period once a month for an entire year.

**Quail Lake Spring Surveys Project.** Conducted spring surveys for a proposed project with SEA #58 south of Quail Lake. Prepared the final Constraints analysis for submittal to the SEATAC for review and recommendation. Coordinated project design to reduce amount of potentially significant impacts. (2002-2005)

**Southwestern Pond Turtle Trapping/Telemetry, Los Angeles County Department of Public Works.** Assisted in trapping southwestern pond turtles in the San Gabriel water shed prior to the sluicing of Morris Dam. A total of twelve turtles were captured, processed, fitted with a radio telemetry transmitter, and relocated in the upper west fork of the San Gabriel River. Turtles were then monitored bi-monthly for movement and recaptured to determine health and status of each individual.

### Commercial and Industrial Projects

**Rose Hills Cemetery Biological Resources Assessment.** Conducted a biological resources assessment to document the existing conditions within the proposed expansion and maintenance areas that required site disturbance. Suitable gnatcatcher habitat and drainage feature were documented within the Project Site.

**J. Edwards Company Biological Resources Assessment, City of Corona.** Conducted a biological resources assessment for a 120-acre parcel within the sphere of influence of the City of Corona at the base of the Cleveland

National Forest. Suitable habitat was observed for California gnatcatcher. A single red-diamond rattlesnake, a California species of special concern, was identified onsite.

**California Gnatcatcher Focused Surveys, Citrus Valley Health Partners, City of Diamond Bar.** Conducted a focused survey for California Gnatcatchers for a proposed commercial development. Suitable habitat was observed and focused surveys were conducted. No Gnatcatchers were observed during the surveys.

### Energy Projects

**Lake Elsinore Advance Pump Storage (LEAPS), Lake Elsinore and Surrounding Areas.** Conducted biological resources assessment and focused species surveys for thirty-seven miles of proposed transmission lines for the LEAPS project near Lake Elsinore and surrounding areas. Surveys included general reconnaissance-level surveys as well as focused surveys for Quino checkerspot butterfly, California gnatcatcher, least bell's vireo, arroyo toad, red-legged frog, spotted owl, and sensitive plants. Also participated in informal consultation with USFWS, USFS, and CDFG.

### General Plan Updates

**General Plan Update  Biological Resources Document, City of Perris.** Prepared the biological resources section, conducted a complete survey and evaluation of all property within the City limits.

**General Plan Update Biological Resources Document, City of Rancho Santa Margarita.** Prepared the biological resources section, conducted a complete survey and evaluation of all property within the City limits.

**Subarea 2 General Plan Biological Resources Document, City of Chino.** Assisted in the preparation of the biological resources section, conducted a complete vegetation map and jurisdictional delineation over the entire General Plan area.

### Residential and Mixed Use Projects

**Green Park Ranch Wetlands Delineation, City of Simi Valley.** Conducted a wetland delineation on a 1600-acre site in the City of Simi Valley. The survey was conducted to delineate the jurisdictional limits of United States Army Corps of Engineers waters of the U.S. and California Department of Fish and Game waters of the state. Assisted in preparing the Runkle Canyon Specific Plan and reviewed the EIR prepared by Impact Sciences. Participated in public hearings and coordination with City Staff to reduce environmental impacts.

## Professional Affiliations

- Association of Environmental Professionals
- Building Industry Associate (BIA)

## Research and Publications

**Masters Thesis, Social Behavior of the Zebra-tailed Lizard, California State University, Fullerton.** Was responsible for the creation of an independent thesis study. The study was done on the zebra-tailed lizard, which lives in a desert wash community. This study will help in the conservation of this lizard in the event of massive habitat destruction due to off-road vehicles.

CORPORATE
RESUME

# Thomas F. Holm, AICP

**Director, Environmental Services**

## Overview

- 30 Years Experience
- Master's degree, Urban Planning – University of California, Los Angeles
- Bachelor's degree, Political Science – University of California, Irvine

**Thomas F. Holm, MURP, AICP**, is MBA's Director of Environmental Services. Tom offers more than 30 years of diverse planning and environmental experience on a variety of environmental, natural resource, and regulatory compliance projects. Since joining MBA in 1997, he has been actively involved in broad-based NEPA and CEQA-related projects throughout Southern and Central California including large master-planned communities, major public works and infrastructure, transportation corridors, water resources, and coastal projects. He oversees operations of the firm's Air Quality/Noise discipline group and provides quality control and assurance to major CEQA and NEPA efforts.

A former City Planning Commissioner and Transportation/Traffic Commissioner, he has also served as Legislative Liaison and Board Member of the Orange County Chapter of the American Planning Association, and Board member of the Natural History Foundation of Orange County.

## Related Experience

### Master Planning

**City of Chino "The Preserve" Master Plan Program, Chino, CA.** Served as project director for the City of Chino Sub-area 2 Master Plan program for 5,400 acres currently in the Chino Valley Dairy Preserve. The project includes a General Plan Amendment, Master Plan/Policy-Level Specific Plan, Program EIR, market, fiscal and financial studies, GIS applications, and support for annexation to the City. Significant influences include the Prado Dam high water inundation line, Chino Municipal Airport and various surrounding institutional uses. Significant issues include regional transportation linkages, ties to the rural heritage of Chino, sensitive habitats and recreational opportunities within the Prado Basin, agricultural lands conversion, dairy waste management and water quality, and financing major infrastructure.

**City of Chino Sub-Area 1 Sphere of Influence/ Annexation Program, Chino, CA.** Master Environmental Baseline Report and Opportunities and Constraints Studies for the City of Chino Sub-area 1 Sphere of Influence/Annexation Program. Managed preparation of these studies which included preparation of GIS data layers, public workshops and interagency coordination. The program involved proposed multiphase annexation and GPAs for 1,800 acres of dairy lands and recreational open space influenced by the Prado Dam high water inundation area and Chino Airport.

**Rio Mesa Area Plan and Program EIR, Madera County, CA.** Served as principal-in-charge for a 15,000-acre master planned community along the San Joaquin River in Madera County, California. The Plan included approximately 30,000 residential units, over 500 acres of Commercial/Industrial and Mixed-Use Core areas, and an overlay for a future University of California campus site. Over 30 percent of the site were proposed for retention in agriculture/open space. Issues included traffic and circulation, public services and utilities, water consumption, agricultural land conversion, growth and cumulative effects, air resources and biological resources.

**Aliso Viejo Greenbelt Management Program, Orange County, CA.** Member of original design team for the Aliso Viejo Planned Community and Greenbelt Management Program, leading to establishment of the Aliso/Wood Canyon Wilderness Park in South Orange County, California. Participated in all phases of concept design, plan preparation, greenbelt management studies, Feature Plan and Program EIR preparation, local coastal program development, urban runoff management plan to preserve Aliso Creek, and community theme/design studies. The Aliso Viejo Planned Community includes over 6,600 acres and is built out at a population of 60,000.

**Salvation Army Master Plan, City of Rancho Palos Verdes, CA.** Managed a Program EIR for the proposed Salvation Army 15-year Master Plan, encompassing a campus of 42 acres and proposed education/conference center in Los Angeles County. Specific issues included height and visual impacts of the proposed education/conference center, costal resources, traffic circulation, sensitive species, and cumulative effects on water supplies, fire services and air quality.

**Gunner Ranch Area Plan and Program EIR, Madera County, CA.** Prepared a tiered EIR for a Phase I Children's Hospital and long range buildout of a surrounding 1,300-acre mixed use commercial and residential center adjacent Highway 41 and the San Joaquin River in Southeast Madera County, California. The proposed hospital relocation and expansion was in response to a critical need for the expanded pediatric care services to meet current and projected Central Valley regional needs. The comprehensive EIR addressed agricultural land conversion, vernal pools and water resources, public services and utility extensions, growth and cumulative effects issues, and included extensive alternative analysis.

**Rich Haven Specific Plan EIR, City of Ontario, CA.** Currently managing preparation of this tiered EIR for up to 4,200 residential units and regional commercial center with mixed-use overlay within the New Model Colony, Ontario, CA.

**North Shore at Millerton Lake EIR, Madera County, CA.** Project director for tiered EIR for this 2,238-acre development in the North Fork Village area of the Rio Mesa Area Plan (RMAP). The specific plan includes 1,459 acres of residential (rural to high density), 160 acres of mixed-use and non-residential, 538 acres of open space, and 81 acres for public use area (i.e., parks and preserves). Based on the proposed densities, up to 2,966 dwelling units would be built. Issues include visual and drainage impacts of hillside development upon adjacent Lake Millerton State Recreational Area, and impacts on biological resources, traffic, air quality, and public services.

**Heritage Oaks Specific Plan, City of Calimesa, CA.** Directed preparation of specific plan and IS/MND for 54-unit country and equestrian estates project within environmentally sensitive oak woodlands and arroyos.

**Liberty Groves Specific Plan EIR, Madera County, CA.** Environmental Principal/Project Director for this 1,320-acre master planned community proposing over 7,000 residential units, mixed-use core, business park and open space/park system on agricultural lands in the southeastern portion of the County. Significant issues for resolution through the environmental review include transportation/traffic, water supply, agricultural land conversion, schools and extension of other services/utilities.

### Transportation

**Los Angeles International Airport Expansion Technical Review, County of Los Angeles, CA s.** Project manager and part of the technical review team in assisting to provide assessment and analyses regarding the adequacy of the draft EIS/EIR for the proposed expansion of the Los Angeles International Airport (LAX). The issues of concern include: capacity of other airports to meet demand, is the simulation model for capacity reasonable, thoroughness of traffic assessment and environmental justice, thoroughness of air quality assessment, thoroughness of noise assessment and environmental justice, equal assessment of impacts on unincorporated vs. incorporated areas.

**Harbor Boulevard SMART STREET Feasibility and Environmental Documentation Project, Orange County, CA.** Served as environmental manager for the Harbor Boulevard SMART STREET Feasibility and Environmental

Documentation project. Environmental documentation includes a Preliminary Environmental Assessment Report (PEAR) and CEQA/NEPA clearances for 7.7 miles of urban arterial improvements in the cities of Garden Grove, Anaheim, Santa Ana, and Fountain Valley. Project includes an extensive public participation and interagency coordination program.

**State Route 91 Improvements Study Environmental Assessment, Orange and Riverside Counties, CA.** Directed preparation of the EA along a 24-mile segment of this corridor through Orange and Riverside Counties. Primary alternatives involved the addition of multiple high occupancy vehicle (HOV) lanes and support facilities, such as park-and-ride lots, ramp metering and a Transportation Management Plan (TMP).

**Cook Street at Interstate 10 Interchange Environmental Assessment, City of Palm Desert, CA.** Prepared an expanded NEPA EA that evaluated the environmental effects of a new connection to I-10 at the planned northerly extension of Cook Street in the City of Palm Desert. The study of the proposed interchange was initiated at the request if the City of Palm Desert and the County of Riverside. Coordination and consultation with these agencies, as well as Caltrans, Districts 8 and 12 FHWA and USFWS was required.

**Eastern Transportation Corridor Route Location Study Master Environmental Baseline and EIR, Orange County, CA.** Served as project director on the Eastern Transportation Corridor Route Location Study Master Environmental Baseline and EIR in Orange County, California. Supervised baseline studies within a 23-square-mile area and EIR preparation for this new state route linking SR91 with I-5 in Orange County. The EIR was prepared as a Tier I EIS for subsequent NEPA clearance. An extensive public participation and technical advisory program were key elements of this study.

**Ford Road Realignment/Extension EIR; Newport Beach and Irvine, CA.** Directed preparation of an Alternatives Analysis and EIR for the extension/realignment of the Ford Road arterial between MacArthur Boulevard and the proposed San Joaquin Hills Transportation Corridor (SJHTC) in the cities of Newport Beach and Irvine. The Ford Road Extension and Realignment Project, is itself a mitigation for noise impacts and traffic loading onto streets anticipated from implementation of the corridor. Specific issues included disruption of natural habitat and biological resources, drainage, archeology, views, noise, air quality, and traffic impacts.

**Bastanchury Road Alignment/Extension EIR; Yorba Linda, CA.** Managed EIR preparation for the Bastanchury Road Alignment/Extension in Yorba Linda, California. Environmental issues included habitat loss, conflicts with oil field operations, landform alteration /views and noise impacts to established residential areas.

**Santa Monica Neighborhood Traffic Control Plan EIRs.** Prepared two separate Focused EIRs and alternatives analyses for roadway improvements, traffic diversion/closures, parking and traffic control measures in sectors of the City of Santa Monica, encompassing Santa Monica Airport, Santa Monica City College, businesses along Lincoln and Santa Monica Boulevards, and adjacent neighborhoods. The traffic component of the EIRs included analysis of over 60 intersections within an outside the City.

**Road Widening EIRs, Cities of Anaheim and Costa Mesa, CA.** Project director for Santa Ana Canyon Road Widening EIR in the City of Anaheim, California, and for the Victoria Street Widening EIR in the City of Costa Mesa, California. Both projects involved right-of-way acquisition, noise, air quality, and visual/aesthetic impacts. The Victoria Street project involved significant residential displacements and public participation.

**California High Speed Rail Project Third Party Technical Review, Southern and Northern California.** Serving as project manager to provide third party, technical review of the DEIR/S for the California High Speed Rail Project involved the preparation of a Master EIR/EIS document for a high-speed rail line that would extend from southern to northern California. The MBA team is providing an intensive review of the Program EIR/S and supporting documents during the draft environmental document (DED) public review period. The primary objective is scrutiny of all available environmental, socioeconomic and engineering data, analysis and conclusions provided in

the DED having a bearing upon the identification of a preferred or environmentally superior alternative alignment for the train through the project area.

### Residential Development

**Vista Verde and Alderwood Residential Project EIRs, Irvine, CA.** Managed two EIRs for single-family residential developments on former school sites proposed by William Lyon Homes and the Irvine Unified School District for conversion. The Vista Verde Project in University Park (PA 20) proposes to develop the former Vista Verde Elementary School site with up to 66 detached single-family homes on approximately 8.47 gross acres. The Alderwood Project in Woodbridge (PA 15) on the site of the former Alderwood Basics Plus Elementary School seeks approvals to develop the site with up to 48 detached single-family homes on approximately 6.2 gross acres. Significant issues for resolution through the EIR process with both of these infill projects included Land Use and Planning, Aesthetics/Views, Tree Removal, Neighborhood Traffic patterns and access, Noise/Vibration and Parks and Recreation.

**Park View at Town and Country Manor, Santa Ana, CA.** Managed an EIR for an 11-story high rise with subterranean parking to support 174 independent living units. The proposed Project will add to the number of independent living units within the existing campus for Town & Country Manor. The Project will be a regulated residential care facility for the elderly. The 8.3-acre site is located near Santa Ana's downtown business district east of Main Street and across from Santiago Park. A zone change to a Specific Development zoning designation and a General Plan Amendment to the District Center land use designation will be required.

**Metropolis Residential Project, Irvine, CA.** Supervised preparation of a project EIR and subsequent Addendum to the *Irvine Business Complex Vision Plan and Mixed Use Overlay Zoning Code Program EIR* for this proposed mid-rise residential project with ground floor commercial/retail within the Irvine Business Complex. The project includes 457 high-density residences with 89 density bonus units for very low-income households in an area originally containing high-rise offices as well as industrial and support businesses. Applications for a Conditional Use Permit for Transfer of Development Rights (TDR), Tentative Tract Map, and Park Plan were also under consideration. The site consisted of two parcels of land totaling 7.34 acres, to be subdivided for residential units, ancillary retail, supporting parking and recreational areas.

**Residential Housing EIR, Lake Arrowhead, CA**. Project manager to prepare an Environmental Impact Report (EIR) for a proposed residential housing development on a prominent ridgeline and forest hillside site in the community of Lake Arrowhead. The applicant seeks approval for development of fifty-eight single-family residential lots and four lettered common lots for roads and open space on 39.8 acres, with a Conditional Use Permit application to request approval for a 20-foot high, 500,000-gallon concrete water reservoir (partially buried in the ground). County determined that the following concerns needed to be addressed in the EIR: evaluation of alternative development concepts (PD), aesthetics, biological resources, grading/landform alteration, water resources, soil erosion, land use and planning; fire safety and mandatory findings of significance. Also of concern is the federally listed Southern Rubber Boa and issues regarding the preservation of this species and its forest habitat.

**Driftwood Estates EIR, Laguna Beach, CA.** Principal-in-charge for a 228-acre hillside subdivision EIR in the City of Laguna Beach. The required approvals for the project include a master tentative tract map, indirect access variance, and a Zoning Ordinance variance from the City of Laguna Beach and a coastal development permit from the California Coastal Commission. The primary issues addressed in the EIR included geology and soils, hydrology/water, biological resources, traffic and circulation, air quality, noise, and aesthetics. The project required extensive coordination with the City of Laguna Beach, California Coastal Commission, California Department of Fish and Game, County of Orange, and the public.

**Andalucia Mission Viejo.** Supervised preparation of an expanded Initial Study/Proposed MND for the Andalucia Apartment Project on a 7.12-acre site adjacent Oso Parkway and the Mission Viejo Country Club in the City of

Mission Viejo. The environmental documentation tiers from a prior GPA/ZC MND on multiple potential affordable housing sites in the City by addressing the environmental effects at this site at a project-level of environmental review. The Project proposes a maximum of 256 units in 3- and 4-story buildings, reflecting a density bonus for affordable units of up to 25% to the base zoning yield. A Streambed Alteration Agreement (SAA) for Oso Creek bank stabilization, restoration and enhancement activities within the project is also proposed.

**Los Alisos Townhomes, Mission Viejo, CA.** Supervised preparation of an Initial Study/MND for a 275-unit infill townhome project with affordable component. Project was adjacent existing residential and retirement neighborhoods, and required GPA/rezone and demolition of existing large-box commercial retail building.

**Capistrano Hillside Residential Project, Dana Point, CA.** Managed a Mitigated Negative Declaration for the development of a vacant 2.0-acre hillside infill parcel proposed to includesingle-family dwellings, a private access road, and several retaining walls as high as 20 feet on a steeply sloping lot, in the Capistrano Beach district of the City of Dana Point.

**Oak Street and Jefferson Street Townhomes, Torrance, CA.** Prepared Initial Studies and Mitigated Negative Declarations for multiple townhome residential projects on industrial Brownfields sites. Projects included senior and market-rate condominiums and townhomes. Issues included hazardous materials/soil contamination and remediation, traffic, noise and air quality, and land use transition and compatibility.

**Pine Valley Estates at Western Hills, Chino Hills, CA.** Project director for EIR evaluating a gated community of 98 single-family homes on 192 acres of hillside property overlooking Western Hills Country Club. Significant issues included traffic and circulation, construction phase air quality, visual impact, geologic hazards, hydrology/water quality, biological resources and wetlands.

**Stonefield Residential Development, Chino Hills, CA.** Supervised an Environmental Impact Report for a gated residential development (TTM 18393) on hillside property overlooking the Western Hills Country Club, including 26 single family residential lots on approximately 35 acres surrounded by residential and commercial-recreation development. Issues for analysis and resolution through the City's EIR process included impacts to jurisdictional waters and riparian vegetation; topography/landform alteration; views: vehicular access, safety and ingress/egress via Carbon Canyon Road (SR 142).

**Multiple Tentative Tract EIRs, Lancaster, CA.** Directed preparation of two EIRs for three proposed Tentative Tracts (TTMs 62757, 062332, 062604) totaling 1,500 single family units in the City of Lancaster, in the Antelope Valley. Royal Investors Group, LLC seeks approval of GPA, zone changes, and tentative maps to allow development of three sites encompassing 328 acres west of SR-14. Significant issues included urban form, infrastructure extensions (roads, water, sewer) and adequate water supplies.

### Commercial Projects

**Hanover-Katella Office Park, Anaheim, CA.** Managed preparation of the Hanover-Katella Office Park EIR in Anaheim, California. Near Anaheim Stadium, this development proposed 2.0 million square feet of new commercial office space in multiple high-rise buildings, with supporting commercial retail integrated in the project design.

**Arena/Events Center, Santa Ana, CA.** Managed preparation of an EIR for a 20,000-seat arena/events center near State Route 55 in Santa Ana, California. The project involved extensive interagency consultation and coordination, and analysis of locally and regionally significant effects-including transportation/circulation, air quality, noise, land use, displacement/relocation, services and utilities, and population and employment.

**Home Depot Retail Center Specific Plan, Town of Yucca Valley, CA.** Supervised preparation of specific plan for 378,000 square-foot Home Depot, with satellite retail buildings. Issues involved Joshua tree displacement and relocation, drainage and water quality, traffic, signage and lighting, and provisions for infrastructure.

**South Coast Home Furnishings Center, Costa Mesa, CA.** Supervised expanded Initial Study/MND for 312,500 square-foot commercial center on 21-acre parcel adjacent I-405. Project included full service furniture stores, show rooms, specialized home furnishings and food service facilities. Project required demolition of existing State Farm Insurance Headquarters and reflects a transition from business park uses to commercial retail uses. Significant issues included traffic and air quality.

**Seaport Village Expansion EIR, Unified Port District of San Diego.** Served as principal-in-charge of EIR addressing major commercial/tourist center, specialty shops, and restaurants. Significant issues resolved or mitigated through the EIR included traffic/circulation/access, parking, views, land use, and historic resources (adaptive reuse).

### Community Planning

**Kings County General Plan Elements.** Managed preparation of the Air Quality, Resource Conservation and Open Space Elements. To support the General Plan update, also prepared an *Agricultural Land Conversion study*. This study involved inventorying and mapping agricultural properties Countywide that are sensitive to growth effects or growth-inducing effects by virtue of proximity to pending or probable future development. The study establishes an economic framework for estimating potential agricultural value losses resulting from conversions, and recommends mitigation strategies to assure a sustainable agricultural base for the County.

**City of Fountain Valley General Plan Update.** Served as principal-in-charge for the City of Fountain Valley General Plan Update, including finalization of the General Plan and Master EIR. The process included extensive community participation in development of the seven mandated Plan Elements, plus optional Air Quality and Growth Management elements.

**City of Stanton General Plan Update.** Served as a group leader/facilitator in the innovative Community Policy Conference leading up to General Plan preparation. Assisted with preparation of the City of Stanton General Plan Update, including responsibility for the Economic Development, Redevelopment, Community Design, and Conservation and Parks, Recreation and Open Space elements, and Master EIR.

### Industrial Projects

**Highland Fairview Corporate Park, Moreno Valley, CA.** Managed preparation of a full scope project EIR for the multiphase buildout of a new 2.6 million square foot transportation logistics center ('Skechers') located along State Route 60 at Redlands Boulevard in Moreno Valley. Significant issues included traffic, air quality/health risk, global climate change/greenhouse gas emissions, noise, aesthetics/views, land use and planning, hazards, water resources (hydrology, water quality, water supply), and cumulative effects.

**Pacific Rail Metal Shredder EIR, City of Colton, CA.** Principal-in-charge for controversial scrap metal and auto body shredding facility EIR adjacent UPRR rail lines. Issues included hazardous materials, air quality/air toxics, noise, traffic, surface and groundwater hydrology, and water quality.

**Bellflower Oil Field EIR, City of Long Beach, CA.** Project manager for EIR evaluating impacts of crude oil and gas exploratory drilling and well production within an oil field adjacent LADWP's Haynes Steam Power Plant in Long Beach, and Rossmoor Leisure World community in Seal Beach.

## Professional Affiliations

- American Institute of Certified Planners
- American Planning Association, Chapter Legislative Liaison
- Association of Environmental Professionals
- Natural History Foundation of Orange County

- Planning and Transportation Commission, City of Mission Viejo

CORPORATE
RESUME

# Vincent Mirabella, M.S.

**Senior Air Quality Scientist**

## Overview

- 30 Years Experience
- Master's degree, Meteorology – Pennsylvania State University
- Bachelor's degree, Meteorology – Florida State University

**Vince Mirabella** offers considerable experience consisting of diverse public and private-sector scientific experience, spanning over three decades. This includes the design and management of major air quality research projects dealing with air quality model development application and analysis and the preparation of technical studies in support of CEQA documents. These projects have included the first application of a comprehensive urban photochemical grid model to examine the impacts of power plant emissions in the South Coast Air Basin, characterization of emission dispersion in complex terrain, identify, quantification of visibility impairment in the Grand Canyon, and the application of various emission inventory and dispersion models in health risk and traffic impact assessments. His experience also involves development of emission inventories and meteorological data necessary to drive dispersion models, legislative review, regulatory peer review, CEQA compliance determinations, and expert testimony.

## Recent Project Experience

### Air Quality and Health Risk Studies in Support of CEQA Documents

**Emission Inventory Development.** Applies various emission estimation tools to derive criteria, toxic air contaminant, and greenhouse gas emissions for short-term construction and long-term operations for use in air dispersion models. These estimation tools include the CARB URBEMIS and EMFAC models, the SCAQMD CalEEMod model, and the USEPA AP42 methods. Sources of emissions include mobile source gasoline and diesel powered vehicles, standby emergency generators, gasoline dispensing stations, parking lots, dry cleaning establishments, restaurants, and rail lines. The types of projects requiring such information have included large warehouses, gas turbine peaker facilities, large industrial projects, mixed use residential-commercial, large retail outlets, and residential projects.

**Air Dispersion and Health Risk Model Applications.** Applies a wide variety of air quality models in developing assessments for both criteria pollutants and toxic air contaminants. Such models include the Industrial Source Complex Model, AERMOD Model, HARP air toxic model for health risk assessments, and the CALINE4 traffic intersection model. The results from these air dispersion models are then compared to the significance thresholds and ambient air quality standards established by various regulatory agencies to assess the significance of project impacts. Such applications involve a close relationship with the staffs of the regulatory agencies to insure that the applications are most appropriate to the specific project.

**CEQA Analyses.** Applies the results of the emission inventory and air dispersion model technical studies in determining compliance with the CEQA checklist for air quality and in particular the various significance threshold levels. Such compliance determinations require the Identification of potential mitigation measures to minimize project construction and operational emissions as part of the CEQA compliance process.

### Recent Projects

- 1 million + square-foot warehouse projects in Perris, Banning, Barstow, San Bernardino, Riverside, Chino, Manteca, and Moreno Valley, CA

- Big-box commercial retail centers in Bakersfield, Wildomar, Oakley, Paradise, Highland, Wasco, Rocklin, Fresno, Visalia, Selma, Yucaipa, Murrieta, Del Norte, and Clovis, CA
- Industrial projects in Colton, West Sacramento, Fresno, Volta, CA
- Mixed use residential and commercial projects in Riverside, San Jacinto, Rialto, Corona, CA
- Residential projects in Fontana, Big Bear, Redlands, San Bernardino, Orange, Martinez, CA

### Air Quality Model Development

**Windfield Modeling Techniques.** Developed a number of modeling techniques used to generate three-dimensional windfields that are used to drive photochemical airshed grid models and point source models in both urban and complex terrain mountain environments. These same wind models have been used to derive the optimum placement of wind energy systems in such areas as Palm Springs.

**Lagrangian Models.** Developed one of precursor point source photochemical lagrangian models used to quantify the impacts of NOx and ROG emissions from point sources on ozone and fine particulate matter concentrations in the atmosphere.

**Photochemical Airshed Application.** Coordinated the first urban photochemical airshed application to examine the impacts of emissions from power plants in the South Coast Air Basin on ambient ozone and NO2 levels.

**Aerosol and Acid Rain Models.** Coordinated a number of basic research studies involving the development of aerosol and acid rain models and enhancing the accuracy of numerical techniques used in grid modeling.

**Nested Grid Models.** Developed one of the first "nested" grid models which allowed a detailed examination of individual large emission sources within the context of an urban grid scale model application Gaussian Dispersion Models. Developed several methods for applying Gaussian dispersion models in the siting of power plants in the western US

**City of Melbourne Urban Air Quality Study, Australia.** Was responsible for the on-site management of a multi-year million dollar urban air quality. The study involved the generation of a comprehensive multispecies emission inventory for the entire metropolitan area of three million people including point sources and area sources, the design of a comprehensive monitoring network to measure various air pollutant constituents across the metropolitan area, development of models for forecasting ozone levels in the metropolitan area, model applications to calculate three-dimensional wind fields for air quality model usage, conduct of a tracer study to document the impact of large emission source in the metropolitan area, development of a photochemical trajectory model to examine sources of pollution in the metropolitan area, report preparation and every day interfacing with the State of Victoria Environment Protection Agency.

**South Coast Air Basin Photochemical Airshed Model.** Application of a photochemical airshed model to the South Coast Air Basin to examine the effects of large scale changes in albedo (ie., "whitening" roofs to reduce the urban heat island and slow down the atmospheric chemistry of ozone)

### Air Quality Data Analysis

**Ozone, CO and NO2 Pattern Study.** One of the first studies to examine the weekday-weekend patterns of ozone, CO, and NO2 in the South Coast Air Basin and attribute emission source contributions using emission and ambient pollutant concentration ratios

**Grand Canyon Visibility Impairment.** Performed a comprehensive evaluation of aerosol and visibility data to assess the relative influences of emission sources on the visibility impairment at the Grand Canyon

## Professional Publications and Presentations and Awards

**Management Achievement Award**: Southern California Edison
**Technology Transfer Achievement Award**: Electric Power Research Institute
**Relating Summer Ambient Particulate Sulfur, Sulfur Dioxide, and Light Scattering to Gaseous Tracer Emissions from the Mohave Power Project, Atmospheric Environment**. 2000 V.A. Mirabella and R. Farber

**Attribution of Particulate Sulfur in the Grand Canyon to a Specific Point Source Using Tracer Aerosol Gradient Interpretive Technique (TAGIT)** 1999 H. Kuhns, M. Green, M. Pitchford., L. Vasconcelos, W. White, and V.A. Mirabella.

**Tracking Regional Background in a Haze Attribution Experiment**, 1999 W. White., R. Farber, M. Green, E. Macias, V. Mirabella, M. Pitchford, and L. Vasconcelas, AWMA.

**Meteorological and Photochemical Modeling of Large-Scale Albedo Changes in the South Coast Air Basin**, 1998 K.T. Tran, and V.A. Mirabella, presented at the 1998 annual meeting of the Air and Waste Management Association, San Diego, CA.

**Relating Summer Ambient Particulate Sulfur, Sulfur Dioxide, and Light Scattering to Gaseous Tracer Emissions from the Mohave Power Project, Proceedings, Visual Air Quality, Aerosols & Global Radiation Balance**, 1997 V. Mirabella and R. Farber, AWMA

**Overview of the Varible-Grid Urban Airshed Model (UAM-V)** 1992 R. Morris, M. Yocke, T. Meyers and V. Mirabella, presented at the 85th annual meeting of the Air and Waste Management Association, Kansas City, Mo.

**Adaption of the ISCST Model for Local Fugitive PM10 Modeling With Application to the Riverside/Rubidoux Area**, 1992 I. Wang, R. Countess, T. Umenhofer, R. Farber, and V. Mirabella

**Development of a Nested Grid Urban Airshed Model and Application to Southern California**, 1991 R. Morris, T. Myers, S. Douglas, M. Yocke, and V. Mirabella, presented at the 84th annual meeting of the Air and Waste Management Association, Vancouver, B.C.

**Performance Evaluation of an Improved Urban Airshed Model**, 1991 K. Tran, and V. Mirabella, presented at the 84th annual meeting of the Air and Waste Management Association, Vancouver, B. C.

**A Comparison of Advection Schemes in Existing Photochemical Grid Models**, 1991 K. Tran and V. Mirabella, presented at the 84th annual meeting of the Air and Waste Management Association, Vancouver, B. C.

**Field Measurements Used to Evaluate Implementation Programs for Multiple Standard Violations**, 1990 R. Farber, V. Mirabella, J. Baas, A. Amerzcua, R. Countess, I. Wang, C. Pilinis, and J. Watson, presented at the 83rd annual meeting of the Air and Waste Management Association, Pittsburgh, Pa.

**Development of the SCAQS Emission Inventory**, 1989 Mirabella, V.A. Mirabella and M. Nazemi, presented at the 82nd annual meeting of the Air and Waste Management Association, Anaheim, Ca.

**An Analysis of Weekend/Weekday Ozone Differences in the South Coast Air Basin of California**, 1989 M. Zeldin, Y. Horie, and V. Mirabella, presented at the 82nd annual meeting of the Air and Waste Management Association, Anaheim, Ca.

**Methodologies for Applying the Urban Airshed Model to Determine the Effectiveness of Measures to Reduce Ozone Levels in the Los Angeles Basin**, 1989 M. Yocke, L. Mahoney, H. Hogo, and V. Mirabella, presented at the 82nd annual meeting of the Air and Waste Management Association, Anaheim, Ca.

**Snowpack and Flow Simulation for the Eastern Brook**, 1988 C. Chen, L. Gomez, and V. Mirabella, presented at the Sub-alpine Watershed Processes and Water Quality, Lake Tahoe, Nevada.

**Retention of Acid Anions by Sub-Alpine Meadows**, 1988 C. Chen, L. Gomez, L. Lund, and V. Mirabella, presented at the Sub-alpine Watershed Processes and Water Quality, Lake Tahoe, Nevada.

**Diffusion and Reaction of Pollutants in Stratus Clouds: Application to Nocturnal Acid Formation in Plumes**, 1985 C. Seigneur, P. Saxena, and V. A. Mirabella, Environmental Science Technical Volume 19, No. 9

**Development of an Acid Rain Trajectory Model**, 1984 C. Seigneur, P. Saxena and V. A. Mirabella, presented at the 77th annual meeting of the Air Pollution Control Association, San Francisco

**Estimating Future NO2 Levels in the Greater Los Angeles Area by Source Type Contribution**, 1982 Y. Horie, and V A. Mirabella,:; JAPCA, Vol. 32 No.3.

**"On A Clear Day"**, 1982 V. A. Mirabella, Clean Air Journal of Australia and New Zealand, 2nd Quarter, 1982

**Emission Trade-Offs: One Way to Increase Generating Capacity**, 1979 M.D. High, and V.A. Mirabella, presented at the 41st annual meeting of the American Power Conference, Chicago, Illinois.

**Atmospheric Dispersion Modeling**, 1979 V. A. Mirabella, Discussion Paper, JAPCA, Vol 29, No. 9

**Experience in IMPACT Modeling of Complex Terrain**, 1979 R.C. Sklarew, and V.A. Mirabella, presented at the fourth symposium on Atmospheric Turbulence Diffusion and Air Pollution, Reno, Nevada.

**Recent Verification Studies with the SAI Urban Airshed Model in the South Coast Air Basin**, 1979 T.W. Tesche, C.S. Burton and V.A. Mirabella, presented at the fourth symposium on Atmospheric Turbulence Diffusion and Air Pollution, Reno, Nevada.

**Optimum Site Selection for Wind Energy Systems**, 1978 R.C. Sklarew, and V.A. Mirabella, presented at the Second International Conference on Alternative Energy Sources; Palm Springs, California.

**Point Source Modeling for Reactive Plumes in Complex Terrain**, 1977 J.C. Wilson, A.J. Fabrick, R.L. Sklarew, and V.A. Mirabella, presented at the 70th Annual Meeting of the APCA, Toronto, Canada.

**Comparison of Several Models with Ambient Sulfur Dioxide Measurements Near the Navajo Generating Station**, 1976 R.B. Lantz, G.F. Hoffnagle and V.A. Mirabella, presented at the 69th Annual APCA Meeting; Portland, Oregon.

**DEPICT: Detailed Examination of Plume Impact in Complex Terrain**, 1976 R.C. Sklarew, J.C. Wilson, S.J. Fabrick, and V.A. Mirabella, presented at Geothermal Environmental Seminar, Clear Lake, California.

**Model Simulation of a Tracer Study in Rough Terrain**, 1975 G.F.Hoffnagle, V.A. Mirabella, and T.L. Spangler, presented at the First Annual AMS Conference on Regional, and Mesoscale Modeling Analysis and Prediction in Las Vegas, Nevada

**Statistical Properties of Turbulence at the Kennedy Space Center for Aerospace Vehicle Design**, 1971, J. Dutton, H.A. Panofsky, D.C. Deavon, B.R. Kerman, and V.A. Mirabella, prepared for the National Aeronautics and Space Administration

**RICHARD BRADY** is the President of the Matrix Consulting Group. He is the leader of our management studies and law enforcement analytical practices. He has been a consultant to local governments for over thirty years. During that period, he has specialized in the analysis of police services, having conducted over 200 studies of law enforcement and criminal justice systems. Mr. Brady has managed and/or significantly participated in every law enforcement study cited as experience in this proposal. Mr. Brady has conducted law enforcement studies in the following jurisdictions:

| State | Illustrative Law Enforcement Management and Staffing Studies |
|---|---|
| **Alaska** | Anchorage |
| **Arizona** | Goodyear, Prescott Valley |
| **California** | Alameda County, Anaheim, Butte County, Citrus Heights, Contra Costa County, Galt, Gilroy, Glendale, Kern County, Los Angeles, Los Angeles County, Los Gatos, Lynwood, Monrovia, Napa, Ontario, Orange County, Palmdale, Palo Alto, Pittsburg, Poway, Roseville, San Jose, Pasadena, San Bernardino, San Bernardino County, San Mateo County, San Rafael, Santa Ana, Santa Barbara County, Santa Monica, Sonoma County, Santa Clara County, Sunnyvale |
| **Colorado** | Aurora |
| **Connecticut** | Stamford |
| **Florida** | Alachua County, Coral Gable, Jacksonville, Jupiter, North Miami Beach, Orange County, Pasco County, Pinellas County, Port Richey and Venice |
| **Georgia** | Americus, Augusta-Richmond County, Fulton County, Hall County, Chatham County |
| **Louisiana** | Alexandria |
| **Massachusetts** | Beverly, Boston, Lawrence, Milford, Mansfield, Burlington, Pelham, Watertown, Wayland, Westwood, Whitman |
| **Minnesota** | Anoka County |
| **Missouri** | Des Peres and Raymore |
| **Nebraska** | Omaha |
| **Nevada** | Las Vegas Metropolitan Police Service, Sparks and Reno |
| **New Hampshire** | Portsmouth |
| **New York** | Albany, Carthage, Endicott, Vestal and Briarcliff Manor |
| **North Carolina** | Burke County and Durham |
| **Michigan** | Alpena and Detroit |

| State | Illustrative Law Enforcement Management and Staffing Studies |
|---|---|
| **Ohio** | Fairborn |
| **Oregon** | Clackamas County and Grants Pass |
| **Pennsylvania** | York |
| **South Carolina** | Beaufort County, Charleston County, Hilton Head Island, Spartanburg County |
| **Tennessee** | Nashville-Davidson County and Knox County |
| **Texas** | Arlington, San Antonio, Terrell, El Paso, Grand Prairie and Southlake |
| **Utah** | Salt Lake City |
| **Vermont** | Brattleboro |
| **Virginia** | Richmond, Leesburg and Loudoun County |
| **Washington** | Spokane, Kirkland and Snohomish County |
| **Wisconsin** | Sun Prairie, Milwaukee, Dane County |

Mr. Brady has a BA from California State University, Hayward; and a doctorate from Oxford University, U.K.

# FRED GREVE, P.E.
## MESTRE GREVE ASSOCIATES
## DIVISION OF LANDRUM & BROWN, INC.
### *MANAGING DIRECTOR*

Mr. Greve has over thirty years experience in all fields of noise assessment and air quality management. Principal experience includes noise and air quality assessment for traffic networks, airports, transportation corridors, and planned communities on the local, state, federal and industrial level. This experience includes legislative monitoring of air and noise regulations, development of ambient air monitoring facilities, and management of aircraft noise monitoring networks. Greenhouse house gas assessments and monitoring of climate change regulations are capabilities that have recently grown out of his work for over 30 years in the air management arena.

Mr. Greve, along with Vince Mestre, established Mestre Greve Associates in 1981. In March 2009, Mestre Greve Associates was purchased by Landrum & Brown, Inc. Landrum & Brown is an aviation planning firm headquartered in Cincinnati, Ohio. Mestre Greve Associates now operates as a division of Landrum & Brown.

**EXPERIENCE**

Principal in Charge for over 500 air quality studies ranging from small developments to master planned communities. Air quality studies have also included a wide range of transportation projects across the United States for roadways, freeways, and airports. Mr. Greve has been at the forefront in conducting greenhouse gas studies (over 15 studies completed as of January 2009) and monitoring greenhouse gas guidelines and regulations.

Principal in Charge of the development of Noise Elements for the Cities of Dana Point, Inglewood, Irvine, Beaumont, Stanton, Rialto, Fountain Valley, Solvang, and Palm Springs. Principal in Charge of updates to the Noise Elements for the Cities of Rancho Cucamonga, Santa Clarita, Glendale, Santee, and the County of Monterey.

Principal in charge, under subcontract with P & D Consultants/ TCB-AECOM and Caltrans, of the preparation of air quality analyses for the addition of the HOV Lane to the Northbound I-405 through the Sepulveda Pass (between I-10 and U.S.101) Project. This proposed highway improvement project required four build alternatives, and one no-build alternative to be analyzed. The initial report analyzed and identified the affected environment, permanent impacts, temporary impacts, cumulative impacts and mitigation measures of each of the five design alternatives along the freeway mainline, the HOV lanes, the freeway ramps, and up to five intersections in the immediate study area for the project. The consultant recently met and worked with Caltrans' Headquarters, FHWA and district staff, and with the appropriate regulatory agencies to resolve all conformity and air quality planning issues.

Principal in charge, under subcontract with P & D Consultants/ TCB-AECOM and Caltrans, of the preparation of air quality analyses for the realignment of the Southbound I-405 connections to the Northbound and Southbound US-101 Project. This proposed highway improvement project required four build alternatives, and one no-build alternative to be analyzed.

Principal in charge for the updated noise assessment based on new traffic data, prepared under contract to Barnard Dunkelberg & Company, for the proposed Northwest Arkansas Regional Airport Authority Intermodal Access Road in Benton County, Arkansas. The access to the new

airport is provided from the Highway 71 bypass on Highway 264 at the Lowell exit and from Bentonville on Highway 12.

Principal in charge, under contract with RBF Consulting, of the NEPA level noise study for the Caltrans Culver Drive Widening project. Mestre Greve Associates has previously conducted comprehensive noise studies for the Culver Drive Widening EIR project as a subconsultant to both RBF Consulting and Templeton Planning Group for the City of Irvine.

Principal in Charge of the technical noise and air quality assessment reports for the following recent EIR projects: Planning Areas 18 and 39 General Plan Amendment and Zone Change, City of Irvine; Perris Ridge Commerce Center, City of Perris; Ontario Gateway Specific Plan, City of Ontario, CA;

Principal in Charge of the noise and air quality assessments for the proposed Foothill Transportation Corridor-South EIS/SEIR project. This study includes the analysis of various alternatives proposed by the Transportation Corridor Agencies.

Principal in Charge of the Carbon Monoxide Monitoring Program for the San Joaquin Hills Transportation Corridor. This program included monitoring air quality levels at three sites near the corridor in order to determine if air quality standards had been exceeded, and to make recommendations as to potential remedial actions if necessary.

Project Manager for the air quality assessment for MCAS El Toro Community Reuse Plan and EIR, the noise assessments for CFB Greenwood Relocation for Base Closure and Realignment Study and CFB Trenton Relocation for Base Closure and Realignment Study, and the air quality assessment for the Master Plan Alternatives for EA Analysis for Jackson Hole Airport.

Project Manager for the noise assessments for the Toland Road Landfill Expansion Project, the Lancaster Landfill Expansion Project, and the North Orange County Landfill and Alternative Technologies Study.

Principal in charge for the noise and air assessments for the proposed Freeway Route 125 in San Diego County, Arizona Route 93, the San Joaquin Hills Transportation Corridor in Orange County, and numerous freeway interchange projects.

Project Manager of the noise assessment for the Orange County Sanitation District Groundwater Replenishment System project; Principal in charge of the noise assessments for the Encino Reservoir Water Quality Improvement Project, the Stone Canyon Water Quality Improvement Project, the Hollywood Water Quality Improvement Project for the Los Angeles Department of Water and Power.

Principal in charge of the air quality assessments for the Eastern Transportation Corridor, HOV Lane Additions to the Orange Freeway and the Riverside Freeway.

Principal in charge for the noise assessments for the Culver Drive Realignment and Widening in Irvine, the I-5/I-405 Freeway Confluence Zone in Orange County, the I-405 Freeway Design Alternatives Study, Route 178 in Bakersfield, Foothill Transportation Corridor, widening of Imperial Highway, and the Moulton Parkway Super Street in South Orange County.

Project Manager for many industrial noise projects including the Coyote Canyon Gas to Energy Plant, the Spadra Landfill Gas to Energy Plant, Anaheim Power Generation Plant, the

expansion of the San Clemente Wastewater Treatment Plant, and expansion of the SERRA Treatment Plant in Dana Point.

Project Manager for air quality assessments for regional planning efforts implemented by the City of Irvine and the planned communities of Aliso Viejo and Laguna Niguel. Projects included coordination with local Air Quality Management Plan (AQMP) efforts.

## EDUCATION

M.S., Environmental Engineering, 1975, University of California, Irvine
B.S., Civil and Environmental Engineering, 1973, UCI
B.S., Biological Science, 1973, University of California, Irvine

## PROFESSIONAL REGISTRATION

Registered Professional Engineer, 1981, Civil Engineering, California, No. C 31701
Certified Acoustical Consultant, County of Orange
LEED Green Associate
Member of Air and Water Management Association
Member of Engineers Without Borders
Registered Private Pilot

## PROFESSIONAL BACKGROUND

Entered the profession in 1973; co-founder of Mestre Greve Associates in 1978. His professional affiliations include membership in the Acoustical Society of America, the Air and Waste Management Association, the Air Pollution Control Association, the National Association of Noise Control Officials, and American Society of Civil Engineers. He is a frequent guest lecturer on air quality assessment techniques at the University of California, Irvine.

## PUBLICATIONS

*Air Quality Modeling as a Management Tool for Airports*, presented at the Airports Council International - Pacific Region in Vancouver, Canada, August 1995.

*Comparison of Noise Measurements along Arterial Roadways with the FHWA Highway Traffic Noise Prediction Model,* with Vincent Mestre, presented at the 1982 National Association of Noise Control Officials Conference.

*A Monitoring System for Long Term Aircraft Noise Measurements,* with Vincent Mestre, Sound and Vibration, February 1982.

*Carbon Monoxide Transport from Freeways: Evaluation of Major Models,* with G. S. Samuelsen, UCI Combustion Laboratory Report UCI-ARTR-78-6.

# MATTHEW B. JONES, P.E.

**MESTRE GREVE ASSOCIATES DIVISION OF LANDRUM AND BROWN – PROJECT MANAGER**
**COMMUNITY NOISE & AIR QUALITY SPECIALIST**

## EXPERIENCE

Mr. Jones joined Mestre Greve Associates in 1987. He has experience in all fields of noise assessment and air quality management. Work includes project management, software development, engineering analysis, report preparation, as well as noise and air quality monitoring. Mr. Jones has considerable noise and air quality modeling experience including FHWA's Traffic Noise Model (TNM), EPA's CALINE3, AERMOD and ISC3-ST dispersion models, FAA's Emissions and Dispersion Modeling System (EDMS), and SCAQMDs URBEMIS and CalEEMod. These services include noise and air quality assessments for EIR/EIS, highways, residential and commercial developments and airports. Mr. Jones is involved in the development of most of the in house computer software modeling programs and is well versed in all of the air quality and noise modeling programs used at Mestre Greve Associates. Representative project experience includes:

EIR noise and air quality assessments for many commercial and residential projects including:

Air Quality And Noise Assessments: Planning Areas 18, 33 (Lot 109), 34, and 39 General Plan Amendment and Zone Change, Irvine, CA; Diemer Water Filtration Plant, Yorba Linda, CA; 2000 Avenue of the Stars, Los Angeles, CA; Chandler Ranch Specific Plan, Paso Robles, CA; Santiago Hills II/East Orange General Plan, Orange; CA; Mission Hospital and Medical Center, Mission Viejo, CA; St. Jude's Hospital Expansion, Fullerton, CA;

Air Quality Assessments: Edom Hill Transfer Station Solid Waste Permit Revision Project, Palm Desert, CA.; Saddleback Medical Office Building, Laguna Hills, CA; The Crest, San Bernardino County, CA, Vista School District Family Literacy Center, Vista, CA.

Noise Assessments: Hoag Hospital, Newport Beach, CA; Northern Sphere Specific Plan, Irvine; CA; UCI Medical Center Long Range Development Plan, Orange, CA; Well No. 12, Huntington Beach, CA, SDG&E Moreno Compressor Station, Moreno Valley, CA;

Highway EIR noise and air quality assessments for: Aviation Boulevard Widening, Los Angeles County, CA, Foothill Transportation Corridor/Santa Margarita Parkway Interchange widening, Orange County; CA, San Joaquin Hills Transportation Corridor/ Interchange addition, Orange County; CA; Northwest Arkansas Airport Intermodal Access Road, AR; Eastern Transportation Corridor, Orange County.

Highway Noise Assessments and noise barrier design to satisfy FHWA and Caltrans requirements for: Kahului Airport Access Road, Kahului, Maui, HI, Foothill Transportation Corridor (SR-241) South Extension, South Orange County

Transportation Infrastructure Improvement Program (SOCTIIP), Orange County, CA; Antonio Parkway Widening, Rancho Mission Viejo, CA; State Street Extension, San Bernardino, CA; Jeffery Road Grade Separation, Irvine, CA.

Diesel Particulate Matter Health Risk Assessment for Home Depot at Highland & Arden Avenues, San Bernardino, CA; PA18, PA39, PA34, and PA33 Lot109 General Plan Amendments and Zone Change, City of Irvine, Eagle Rock Services Truck Repair Facility, San Bernardino County, CA; Perris Ridge Commerce Center, Riverside County, CA.

Preparation of the Noise Elements for the General Plans of the Cities of Santa Monica, Glendora, Highland, Stanton, and Dana Point.

Air quality modeling using the FAA's Airport Air Quality Modeling Program (EDMS) for Sonoma County Charles M. Schultz Airport Master Plan, the New Orleans International Airport Phase II EIS, New Orleans, Louisiana; Vancouver International Airport Air Quality Assessment, Vancouver, Canada; Boise Airport, Boise, Idaho.

Noise and vibration monitoring, data analysis and modeling in support of expert witness services for Margrave v. MTA claiming inverse condemnation due to operation of Gold Line LRT through South Pasadena, California.

Noise monitoring and data analysis for the Pilot Aircraft Noise Impact Assessment on the Grand Canyon and Volcano National Parks.

## EDUCATION

B.S. Engineering Physics, Acoustics Specialization, June 1994
University of California, San Diego, Summa Cum Laude

A.A. Liberal Arts with a Certificate in Recording Arts, 1992
Golden West College, Huntington Beach, CA

## Professional Registration

Registered Professional Engineer in the State of California, (Electrical #17156)

## Professional Affiliations

Acoustical Society of America
Association of Environmental Professionals
Air and Waste Management Association
American Institute of Physics
Audio Engineering Society

## DONALD HUBBARD, PE, AICP

Senior Planning Manager, Parsons Brinckerhoff, Inc.

**Years of Experience**

33 (6 with PB Americas; 27 years with others)

**Education**

Master of City and Regional Planning, Harvard University, 1985;
B.S., Engineering Science, Northwestern University, 1979

**Professional Affiliations**

American Planning Association; Institute of Transportation Engineers

**Professional Registrations**

Professional Engineer: Traffic, California, 2004 (TR-2260)
American Institute of Certified Planners: 2002 (018133)

**Key Qualifications**

Don Hubbard is a Senior Planning Manager with extensive experience in travel demand forecasting and traffic engineering. He currently heads the Transportation Planning section of Parsons Brinckerhoff's Sacramento office. Don specializes in improving the performance of traffic models to analyze real-world problems. For example, he helped develop the 4D's modeling technique used by the Sacramento Area Council of Governments (SACOG) for their award-winning Blueprint Project. Much of Don's work involves finding practical approaches to complex, high-profile traffic engineering problems.

**Recent Experience**

- Regional Traffic Mitigation Fee Study, Fresno, California. Don was Project Manager for the development of a new county-wide regional traffic mitigation fee for Fresno COG. This included performing the nexus study, providing policy-makers key information to guide them through a series of policy decisions, working through the administrative details including developing forms and an administrative manual, and drafting the necessary resolutions. The study was unusually challenging because of the need to fit the fee within the framework established in an ambiguously-worded ballot measure as well as the Mitigation Fee Act, and because of the political sensitivities inherent in establishing a new development fee during a downturn in the real estate market. PB's approach resulted in a fee that will raise enough funds to support critical projects while still getting the written support of the development community. PB is currently providing on-call support during implementation of the fee.
- Traffic and Revenue Study for the US-101 Corridor, Marin County, California. Don served as Project Manager for a study assessing the potential revenues and traffic impacts from adding HOT lanes to portions of US-101 or adding tolled lanes parallel to the facility. The project included developing scenarios covering various combinations of physical investments and policy choices, preparing traffic and revenue forecasts, preparing estimates of capital and operating costs, performing quality control checks, writing technical reports and training manuals, and managerial duties regarding the client and sub-consultants.
- World Logistics Center, Moreno Valley, California. Don currently heads the team performing the traffic impact assessment of what will be one of the largest logistics centers in the United States. The study includes forecasting the traffic that will be generated by tens of thousands of workers, analyzing the level of service for hundreds of intersections, determining the level of service on freeways affected by car and truck traffic, and preparing the traffic section of the EIR.
- Guam Military Relocation and Guam Road Network Project, Guam Territory, U.S. Don currently heads the team performing a variety of traffic studies related to the relocation of

several military facilities to the island of Guam. The studies include long-term planning to accommodate a large percentage increase in population, medium-term planning for prioritization and phasing, and short-term planning to mitigation traffic impacts during construction.

- MTC HOT Lanes Feasibility Study, Bay Area, California. Don served as Task Manager for conceptual design on this study to develop a region-wide HOV/HOT lanes network on the freeways in the Bay Area. Was responsible for developing several different conceptual designs for HOT/HOV lanes for use depending on the physical constraints of the site in question, for determining where in the network each design would be applied, and for developing the cost estimates used to determine the feasibility of the system. Also advised on phasing of network sections based on revenue potential, relative costs, state of preparation, and other criteria.
- Wine Country Travel Demand Model, California. Don was the Project Manager for the development of a regional travel demand model covering the Napa, Sonoma, Lake, and Mendocino Counties. The model makes use of existing data sources as well as new origin-destination and traffic surveys to help forecast inter-county travel in future study years. Was responsible for all aspects of the project, including devising the work plan for model development, overseeing work of mid-level and junior staff, performing quality control checks, writing technical reports and training manuals, and managerial duties regarding the client and sub-consultants.
- Congestion Pricing Operating Plan, Los Angeles, California. Don served as Task Manager for conceptual design on this study to convert existing HOV facilities on the I-10 and I-110 freeways in Los Angeles County into HOV/HOT lanes. Don was responsible for developing several different conceptual designs for HOT/HOV lanes for use depending on the physical constraints of the site in question and for developing the cost estimates used to determine the feasibility of the system.
- Sacramento State Tram Study, Sacramento, California. Don served as Project Manager for the feasibility study for a BRT system linking the campus of Sacramento State University to the regional light rail system. Don also served as task manager for the development of ridership forecasts. The forecasts utilized the six-county regional travel demand model in combination with smaller-scale models of parking space availability and comparative travel times between walking and the tram/walk combination. This was one of the first applications of SACOG's new activity-based model (SACSIM). He also preformed the analysis of the traffic impacts that the system may have on the portion of the route when the BRT is operating in mixed traffic on city streets.
- I-215 corridor Improvements, Las Vegas, Nevada. Don was responsible for the development of future forecasts along I-215 corridor between Las Vegas Boulevard and Windmill Lane. This work included devising the methodology for preparing forecasts to meet the needs of several different agencies, detecting and correcting errors in the new regional model, performing with- and with-out project model runs for four forecast years, and converting the model outputs into levels of service (LOS) forecasts by freeway section.

**Publications**

- "Planning a Regional Express Lane Network – Lessons from the Bay Area", presented at the TRB Transportation Planning Applications Conference, Reno, Nevada, May 2011
- "Making Travel Demand Models Sensitive to Smart Growth," published and presented at the ITE District 6 Annual Conference, Honolulu, Hawaii, June 2006.

## DEBRA J. MEIER, AICP

Senior Supervising Planner

**Years of Experience**

28

**Education**

B.S., Urban Planning, California State Polytechnic University, 1983; Associate of Science, Construction Trades Drafting, Sierra Community College, 1977
Additional Studies: Management Program, California State University, 1991

**Professional Affiliations**

American Institute of Certified Planners (AICP); American Planning Association (APA); Association of Environmental Professionals (AEP)

**Professional Registrations**

Certified Planner: AICP, 1995

**Key Qualifications**

Debra Meier is a senior urban planner and development industry professional with expertise in project management, land planning, environmental analysis and entitlement processes. As a former planning commissioner for the City of Highland, California, during the 10 years immediately following the city's incorporation, she was involved in the initial development of the city's general plan and development code. As a project manager for one of the nation's largest home builders, her responsibilities included completing the land use entitlement process (including all environmental and regulatory permitting), selecting project design consultants, managing consultant contracts and work products, preparing and managing project-specific budgets and schedules, selecting and managing land development contractors, and monitoring the land development construction schedule and budget. As a public-sector planner with the City of Rancho Cucamonga, Ms. Meier coordinated four concurrent annexation and development applications with the city's Sphere of Influence, each with separate project-sponsored environmental impact reports (EIRs) requiring close coordination with the County of San Bernardino and other local and state agencies. Her agency coordination work has included working with the California Department of Transportation (Caltrans), the California Department of Fish and Game, the U.S. Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service and the Santa Ana Regional Water Quality Control Board.

**Industrial Development**

- The Highlands Specific Plan, Moreno Valley, California: deputy project manager/EIR task manager. Prepared for the Highland Fairview Corporation, The Highlands Specific Plan is a proposed logistics/warehouse master plan for a building area of up to 40 million square feet (3.7 million square meters) covering over 2,600 acres (1,052 hectares) in the eastern portion of Moreno Valley. Parsons Brinckerhoff was responsible for preparing the draft specific plan and selected DEIR sections as well as an extensive traffic impact analysis.

**Highways**

- Needles Highway, San Bernardino County, California: project manager for the preparation of preliminary roadway design plans and environmental documents for the realignment of 15 miles (24 kilometers) of Needles Highway from I-40 in the city of Needles to the Nevada state line. The project scope includes preliminary roadway design and National Environmental Policy Act/California Environmental Quality Act (NEPA/CEQA) analysis within county, state, federal and tribal entities.

**Previous Experience**

Prior to joining Parsons Brinckerhoff, Ms. Meier participated on the following projects:

- Gresham Savage Nolan & Tilden, San Bernardino, California (2009-2011): entitlements manager for this law firm specializing in environmental, land use, natural resources management and real estate law. In addition to preparing applications and processing use permits, Ms. Meier supported the attorneys in the Land Use and Real Estate Practice Groups by providing land use research, including historical overview of development entitlements, analysis of easements and development agreements, and review of code requirements and entitlement procedures for city and county jurisdictions throughout California.

- Centex Homes – Inland Empire Division, Corona, California (2004-2009): project manager for one of the largest home builders in the nation with communities in 19 states. Ms. Meier's projects included:
  - The Cove, Highland, California: project manager for the entitlement process and land development for this tract of 132 homes in the East Highlands Ranch master planned community. The land development budget exceeded $8 million with $3.3 million allocated for grading to over-excavate and re-compact historic hydraulic fills. The project was completed and sold out in less than 3 years. In addition to completing the land use entitlement process—including all environmental and regulatory permitting—Ms. Meier selected project design consultants, managed consultant contracts and work activities, prepared budgets and schedules, selected and managed land development contractors, and monitored the budget and schedule.

  - Coyote Canyon, Fontana, California: project manager for the preparation of a specific plan. The project included six subdivision maps providing for the development of 650 homes, a 12-acre (4.8-hectare) city park and a 2-acre (0.8-hectare) parcel for the fire station. The $65 million land development budget included substantial storm drain and public infrastructure to support the new community. Construction began in 2005, and by February 2009, nearly 600 homes were occupied and four of the six subdivision maps had received final acceptance from the city and complete bond exoneration. The project required significant coordination with the San Bernardino Flood Control District, including property exchange, easements and developer construction of over $4 million of district infrastructure.

  - Orchard Park, Redlands, California: project manager for the land entitlement process and land development for this in-fill tract of 64 homes with a land development budget of over $7 million. The lots, in excess of 18,000 square feet (1,670 square meters), were developed with executive-style homes and were the first of the company's homes to be sold for more than $1 million. The project was developed and sold out over a period of 2 years.

  - Tuscany Hills, Lake Elsinore, California: project manager for the entitlement process regulatory permitting. The project, with an estimated land development budget exceeding $135 million, received entitlements from the City of Lake Elsinore for 807 lots, including a specific plan, development agreement and subdivision map. These entitlements were followed by permits and authorizations from the California Department of Fish and Game, the U.S. Fish and Wildlife Service and the Riverside County Multiple Species Habitat Conservation Plan. Ms. Meier negotiated with the Santa Ana Regional Water Quality Control Board to obtain the 401/404 certifications. She also held discussions with the city manager and city attorney to renegotiate the terms of the development agreement.

- City of Rancho Cucamonga, California (2002-2004): as associate planner and project manager, Ms. Meier coordinated four concurrent annexation and development applications with the city's Sphere of Influence and worked with the County of San Bernardino to strategically plan and develop a management plan for the expansion of the North Etiwanda Preserve. The annexation applications totaled nearly 1,000 acres (405 hectares) in the area adjacent to the preserve. The annexations entailed concurrent processing of development applications, review and management of all CEQA documents and consultant contracts and

coordination with the Local Agency Formation Commission (LAFCO) and other city/county agencies.

## JAMES J. IMBIORSKI, P.L.S

Senior Vice President/ Inland Empire Manager

**Years of Experience**

45 (<1 with PB; 33 with AE; 12 with others)

**Education**

San Bernardino Valley College, San Bernardino, California, 1964

**Professional Affiliation**

California Land Surveyors Association
California State University, San Bernardino – Science Advisory Committee
Chairman, Observatory Steering Committee
San Bernardino Unified School District, Advisory Committee for Dr. Herb Fisher
San Bernardino County, Sheriff's Reserves Special Bureau

**Professional Registration**

Land Surveyor, CA #4430 (1977); NV #11588; AZ #30356

**Key Qualifications**

Jim Imbiorski has 45 years of land surveying, construction and construction contract administration experience. He began his surveying career at California Department of Highways (Caltrans) and has provided surveys, mapping and Right-or-Way engineering services in support of Project Study Reports, Project Reports, Major Investment Studies, and final design on proposed highway improvement projects. Jim has served as field party chief, head of the survey department, project manager and principal-in charge. He is a licensed professional land surveyor with a broad background in surveying, including design, construction, cadastral and boundary surveys, mapping and records of survey. He has managed survey operations for design and construction on more than a hundred projects involving airports (landside and airside); access roads, state highways, water/sewer projects, buildings and facilities.

Jim has served in various functions supporting FAA funded airport improvement projects. Jim served as a Principal Oversight/ Project Manager for Taxiway "N" Westerly Extension, LAWA Master Plan at LA/ONT, and Perimeter Fence at VNY. As a sub-consultant to HNTB he provided the same services for the South Airfield Center Taxiway, and Southside Taxiway Design at LAX. Additionally, he has been Field Party Chief for design and construction at Palm Springs, Big Bear, Barstow-Daggett, Chino and Ontario International Airport. Since 1983, Jim has been Project Manager on airport improvement projects at Needles, Redlands, Apple Valley, Chino, Cable and San Bernardino International Airports. His knowledge and past working relationships with FAA Western Region staff is an asset to agencies in applying for and receiving grants.

**Relevant Experience**

**Highway/Roadway**

- Tippecanoe Avenue Widening, San Bernardino, California: principal-in-charge responsible for preparing plans, specifications and cost estimates for the construction of Tippecanoe Avenue from Harry Sheppard Boulevard to the Santa Ana River. The project bid in April 2007, has an anticipated budget of $5,000,000. Provided all surveys, mapping, legal description, hydrology and consultation with the FAA for this 6-lane project.
- District 08 "On-Call" Surveying Services, San Bernardino and Riverside County, California (Contract No. 08A0716): project manager and expert witness in support of CALTRANS. Provided various "On-Call" tasks for District 8. On-call task orders included preparation of Right-of-Way Maps, hardcopy and deeds for projects in San Bernardino and Riverside Counties, preparation of Resolutions of Necessity documents for Segments 10 and 11 of SR 30/210 (new freeway) in San Bernardino; preparation of relinquishment maps for SR30 along Highland; and 19th Street within the Cities of Upland, Rancho Cucamonga and Fontana;

preparation of miscellaneous court exhibits for condemnation actions within Segments 3 and 4 of SR 30/210; and preparation of Right-of-Way maps, hardcopy maps and deeds for Segments of SR 62 in Yucca Valley; and for SR 395 in Victorville.

- I-10/ Etiwanda Avenue Interchange, Fontana, California: project manager for design surveys, aerial mapping, Right-of-Way mapping, utility coordination and civil design for drainage, utility relocation and local streets for the reconfiguration of the existing interchange to bring it up to current requirements. All work was performed in metric to Caltrans Standards for PSR, PR & PS&E.
- Needles Highway Project, Needles, California: project manager for preparation of plans, specifications and Environmental Documents for the realignment of 15 miles of Needles Highway from Interstate 40 in the City of Needles to the Nevada State Line. The project scope includes civil design, Right-of-Way engineering, aerial mapping, and design and construction surveys. Provided GPS surveys to control color digital ortho-photo and aerial mapping for preliminary alignment studies and environmental processing. Color image plotting was also provided.
- State Route 60/ Moreno Beach Drive Project, Moreno Valley, California: project manager providing various survey and mapping support required for the re-construction of the State Route 60/ Moreno Beach Drive in Moreno Valley. Responsible for all survey control, design and tie-in surveys, utility location and mapping, Right-of-Way Land Net surveys, Right-of-Way mapping, legal descriptions and plats. Also prepared surveys, mapping, legal descriptions and plats for the lot line adjustment in the northeast quadrant of the interchange, working directly for the City of Moreno Valley.
- State Route 30 (SR-210) Segments 1, 2, 3, 4, 5, 7, 10 & 11, Los Angeles County Line to the City of San Bernardino: project manager and quality control to provide various survey and mapping support. This 26-mile project involves construction of a new six lane freeway from the Los Angeles County Line through the Cities of Upland, Rancho Cucamonga, Fontana and Rialto, to the I-215 in the City of San Bernardino. Responsible for all design, drainage, bridge, utility and soundwall surveys on Segments 1, 2, 3, 4, 5, 7, 10 and 11 used for the Project Study Report, Project Report and Final Plans. Working closely with Caltrans District 08 Right-of-Way and Survey Department, established a metric centerline. This alignment was used as control for all construction plans and Right-of-Way maps along the entire 26-mile route. All work products were delivered in accordance with Caltrans Survey and Drafting Manuals.
- City of Moreno Valley - Fiscal Year 2005/ 2006 Street Improvement Program (SIP) Capital Improvement Program (CIP) Moreno Valley, California: project oversight to provide engineering and surveying services for the City of Moreno Valley's Capital Improvement Program. Scope of work included surveys necessary for the design of improvements, legal description and plats, tie outs for all monuments (street and property), re-establish destroyed monuments and construction staking. Street projects included Maltby Ave. from Redlands Boulevard to Merwin Street; Campbell Avenue from Redlands Boulevard to Merwin Street; Hotchkiss Street from Campbell Avenue to South End; and Bencliff Avenue from Dracaea Avenue to South End.
- State Route 60, HOV Lanes, Riverside County, California: project manager for all design, drainage, utility bridge and sound wall surveys required for preparation of the Project Study Report, Project Report, and Final PS&E for 7.5 miles of HOV lanes, bridge structure replacements and improvements, and soundwalls. Working closely with Caltrans District 08 – Survey Department, established a metric centerline of improvements, converted existing Imperial Right-of-Way maps and photogrammetry to Metric 1:500 design scale hard copy maps and electronic files.

## STEPHANIE S. OSLICK, AICP

Environmental Manager
Professional Associate/Project Manager

**Years of Experience**
15 (6 with PB; 9 with others)

**Education**
M.S., Environmental Studies, California State University Fullerton, Fullerton, California, 1999;
B.S., Biological Sciences, University of Southern California, Los Angeles, California, 1992

**Professional Affiliations**
American Institute of Certified Planners (AICP), Certification Number 020593; American Planning Association (APA); Association of Environmental Professionals (AEP); Women's Transportation Seminar (WTS)

**Professional Registrations**
American Institute of Certified Planners (AICP), 2006

**Key Qualifications**
Stephanie Oslick is a supervising environmental planner with Parsons Brinckerhoff (PB), and has deep experience successfully managing the environmental planning process on a wide array of transportation-related projects. Ms. Oslick has been responsible for preparing environmental documents and reports to comply with National Environmental Policy Act (NEPA), California Environmental Policy Act (CEQA) and other environmental regulations, obtaining environmental permits and coordinating with local, state and federal officials. Her agency coordination work has included personnel from the Federal Highway Administration (FHWA), California Department of Transportation (Caltrans), Alaska Department of Transportation and Public Facilities, Arizona Department of Transportation (DOT), Colorado DOT, Kentucky Transportation Cabinet, Florida DOT, Maine DOT, Maryland State Highway Administration, New Hampshire DOT, New Jersey Department of Environmental Protection, Ohio DOT, Oregon DOT, Pennsylvania DOT, Texas DOT, Vermont Agency of Transportation, Washington DOT, Wisconsin DOT, Wyoming DOT, U.S. Department of the Army Corps of Engineers (usace), U.S. Fish and Wildlife Service, Regional Water Quality Control Board, California Department of Fish and Game and California Coastal Commission (CCC).

Over her seven years of experience while at Caltrans, Ms. Oslick functioned as a general environmental planner, district biologist, and District Liaison to the CCC for the Division of Environmental Planning. As the District Liaison to the CCC, she was the single point contact for all projects within the Coastal Zone to ensure compliance with the California Coastal Act regulations. She worked as environmental reviewer for encroachment permits and intergovernmental review for projects. Ms. Oslick was also a core member of the project development team to ensure the environmental and project milestones were reached with the schedule and budget. She authored, edited and peer-reviewed environmental documents and biological technical reports and prepared presentations and notices for public meetings.

**Project Management**

- National Cooperative Highway Research Program (NCHRP), Nationwide: task manager for NCHRP 25-25 Task Order research contract for the American Association of State Highway and Transportation Officials' (AASHTO) Standing Committee on the Environment. This required research into a host of topics such as environmental stewardship, air quality, and environmental compliance. Stephanie managed four tasks:
  - Task 37, "Effective Organizational Structures and Management Practices for Achieving Environmental Stewardship and Streamlining in Transportation Agencies"
  - Task 42, "Alternative Methods to Calculate PM2.5 and PM10 Emission Factors for Re-Entrained Road Dust on Transportation Projects"

- Task 46, “Compendium of Best Practices for Environmental Compliance and Stewardship at Transportation Maintenance Facilities”
- Task 52, “Informational Requirements for Jurisdictional Determinations to be Issued by the U.S. Army Corps of Engineers (USACE) Under the Clean Water Act (CWA)”

- County of San Diego On-Farm Composting and Manure Management Project, San Diego County, California: project manager responsible for client relationship and oversight of the whole project, including preparation of the Programmatic Negative Declaration, technical studies, the Best Management Practices Handbook, Permit Process Guide and the development of the On-Farm Composting and Manure Management permit program in coordination with the County Manure Management Committee. The County of San Diego, Department of Public Works Recycling Section proposed to amend the zoning ordinance to allow the transport of green waste from municipal landfills to agricultural facilities for composting.
- Center for Environmental Excellence by AASHTO: project manager for a contract requiring research into various environmental topics including center website development and maintenance, Programmatic Agreement Library (PAL) and NEPA Practitioner Guides.
- AASHTO Center for Environmental Excellence: research investigator for this AASHTO Center for Environmental Excellence partnership with PB to create a PAL for a centralized, organized and accessible “one-stop-shop” for programmatic agreements. These agreements have been developed over the years by various states’ departments of transportation and/or the FHWA in partnership with resource agencies to streamline compliance with federal environmental laws (e.g., the National Environmental Policy Act - Categorical Exclusion, the Endangered Species Act and the National Historic Preservation Act). The database provides examples of executed programmatic agreements, summarizes agreement information, links to the full agreement and allows practitioners to research agreements that meet specific requirements. Programmatic agreements have been included from the following five topic areas: NEPA Categorical Exclusions, Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act and land management-related agreements. Each agreement presented has been surveyed by an agency representative to provide in-depth information on its development and use. This project was honored as a finalist for the PB Project of the Year 2006 and was a co-author with the client, AASHTO, on a poster showcasing the project at the 2007 Women in Transportation Seminar Conference.

**Regulatory/Public Agency Coordination**

- I-15 La Mesa/Nisqualli Interchange, Victorville, California: environmental task manager for a proposed new local interchange on I-15 in the City of Victorville at La Mesa Road and Nisqualli Road. This fully directional interchange includes a new bridge overcrossing, new freeway ramps, and local street realignments. The project involved the preparation of a Project Report, an Initial Study/Environmental Assessment (IS/EA) leading to a Negative Declaration/Finding of No Significant Impact (ND/FONSI), and final design plans, specifications and estimates (PS&E). She also prepared and obtained approval for the Revalidation, per Caltrans standards. She is also managing the permitting process for impacts to the Mohave Ground Squirrel (Incidental Take Permit from the California Department of Fish and Game) and non-wetland Waters of the United States and State (404 Individual Permit from the Army Corps of Engineers, 401 Certification from the Regional Water Quality Control Board, and 1602 Streambed Alteration Agreement from the California Department of Fish and Game). As part of the alternatives analysis associated with the 404 Individual Permit, she worked with the engineers to do minor engineering modifications that resulted in a reduction of impacts to federal jurisdictional areas by 78%. Ms. Oslick was a co-author on the USACE-approved Habitat Mitigation and Monitoring Plan. She is also managing the purchase of mitigation land

associated with impacts to MGS and the enhancement and preservation of land associated with impacts to waters.

- Caltrans District 8 Value Analysis, San Bernardino, California: value analysis team member who provided environmental analysis expertise on multiple major projects exceeding $25 million. She participated in the workshops for value analysis and risk management for projects within San Bernardino and Riverside counties. The scope of the projects ranged from highway widening, bridge replacements and operational improvements to new interchanges.
- SR 60- Nason Street, Moreno Valley, California: environmental task manager for the approval of the environmental document revalidation (per Caltrans requirements), coordination and approval of permits (404 Nationwide Permit, 401 Certification and 1602 Agreement and Amendment) in-lieu fee transfer to satisfy mitigation requirements. She also proposed to create a mitigation bank with Caltrans to satisfy mitigation requirements and create a “win-win” situation for the City of Moreno Valley and Caltrans. The proposed interchange project would impact several drainages in the local area.

**Environmental Planning (Highway and Road)**

- SR 91 Corridor Improvements Project, Riverside and Orange Counties, California: the SR-91 PR/ED involves preliminary engineering for preparation of a Caltrans project report and an environmental document for extension of the existing 91 toll lanes. This project is a major element of Riverside County Transportation Commission’s (RCTC) 10-year construction program with an estimated construction cost of $1.3 billion and is a high priority project within the region. The project includes the addition of one general purpose lane and two toll lanes in each direction on SR 91 from SR 241 to Pierce Street for approximately 12 miles (19 kilometers) and widening of existing structures and realignment and reconstruction of nine local interchanges and two system interchanges within the project limits. The project will also study direct connectors to link I-15 to the toll lanes and extend this connection 1 mile (1.6 kilometers) north and 5 miles (8 kilometers) south along I-15. She performed QA/QC on subconsultant-prepared Section 4(f) Evaluation.
- City of Needles Street Widening and Corridor Improvement Project, City of Needles, San Bernardino County California and the City of Mohave Valley, Mohave County, Arizona: environmental task manager for the preparation of preliminary environmental studies (PES) and environmental document (Initial Study/Environmental Assessment). This project includes various street intersection improvements, widening of Harbor Avenue, North K Street, West Broadway, J Street and Needles Highway as well as modifying the Colorado River Bridge deck to accommodate an overhang sidewalk (cantilever) on the west side and to re-stripe the deck to four lanes.
- Fontana Program Management, Fontana, California: PB provided program management services for the Robert W. Weddle Capital Improvement Program Projects to meet the city’s most critical infrastructure improvement needs. The program was created to design and construct much needed storm drains and sewer mainline projects, major arterial roadway widening and reconstruction projects, freeway interchange reconstruction and new construction projects and grade separation construction projects. She assisted with coordination and acted as a third-party reviewer of environmental documents and technical studies prepared by environmental consultants, for the I-10/Cypress OC and the I-10/Citrus Interchange projects.

## RONALD W. SKLEPKO, PE, LEED AP, CPSWQ

Senior Project Manager, Operations Manager

**Years of Experience**

36 (2.5 years with Parsons Brinckerhoff; 33.5 with others)

**Education**

M.B.A., Business Administration, University of Redlands, 1995
B.S., Civil Engineering with Survey Option, California State Polytechnic University Pomona, 1989

**Professional Affiliations**

American Society of Civil Engineers, Member
U.S. Green Building Council, Inland Empire Chapter, Member

**Professional Registrations**

Professional Engineer, California, 1990 (C46216)
Land Surveyor-in-Training Certificate, 1989
LEED Accredited Professional, 2008 (USGBC)
Certified Professional in Storm Water Quality (CPSWQ), 2009, (#0552)

**Key Qualifications**

Ronald Sklepko has more than 36 years of experience in the planning, design, and management of public works improvements and land development projects for government agencies and private developers. He has developed a reputation of excellence in project management by maintaining good control over his projects; being thorough in design; and producing a set of plans and specifications that clearly conveys the intent of construction. He has special qualifications in stormwater management, stormwater quality, NPDES compliance and LEED. Public-sector clients include the cities of Los Angeles, Burbank, Highland, Riverside and Rancho Mirage.

**Relevant Experience**

- Twentynine Palms Marine Corps Air Ground Combat Center - North Mainside Expansion: deputy project Manager for the design of infrastructure and utilities for eight new city blocks in the North Mainside area of Twentynine Palms under NAVFAC Southwest. Responsible for civil engineering design, design coordination, design team meetings, scheduling and contract management. Improvements include major earthwork, water utilities, sanitary sewer, electrical distribution, gas mains, high temp hot water system, chilled water system, storm drainage and communication infrastructure. Designs were completed for roads, electrical substation, electrical transmission and distribution, 4.5 MG water storage tank, water pipeline system, and industrial wastewater improvements. This $110 million Design-Build project involves a total of 11 design packages with eight plan packages. Project construction started November, 2010 and will be completed by mid-2012.
- World Logistics Center, Moreno Valley, California: project manager for a proposed 2,600-acre industrial center for logistics distribution warehousing with planned build-out of 41.6 million square feet of space. PB is providing management, planning, traffic impact analysis and dry utility services to Highland Fairview, the private developer of the site. PB is preparing an extensive traffic impact analysis as part of the Environmental Impact Report (EIR) to address California Environmental Quality Act (CEQA) requirements. The project will pursue sustainable building standards with solar energy features and efficient water use technologies. The project is scheduled to go before the City Council in Spring, 2013.

- Pierce College, Facilities, Maintenance and Operations Building, Woodland Hills, California: civil project manager for this $20.8 million Design-Build Project for Build-LACCD and lead architect, Gkkworks in Irvine. This 3.3 acre development includes a 38,900 SF Maintenance Shop Building, a 4,900 SF Office Building and a 1,500 SF Central Plant Building, along with an 85,000 SF vehicle parking area with container storage, truck dock, trash, equipment wash down area and fueling station. The project started contruction in August, 2010 and is seeking a LEED Silver certification and near net-zero energy consumption. Ron designed a rainwater harvesting system for irrigation water and a porous landscaped detention area and hydrodynamic separator to address stormwater quality.
- Stoneridge Towne Centre, Moreno Valley, California: project manager for a 56-acre commercial development for Stoneridge Centre Partners located at the southwest corner of Nason Street and State Highway 60 in the City of Moreno Valley. This 563,000 SF development is anchored by a 178,000 SF Super Target Store, Kohl's and Best Buy. This project required the design of unique underground sand filters in order to meet the City's stormwater quality objectives. The shopping center opened July, 2007.
- Countryside Marketplace, Menifee, California: managed the design of a 69-acre commercial center that opened in October, 2008 with a total of 726,000 SF of building area that is anchored by a Super Target and Lowe's. He worked on the planning, design and construction phases of this $100 million project. Site civil improvements totaled $12.5 million and included storm drain, sewer, water, curb, sidewalk and parking lot pavement. Site drainage included an extensive pipe system, up to 48" in diameter, to collect the 100-year storm event over a very flat site. The design was reviewed and approved by the Riverside County Flood Control District and Caltrans District 8.
- UPS Expansion, Ontario, California: This project, completed in 2001, involved a 167,000 SF expansion of the UPS Main Sort Building adjacent to the Ontario Airport. An additional 13 acres of pavement around the sort building was added for trailer staging operations, along with a two acre employee parking lot expansion. As civil engineer, he supervised the preparation of plans for demolition, earth borrow site, paving, joint layout, sewer & water, storm drain and erosion control. A 66" diameter storm drain was relocated to make way for the new building. The project design included a biofilter swale, a small desilting basin and catch basin inlet stormwater treatment units to address NPDES stormwater regulations.
- Burbank Entertainment Village, California: project manager for the civil engineering of a three-level entertainment complex on 4.8 acres of land in the City of Burbank consisting of a 16 screen multiplex theater, retail shops, restaurants, health club and underground parking structure. This $45 million project was developed by AMC Theaters in Kansas City using STK Architecture in San Jacinto. Construction was completed in June, 2003.
- MWD Headquarters, Los Angeles, California: lead civil engineer for the design of site civil improvements and traffic elements for the new 12-story Metropolitan Water District Headquarters (MWD) at Union Station in Los Angeles. The project required deep shoring and excavations for an underground parking structure below the building. The work was accomplished with space constraints in a highly urban area.
- "E" Avenue / Mission Street Storm Drain, Hesperia, California: project manager for the planning phase, design phase and construction phase of this $2.6 million master planned storm drain project for the City of Hesperia. The design involved preparing a hydrology study, designing a desilting basin and spillway, 3,000 lineal feet of pipeline up to 96" diameter, extensive remedial earthwork, and designing the discharge connection to the Antelope Valley Wash maintained by the San Bernardino County Flood Control District. He was the construction manager for the project including bidding, contract award, approving contractor draw requests, conducting weekly progress meetings, and performing site observations. The project was completed to provide flood protection for homes and property.

## TARA OLSEN, P.E.

Project Manager
Senior Supervising Traffic Engineer

**Years of Experience**
19 (15 with Parsons Brinckerhoff; 4 with others)

**Education**
B.S., Civil Engineering, University of Washington, 1993

**Professional Registrations**
Washington, 1998 (#35204)

**Key Qualifications**
Tara Olsen is a senior supervising traffic engineer with Parsons Brinckerhoff. Her experience ranges from design, conceptual to final plans, specifications and estimates (PS&E); traffic analysis, including level of service (LOS) evaluation, alternatives analysis and development of signal timings; and construction inspection and support. Ms. Olsen's design expertise is in traffic signals, intelligent transportation systems (ITS), illumination, signing, channelization and maintenance of traffic.

Ms. Olsen's experience as a project manager includes supervising and coordinating the work of teams of engineers and technical personnel. Her responsibilities have included quality control; project scheduling; progress reporting; client presentations; preparing subcontractor agreements and budgets; and preparing final contract documents and construction cost estimates. Her project management experience has given her a familiarity with all aspects of transportation planning and engineering.

**Project Management**

- Bothell Crossroads (State Route (SR) 522) and Multiway Boulevard (SR 527), Bothell, Washington: as a subconsultant, Parsons Brinckerhoff was the lead designer for the SR 522 component of the Bothell SR 522 Crossroads and the SR 527 Boulevard projects, which are vital for the city's transportation system and serve as its public centerpiece for the economic revitalization of the downtown area. Ms. Olsen was project manager for the firm's portion of the work that included the realignment of SR 522 to the south of the existing location. She also served as deputy project manager for the overall project. The project not only focused on roadway improvements, but also worked to enhance the environment for pedestrians and bicyclists. This was especially important due to the proximity to the Park at Bothell Landing.
- 2nd Street Corridor Study and Signal Design, Snohomish, Washington: project manager for a corridor analysis study along 2nd Street from Avenue D to Pine Avenue through the City of Snohomish. This study focused on traffic operations and the safety of both motorized and non-motorized modes. The study identified immediate needs, short term needs and long term needs at intersections and corridorwide, which were then presented to the City Council. The project also included the design of a traffic signal at the intersection of 2nd Street and Avenue A. The intersection design included curb bulbs and decorative signal poles to emphasize the historic and pedestrian nature of this location.
- Anacortes Multimodal Ferry Terminal, Anacortes, Washington: project manager for the reconstruction of the Anacortes Ferry Terminal, including both building and site. The first phase of the project included the revision and validation of the 1997 design report, including site and terminal building preliminary plans, environmental/pre-permitting efforts for the development of a National Environmental Policy Act (NEPA) environmental assessment, and a 30% design report. The project concluded at the 60% design phase due to budgetary issues.

- 44th Avenue West Roadway Improvements, Lynnwood, Washington: project manager responsible for the development of the PS&E for the widening of 44th Avenue West between 196th Street SW and I-5 to incorporate an extension of a high occupancy vehicle (HOV) lane and additional turn pockets. This work included basemapping, drainage and stormwater, paving, signals, signing and striping, ITS elements, signal interconnect, maintenance of traffic and landscaping.
- Mill Creek Boulevard Signal Interconnect, Mill Creek, Washington: project manager and lead designer responsible for the design and coordination of a signal interconnect between two different agencies' signals. This project evolved to include a wireless interconnect system, which was installed by a third local agency. This project was then converted to an on-call project that included the evaluation of this intersection for future improvements.
- 164th & Mill Creek Boulevard Intersection Improvements, Mill Creek, Washington: project manager responsible for the development of PS&E for the widening of the north leg of this intersection to include four lanes, installation of new Americans with Disabilities Act (ADA) compliant sidewalk ramps and signal modifications.
- Mill Creek Stormwater/Traffic On-Call, Mill Creek, Washington: project manager and lead traffic designer responsible for the developer review services related to stormwater plans and reports, as well as traffic reports and plans. This project also included a travel time study and the development of immediate improvements for the intersection of 164th and Mill Creek Boulevard.