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Resumes of Key Personnel

CURRICULUM VITAE

JOSEPH S.C. BONADIMAN, P.E.

234 North Arrowhead Avenue (909) 885-3806 Fax (909) 381-1721
San Bernardino, CA 92408 jcb@bonadiman.com

PROFESSION:

Registered Civil Engineer in the States of California (# C-30238), Colorado (# 16973), and Nevada (# 5671 - Inactive). Has California licenses as an Agricultural Engineer (# 97), General Engineering Contractor, General Building Contractor (A & B # 313503), Registered Earthquake Damage Assessor (# SA951114) and Energy Auditor. Chief Executive Officer of Joseph E. Bonadiman and Associates, Inc., an engineering, surveying, planning and construction management firm founded in Los Angeles, California in 1941. Chairman of the Board of CIVILDESIGN® Corporation, consulting engineers.

EDUCATION:

Los Angeles Pierce College. Associate in Science
California State University at Fresno. Bachelor of Science, Civil Engineering.
Century University. Master of Science, Civil Engineering.
Columbus University. Doctor of Philosophy, Civil Engineering.
Additional continuing education studies in Hydrology and Hydraulics, Ground Water Hydrology, Nuclear Site Hardening, Forensic Engineering, Water and Wastewater Systems and Planning at UCLA, Cal Poly Pomona, University of Iowa, Calif State University at Long Beach, West Virginia University and University of Washington.

COLLEGE LECTURING, PUBLICATIONS AND TECHNICAL PAPERS:

Guest lecturer for the University of California at several campuses, addressing groups such as the National Association of Home Builders, Southern California Adjusters Association, American Society of Civil Engineers, Society of Real Estate Appraisers and the Western Mobile Home Park Association. Authored papers and reports on ecological systems, recreational developments, structural steel systems, mobile home and recreational vehicle parks, energy systems, Computer-Aided Design and Drafting (CADD), along with environmental, wastewater and water treatment, and Forensic Engineering, have been a peer reviewer and have been peer reviewed. Editor of CIVILDESIGN®/CIVILCADD® *Pipe Network Analysis* and CIVILCADD® *Computer Aided Design and Drafting*.

MEMBERSHIPS:

Fellow, American Society of Civil Engineers
Member, National Society of Professional Engineers
Member, The American College of Forensic Examiners
Fellow, National Academy of Forensic Engineers
Member, Association of Energy Engineers
Member, American Water Works Association

CIVIC AND FRATERNAL ACTIVITIES:

The California Club, Los Angeles (Member)
San Bernardino Area Chamber of Commerce
Aircraft Owners and Pilots Association
Serra International (Past President)
Easter Seal Society (Past President)
Thursday Morning Group (President)
California State Polytechnic University,
Engineering Industry Action Council (Member)

REPRESENTATIVE PROFESSIONAL ACTIVITIES:

The following projects by Mr. Bonadiman are listed as examples to show an interested party, the various types of experience that he has gained over his years as an engineer. More specific projects can be assembled from hundreds of others not included in this list, if necessary, for a particular type of case or project.

- Project engineer and expert witness for a forensic investigation on two 50,000 square foot freezers for the Van De Kamp Food Company, San Diego, California. The cause for the failure of the buildings had to be determined and corrected in record time due to the thousands of pounds of tuna soon to arrive at the dock.

- Project engineer for the design of an earth dam in Bishop, CA. This 450 foot long dam was designed for the County of Inyo in connection with a David Grunsky Act application. This State of California funded project was the only one approved for the County.

- Design engineer on an innovative modular building. The building used a rigid frame plastic design, with stressed skin wall panels. The rigid frame was built in a one-man welding shop while the stress panels were built in a two-man cabinet shop, indicating the ease of construction. Building was then erected by mostly non-experienced tradesmen. This was an original design that proved to be very cost effective.

- Staff engineer for the design of the Meadowbrook Redevelopment Project in the City of San Bernardino, CA. This project made land available for new development and necessitated the integration of existing older infrastructure with new construction. This development was one of the most successful redevelopment projects in California at the time.

- Principal engineer for the San Bernardino County Medical Society's building. Originally designed to be a 2-story structure, with the second story to be constructed at a later date, this building was so efficiently designed that added to the economies, it allowed the Medical Society to build both stories at the same time.

- Staff engineer on a hydrology analysis, study and design for a compacted soil cement levy for the County of Ventura. The Arroyo Las Posas Wash carried a Q100 of 33,000 CFS. Due to the location of the wash, no acceptable rock to race the levy was available. Therefore, an analysis was made as to the most inexpensive way to protect the levy from erosion. Compacted soil cement was recommended and used successfully for the first time in Ventura County.

- Principal senior engineer for St. Adelaide's Catholic Church in Highland, CA. Despite the low construction budget, it is considered one of the most attractive churches in the San Bernardino Diocese. A feature of the design was that the tower would be an integral part of the church. Reasonable cost on the church had to be maintained. As a solution, certain items were purchased in Mexico and finished to U.S. standards so that they could be incorporated into the structure.

- Principal engineer for a FEMA study and design on a large channel in Highland, CA. Calculated flow of the channel was 30,000 cfs. The study was submitted to FEMA for approval and terminated with a FEMA map provision for the overflow area of the wash.

- Principal engineer for a set of three fire stations for the City of San Bernardino, CA. The fire

stations were designed to be used at multiple locations within the City of San Bernardino. They were designed to be site adapted and de-mountable so that they could be relocated as the fire demand changed within the City.

- Project engineer on a specific plan for a 700-acre hillside development containing single and multiple family homes in the City of Loma Linda. This project anticipated movement of approximately 25 million yards of earth. The project was dissected by the San Jacinto fault, which necessitated extensive geological analysis.

- Principal engineer for the City of Colton's Main Library in Colton, CA. This project was designed for the City and the City required the firm to work with a separate construction manager in the building of the library. The library was designed and constructed so that a second story could be added in the future when present space requirements were exceeded.

- Principal engineer for the design standards of the CIVILDESIGN®/CIVILCADD® Civil Engineering Software. Started the project in 1979 and continues to be the principal engineer in charge. This is the most complete Civil Engineering software designed by a single coordinated software design group of civil engineers.

- Principal engineer on an environmental study and report on the Sunrise Ranch, a 2,000 acre multi-use development in Highland, CA. This project contained single family, multiple families and a golf course. The property had multiple types of topography along with historical significance.

- Principal engineer on the Glen Helen Regional Park and vicinity Master Plan. This project consisted of primarily County property, but included some private and National Forest property. The study covered approximately 3,000 acres. The plan developed the basis for a multi use recreational facility in the Northern part of San Bernardino.

- Principal engineer for all on and off site design including grading, streets, paving and storm drain, for a $10 million State facility at the National Orange Show Grounds in San Bernardino, CA. A condition by the State on this project was that all working drawings had to be in digital format.

- Principal engineer on 72 miles of water transmission main, water storage tanks, wells, and a booster station in the community of Phelan, San Bernardino County, CA. This project from start to completed working drawings took three months.

- Principal engineer on two 8,000 space recreational vehicle and camping facilities for two U.S. Festivals. The two temporary facilities were the largest for recreational vehicles ever designed and constructed.

- Principal engineer on three miles of 84" diameter storm sewer in the cities of Rialto and Colton, CA. Design and construction of this line was complicated due to its location in Valley Boulevard, which had large crossing utilities.

- Principal engineer on the only temporary on and off ramps from a major U.S. freeway. Both ramps were designed and built to state and federal standards. Cooperation had to be obtained through Cal Trans as well as the Federal Highway Commission.

- Project engineer on a 75-acre industrial development for the City of Colton. This city project was to provide industrial property for companies wishing to locate in the city. This project was done under a

State 1915 Improvement District Act.

- Project engineer on the design of a 400-space mobile Home community in the vicinity of Vail, CO. This project included a complete sewer and water system with the treated sewage of such quality that it was discharged directly into the Eagle River.

- Project engineer for two one-year contracts to do all engineering and architectural design at Norton Air Force Base in San Bernardino, CA. This project included civil, electrical, mechanical and architectural designs.

- Project engineer for a 100 mile survey of Edwards Air Force Base, CA. This project included re-monumentation of the base. The project was done for the U.S. Corps of Engineers and required much historical review going back to the 1840's.

- Project engineer on 20 miles of 48" water transmission main in sections of between 4.3 miles and 5 miles in length for the San Bernardino Valley Municipal Water District, which is a contractor for State water.

- Design engineer for a hydrogeneration systems for Sheep Creek Water Company. Systems designed were to retrieve energy using hydrogenerators as opposed to pressure reducers located in water transmission lines.

- Design engineer on the hydrology study and design of 2 ½ miles of a 10' x 11' box culvert for the City of San Bernardino. Project paid for through a United States government grant. Because this box culvert ran through the main part of the city, a study had to be completed for a significant portion of the City prior to the design of the storm drain facility.

- Design engineer for a hydrology study and the design of a channel protection for a portion of the San Luis Ray River in the County of San Diego. The San Luis Ray River has a Q100 of 46,000 CFS and a design with a backwater analysis was necessary to protect properties next to the river.

- Staff engineer on the Scottish Rite Masonic Temple in San Bernardino, CA. This structure was designed to be built in phases. The structure was unique in that it was constructed much as an industrial building. The building turned out to be very functional and contained all the amenities necessary for that type structure and use.

- Construction manager on various engineering and building construction projects. Management of construction projects enables the engineer to bridge the gap between engineering construction in a way that makes his cost estimates and timetables meaningful.

- Principal engineer for the first incinerator waste-heat-boiler combination to be used in Southern California, which met all the requirements of the Regional Air Pollution Control Board. The incinerator was able to take all the waste, both infectious and noninfectious--from Saint Bernardine's Medical Center, incinerate it, pass the gases through a waste heat boiler and produce steam of sufficient quantity to meet all the hospital's requirements.

- Principal engineer on cogeneration system for Anaheim Memorial Hospital. The cogeneration system consisted of a natural gas-fired engine driving a generator to produce electricity. The heat from the engine was used to meet a portion of the hospital's hot water requirements.

Joseph S.C. Bonadiman, PhD, P.E.

Chairman & C.E.O.

Education

Los Angeles Pierce College, A.S.

California State University Fresno, B.S. Civil Engineering

Century University, M.S. Civil Engineering

Columbus University, PhD, Civil Engineering

Registrations

Registered Civil Engineer California No. C-30238

Registered Civil Engineer Nevada No. C-5671

Registered Civil Engineer Colorado No. C-16973

Affiliations

Fellow, American Society of Civil Engineers

Fellow, National Academy of Forensic Engineers

Member, American Water Works Association

Member, National Society of Professional Engineers

Experience

40 Years

Mr. Bonadiman has designed and managed most types of Civil Engineering projects. He served as guest lecturer on engineering subjects for the University of California covering such issues as design of utilities, ecological systems, energy systems, and computer aided design and drafting facilities.

In addition, Mr. Bonadiman has been responsible for studies, designs, management, and investigations of most types of hydrology and hydrology related matters. His activities have included working with city, county state and federal agencies on items ranging in complexity from technical studies to failure investigations, expert testimony, engineering design, inspection, and finally, construction management. Selected project experience includes:

- Design Engineer on hydrology study and design of 2% miles of an 11' x 10' box culvert for the City of San Bernardino. Project paid for through a United States government grant. Because this box culvert ran through the main part of the City, a study had to be completed for a significant portion of the City prior to the design of the storm facility.

- Design Engineer on 3,000 feet of a 10' x 9' box culvert for the National Orange Show in the City of San Bernardino. A total of 6,000 feet of culvert was designed and 3,000 feet have been built to date. The construction of the box culvert allowed for improved parking and easier access to the National Orange Show property in addition to solving their drainage problem.

- Staff Engineer on a hydrology analysis, study and design for a compacted soil cement levee for the County of Ventura. The Arroyo Simi Wash carried a Q of 33,000 cfs. Due to the location of the wash, no acceptable rock to line the face of the levee was available and reinforced concrete was not an option. Therefore, an analysis was made as to the most inexpensive way to protect the levee from erosion. Compacted soil cement was recommended and used successfully for the first time in Ventura County's history.

- Design Engineer for a hydrology study and the design of channel protection for a portion of the San Luis Ray River in the County of San Diego. The San Luis Ray River has a QlOO of 46,000 cfs and a design with a back water analysis was necessary to protect properties next to the river.

- Principle Engineer on three miles of 84" diameter storm sewer in the cities of Rialto and Colton California. Design and construction of this line was complicated due to its location in Valley Boulevard that had large crossing utilities.

- Forensic Engineer on several cases having to do with Counties, Cities and Flood Control Districts. Ranging in scope from dam failures to personal injury in connection with Flood Control facilities. Calculations, reports and inspections are required for typical court cases using expert services.

- Design Engineer for a hydrology / hydraulics study and design for 4,000 feet of Reche Canyon Channel. Design was for an 11 ' deep trapezoidal channel with a 25' bottom width in the City of Colton,

Joseph S.C. Bonadiman, PhD, P.E.

California. The analysis design and construction was conducted to facilitate the removal of an area from the FIRM Maps by working with FEMA. This was done by utilizing the Army Corps of Engineers' HEC-I1 computer program and verify the adequacy and HEC-I for the Hydrology Study.

- Design Engineer for a hydrology and hydraulic study for the design of two 48" x 76" reinforced elliptical concrete pipes in the City of Norco. HEC-I and HEC-11 software was incorporated in the analysis to handle retention basin analysis, routing of flood hydrograph, channel design, and dam break analysis. This project was done with the authority of the County of Riverside and the City of Norco. The design consisted of a drainage system, which included upstream diversion of waters as well as flows intercepted by the pipes. The design was complicated by size of the pipes and the relationship to other utilities.

- Staff Engineer working with the Army Corps of Engineers HEC-II software in the hydrology study and design of Rock Slope Protection for a one mile reach of City Creek, located in Highland, California. This project was done under the supervision of the San Bernardino County Flood Control District, Caltrans, and the Army Corps of Engineers to facilitate the design and construction of improvement along City Creek. The Corps of Engineers S.P.F. was a flow of 30,000 cfs. The analysis and design was submitted to FEMA for a Letter of Map Revision (LOMR) and subsequently approved.

- Project Engineer of a hydrology study for Mill Creek using San Bernardino County Flood Control District synthetic unit hydrograph and rational method. This project consisted of preliminary engineering studies for channel crossing of Mill Creek in the County of San Bernardino. Mill Creek is a major tributary to the Santa Ana River. This project was done for Thousand Trails, a large recreation corporation and the County of San Bernardino.

- Staff Engineer for a drainage study and design of pipes, channels and box culverts for the Meadow Brook Redevelopment Project in the City of San Bernardino. This study and design consisted of the analysis of drainage and design of facilities for a major portion of the downtown section of the City of San Bernardino, and the Redevelopment Agency of the City.

- Staff Engineer for a hydrology study and design for the 11 Mile Strip Regional Park between Parker, Arizona and Parker Dam, in the County of San Bernardino, was submitted by JBA using the San Bernardino County Flood Control District unit hydrograph. This project studied how to protect the County Park and park facilities from drainage tributary to the Colorado River. The project was done for the County of San Bernardino Regional Parks Department and the San Bernardino County Flood Control District.

- Design Engineer for a hydrology study and dam design for Fish Slough, Inyo County. This project was done under the supervision of the State of California and the County of Inyo. Fish Slough was developed into an area for water retention for fishing activities. The original dam conceived by the county was to be at a location that had the highest

Joseph S.C. Bonadiman, PhD, P.E.

seismic activity of any place recorded in the State of California. The design analyzed a series of possibilities and choose a multiple dam design that would minimize the counties liability while maximizing the fishing potential.

- Staff Engineer for a hydrology study for the design of a 45' high 450' long dam for the County of Inyo. This project was done under the State's David Grunsky Act to provide recreational development. The design of the dam was completed weeks prior to the damaging earthquake in Sylmar, which then increased the design criteria for the seismically sensitive projects. The dam had to be redesigned to the new state requirements and resubmitted to dam safety for approval.

- Staff Engineer for a hydrology /hydraulic study and design for Prado Dam Recreational Facilities. The study had to be approved by the State, the County and San Bernardino County Parks and Recreational Department. The Regional Park being designed was in the vicinity of the tributary channels leading into Prado Dam. The design had to analyze the effect on the flows to park properties.

- Project Engineer for a project, located in Desert Hot Springs, California. The project required a compound design of retention basin, trapezoidal channel, transition structures, channel confluence and hydrology/hydraulic study. The design and subsequent construction of the project allowed further development of a large residential development within the City of Desert Hot Springs. The flows had to be captured from three separate areas. The channel and retention basin, included earth slopes, grouted rock protection and concrete lined channels. The project used the firm's hydrology and hydraulic software, and the firm's proprietary computer aided and design software. Plan checking of the project was partially done by the County of Riverside Flood Control District, who also utilizes the firm's software.

CURRICULUM VITAE
for
Professional Surveying Consultant

EDWARD J. BONADIMAN, P.L.S.

234 North Arrowhead Avenue (909) 885-3806X132 Fax (909) 381-1721
San Bernardino, CA 92408 ejb@bonadiman.com

PROFESSION:
Registered Land Surveyor in the States of California (# LS 7529
General Engineering Contractor, General Building Contractor (A & B # 909172)
President of Joseph E. Bonadiman and Associates, Inc., an engineering, surveying, planning and construction management firm founded in Los Angeles, California in 1941.

EDUCATION:
California State University San Bernardino, B.A., Business Administration & Management
California State University San Bernardino, M.B.A., Master of Arts Degree in Business Administration
Additional continuing education studies in Global Positioning Systems (GPS) and Subdivision Map Act.

MEMBERSHIPS:
California Land Surveyors Association, San Bernardino / Riverside Chapter, Past-President
California Land Surveyors Association, State Corporate Member

CIVIC AND FRATERNAL ACTIVITIES:

San Bernardino Downtown Business Association (Member)
San Bernardino Area Chamber of Commerce (Member)
San Bernardino YMCA (Board Member)
Cub Scouts Pack 8, Redlands (Committee Chair)
Mu Kappa Tau, National Marketing Honor Society (Member)

REPRESENTATIVE PROFESSIONAL ACTIVITIES:
The following projects by Mr. Bonadiman are listed as examples to show an interested party, the various types of experience that he has gained over his years as a land surveyor. This list emphasizes boundary surveying and determination projects.

- **Mt. Baldy Ranch, LLC Boundary Dispute (Consultant) –** Worked as a consultant to determine the location of a property line that was in dispute. Project was in an area that had little survey control, evidence and conflicting record data. Old easements were also in dispute and were analyzed. Displays were prepared from all analyzed data to clearly convey issues to stake holders. *Hudson & Browning - Blake Hudson, Esq.*

- **Klim Boundary Dispute, Redlands (Expert Witness) –** Conducted a field survey to establish boundary of project. Analyzed easements in title policy and created exhibits to clearly show property characteristics. Deposed as expert for plaintiff. *Fullerton, Lemann, Schaefer & Dominick – Wilfred Lemann, Esq.*

- **Selrocco Drive, Calimesa Boundary Dispute (Consultant) –** Analyzed chain of title, record of surveys and Tract Maps along with topographic evidence in order to establish an opinion of disputed property line position. Calculated scenarios and prepared exhibits to aid in the determination of the property lines intended position. *Gresham, Savage, Nolan & Tilden – Richard Marca, Esq.*

- **Rippey Property, El Cariso, Ortega Hwy. (Consultant) –** Reviewed record data and chain of title in order to establish easement existence. *Reid & Hellyer – Christopher Peterson, Esq.*

- **Lindsey Side Line Boundary Dispute (Consultant) –** Provided filed crew to establish property line and adjacent structures. Prepared exhibit that was utilized by council as display. Ward & Ward – William Ward, Esq.

- **Arroyo Drive, Riverside Boundary Dispute (Consultant) –** Analyzed chain of title, record of surveys and Tract Maps along with topographic evidence in order to establish an opinion of disputed property line position. Calculated scenarios and prepared exhibits to aid in the determination of the property lines intended position. *Gresham, Savage, Nolan & Tilden – Jamie E. Wrage, Esq.*

- **Wal-Mart, San Jacinto, Construction Staking Issues (Consultant) –** Hired by Wal-Mart to identify the source of land surveying problems prior to and during construction activities. Analyzed data and prepared report of findings to Wal-Mart.

- **Luna Road Reclaimed Waterline (Project Manager) –** Worked with the Baldy Mesa Water District to design and specify 15,000 l.f. of 18" and 12" reclaimed water line. Scope included surveying the alignment right-of-way, preparing easement documents and preparing plan and profile sheets for the project.

- **Patterson Boundary Dispute, Redlands (Expert Witness) –** Conducted a field survey to establish boundary of project. Analyzed property rights and created exhibits to clearly show property characteristics. Deposed and appeared in court as expert for defendant. *Reid & Hellyer – Christopher Peterson, Esq.*

- **Tract 24384 Desert Hot Springs (Project Manager)** – Prepared all improvement drawings for this 396 lot foothill subdivision. Scope included working with Mission Springs Water District to provide water and sewer service to the project.

- **Crew Chief on various high-rise projects in Reno, Nevada, (Crew Chief)-** 26 story Hamilton Inn Hotel, including building alignment. El Dorado Hotel and Casino Reno Airport Hilton Hotel and Casino. 120,000 square foot Patagonia Clothing Company warehouse, and various other "tilt-up" type warehouses throughout Northern Nevada

- **(Project Manger/Crew Chief)-** Rough grade, utility, road alignment and final grade staking on thousands of residential lots throughout Southern California.

- **L.A. to Pasadena Metro link Blue line Extension (Project Manager/Crew Chief)-** Right-of-Way acquisition and descriptions, on portions of the 26-mile project

- **Cadiz Valley, California agricultural project (Manager & Crew Chief)-** Utilized RTK to set vertical / horizontal aerial control to produce contour maps and rectified orthophotos for the 2,240 acre area.

- **3,400 acre boundary survey on the Mariano Rancho in Ventura, California (Crew Chief)-** Provided Real Time Kinematic surveying services to locate boundary monuments and the City / County line.

- **2,800 acre residential / industrial development in Reno, Nevada (Crew Chief)-** Set aerial control with Real Time Kinematic G.P.S. for the entire project.

- **Community Sewer Improvements, Baker, California (Manager / Crew Chief)-** Met with Cal-Trans and pulled permit to bore 460 feet under Interstate 15. Provided both preliminary control and construction staking for boring and sewage lagoons.

- **(Project Manager / Crew Chief / Cartographer)-** Various A.L.T.A., Record of Surveys, Parcel Maps and Tract maps, throughout Southern California from preliminary research, to document and legal description evaluations and all field work.

Edward J. Bonadiman, M.B.A, P.L.S.

President, Survey Manager

Education

California State University San Bernardino, B.A. Business Administration/Management

California State University San Bernardino, M.B.A Business Administration/Marketing

Registrations

California Licensed Land Surveyor, No. L-7529, 1999

Affiliations

Past-President, California Land Surveyors Association, San Bernardino/Riverside Chapter

Corporate Member, California Land Surveyors Association

Experience

19 Years

Mr. Bonadiman has been working in the Land Surveying field for over 17 years. He has provided land surveying services with Real Time Kinematic G.P.S. equipment since 1994. His understanding of the latest equipments, features, benefits, and limitations has made Mr. Bonadiman a valuable asset on any project.

Mr. Bonadiman has worked extensively throughout the western United States, and is currently preparing and staking improvement plans, record of surveys, parcel maps, tract maps, large area vertical / horizontal control plats and construction staking from our office in San Bernardino. Selected project experience includes:

- Project Manager / Crew Chief for a 2,240 acre agricultural project in the Cadiz Valley, California. Utilized RTK to set vertical / horizontal aerial control to produce contour maps and rectified orthophotos for the entire area.

- Crew Chief for a 3,400 acre boundary survey on the Mariano Rancho in Ventura, California. Provided Real Time Kinematic surveying services to locate boundary monuments and the City / County line.

- Crew Chief for a 2,800 acre residential / industrial development in Reno, Nevada. Set aerial control with Real Time Kinematic G.P.S. for the entire project.

- Project Manager / Crew Chief for Community Sewer Improvements, Baker, California. Met with Cal-Trans and pulled permit to bore 460 feet under Interstate 15. Provided both preliminary control and construction staking for boring and sewage lagoons.

- Project Manager / Crew Chief for site improvements on New City Hall, Highland, California. Worked closely with architects and City officials through planning process. Provided all preliminary control and construction staking for project.

- Project Manager / Crew Chief for Co-composting facilities in Corona, California and Colton, California. Prepared conditional use permits, oversaw preparation of plans, As-Built drawings, met with flood control, South Coast Air Quality Management, and SAWPA. Provided all preliminary control and topographic maps.

- Crew Chief on various high-rise projects in Reno, Nevada, including:
  - 26 story Hamilton Inn Hotel, including building
  - El Dorado Hotel and Casino
  - Reno Airport Hilton Hotel and Casino
  - 120,000 square foot Patagonia Clothing Company warehouse, and various other “tilt-up” type warehouses throughout Northern Nevada.

- Crew Chief on the L.A. to Pasadena Metrolink Blueline Extension. Right-of-Way acquisition and descriptions, on portions of the 26-mile project.

Dennis W. Jackson, B.S., P.E.

Senior Water Resources Engineer

Education

California Polytechnic University, Pomona, B.S. Civil Engineering, cum laude

Registrations

Registered Civil Engineer California No. C-47434

Affiliations

American Society of Engineers

Floodplain Management Association

Chi Epsilon

Experience

24 Years

Mr. Jackson, as a Project Engineer and Hydrologist for Joseph E. Bonadiman & Associates, Inc., has gained extensive experience in hydrology, hydraulics, and drainage design engineering.

Mr. Jackson has been Project Engineer for hydrology analysis and design of drainage improvements for developments in San Bernardino, Riverside, Kern, San Diego and Los Angeles counties. These drainage designs required both the use of county hydrology manuals, U.S. Army Corps of Engineers' programs, and the hydrology/ hydraulics programs developed by Mr. Jackson.

On a daily basis, he provides advice and instructions to many engineering firms on use of software for the design and analysis of storm drain channels, or the preparation of hydrology studies. Sample projects he has been involved with include the following:

- Design Engineer where the firm was retained by an engineering company to analyze a 30 square mile drainage area. The study area lay on both sides of Interstate Highway 5 in the northern part of Los Angeles County. A shopping outlet center had been designed for a site downstream of the study area. When building permits were requested it was discovered that the existing facilities that were to be used to protect the shopping center were inefficient based on current Los Angeles hydrology manual. The firm, working with Los Angeles County, was able to gain approval for the drainage and at the same time, effect changes to the rainfall map designation portion of the hydrology manual.

- Project Engineer for the development of software programs with the Los Angeles County Flood Control District, County of Los Angeles, Department of Public Works as follows:

LAR04 - F0601 - Modified Rational Method. Added program options, including automatic calculation of "bum factors," areas less than one acre in size and runoff volume totals. Prepared a separate retarding basin program providing Modified Puls analysis input to F0601.

WSPGW - Water Surface Pressure Gradient. Added metric unit option, improved junction analysis to include upstream conduit angle, drawing file output and improved super elevation calculations.

- Project Engineer working with the City of La Habra and the Los Angeles County Flood Control District to do a hydrology study and design a method of handling water that had been impacting Harbor Blvd. and a residential street. Due to previous designs, flooding problems occurred that needed to be mitigated so that a large church property could continue to function. Through imaginative routing, both problems were overcome, thereby allowing the church to legally remain open.

Consulting Engineer for an investigation of flooding adjacent to Tijuana River, San Diego County, California. The firm was contacted after other engineering companies could not agree or successfully determine the causes of flooding along the river. The firm, after thorough investigation, determined that all previous studies done were in error in that they did not factor in the panic situation that occurred when a large flood control dam was close to being breeched in Mexico. The investigation and study that ensued indicated the firm's in-depth knowledge and management of large drainage systems.

Jay Gunther, M.E., P.E.

Senior Project Engineer

Education

B.S., Civil Engineering, Brigham Young University, Provo, Utah

M.E., Civil Engineering, Brigham Young University, Provo, Utah

Registrations

Registered Civil Engineer California No. C-39583

Experience

26 Years

Jay Gunther has over 26 years of design and management experience in a wide variety of projects including land development, public works, sanitary engineering, hydrology and post-tension design. Selected project experience includes:

- Senior Engineer in charge of alignment studies and final design of approximately 13 miles of 48-90 inch diameter outfall sewer lines for the County Sanitation Districts of Los Angeles County. Much of the alignment traversed major streets and required extensive utility coordination and relocations, traffic control and interfacing with various agencies. The project also included the design of several major junction structures, inverted siphons and tunnels.

- Senior Engineer in charge of alignment studies and final design of approximately 3 miles of 48-54 inch diameter water main for the City of Concord, California. Design included traversing major streets, a BART parking lot and some environmentally sensitive areas

- Senior Engineer for the Taft Federal Prison Wastewater Treatment Plant in Taft, California. This involved the complete design of a new WWTP for the new Taft federal prison. The design included headwork, secondary treatment facilities, a pumping station, drying beds and general civil site work and yard piping for the facility. Also required extensive coordination with a team of civil, structural, mechanical, chemical and electrical engineers.

- Senior Engineer for the River Mountain Reservoir. Southern Nevada Water System's 55-million gallon water regulating reservoir near Lake Mead, Nevada. This reservoir was part of an overall project to provide necessary redundancy for the system, which fed potable water to the Las Vegas Valley. The work required the coordination of civil, mechanical, structural and electrical engineers. The project also involved the design of ancillary facilities to the reservoir including a 2-mile access road, 1 mile of 90-inch pipeline, hydrology studies and the design of a 2,500 CFS flood control channel to protect the reservoir.

- Senior Engineer for an alignment study of a 39-mile Lake Nacimiento Pipeline. The pipeline ranged from 24-42 inches in diameter and was pre-designed for the purpose of delivering water from Lake Nacimiento, California to the cities of San Miguel, Paso Robles, Templeton, Atascadero, Santa Margarita, San Luis Obispo and the surrounding areas. The alignment traversed many challenging areas, including narrow, winding streets, difficult terrain and environmentally sensitive areas.

- Senior Engineer for the 2020 water system master plan for the City of Indio, California. This project required extensive field and office data collection in order to run a computer network model of the existing pipeline system and projected improvements for the estimated 2020 population, including the addition of pumps, pressure zones and storage reservoirs.

J. T. Stanton, B.S., P.E.

Associate Project Engineer

Education

California Polytechnic University, Pomona, B.S. Civil Engineering

Registrations

Registered Civil Engineer California No. C-70944

Experience

8 Years

Mr. Stanton has designed and managed many types of Civil Engineering projects and has an extensive background in surveying. He has been responsible for studies, designs and management of public and private projects throughout Southern California.

In addition, he has worked extensively with Riverside County Waste Management providing engineering and field surveying services for the construction, expansion and maintenance of landfill sites all over Riverside County. Selected project experience includes:

- Design engineer for 2 ½ miles of 14" D.I.P. and 12" P.V.C. water main extension for Apple Valley Ranchos Water Company in the Town of Apple Valley. Project was part of the development of the Apple Valley Plaza. The construction of the water main allowed for expansion of the water service boundary.

- Design engineer for approximately 800' of concrete trapezoidal storm channel, including spillway with baffle walls in the City of Victorville. The construction of the channel allowed for development of the property and provides a possible future connection point for proposed Cal Trans improvements.

- Design engineer on hydrology study and design of debris basins for approximately 3 sq. miles of drainage area, related to the development of a residential subdivision in the county of Los Angels.

- Design engineer for 1 ½ miles of sewer main extension alone Bear Valley Road, in the Town of Apple Valley, including a sewer lift station. Project was part of the development of the Apple Valley Plaza. The construction of these facilities allowed for expansion of the sewer service area.

- Design engineer for the construction of a daycare facility and the expansion of an existing Senior Center, in the City of Riverside. Project was part of the Riverside Park Department redevelopment of the Bordwell Park site.

- Design engineer for the expansion of an existing Community Center, in the City of Riverside. Project was part of the Riverside Park Department redevelopment of the Bryant Park site.

- Design engineer for the development of a 22 parcel industrial complex in the City of Desert Hot Springs. Project included onsite water, sewer, street and grading improvements.

Michael J. Bonadiman

Director of Surveys

Education

Mount San Jacinto College, San Jacinto, CA
2007

Certifications

Certified Survey Technician

Affiliations

Member, National Notary Association (NNA)

Experience

10 Years

Mr. Bonadiman has over ten years of experience in Land Surveying, Photogrammetry, and Global Positioning System (GPS) experience. As Director of Surveys for Joseph Bonadiman & Associates, Inc., he possesses a high level of Project Management expertise with extensive technical knowledge of Field Surveying (including boundary and topographic), Mapping, and staking calculations for commercial, residential, and municipal projects.

In addition, he has technical knowledge of grading plans, plan and profile, traffic control plans, topographic plans, right-of-way maps, traverse closures, parcel and tract maps, Records of Survey, legal descriptions, and plats.

Mr. Bonadiman is proficient in the use of AutoDesk Land Development Desktop (all versions), Autodesk Civil 3D (all versions), CIVILCADD® and all industry-standard equipment, including TGO (Trimble Geomatic Office), Trimble S6 Robotic Total Station, R8 GPS Stations, and handheld data collectors.

Mr. Bonadiman's project experience includes the following:

- Survey Director for all on-site and off-site improvements for a 400-lot residential subdivision in Desert Hot Springs, CA. Client was Century Vintage Homes.

- Survey Director for GPS survey of United States Marine Corps base in 29 Palms, CA for Sensis Corporation

- Survey Director for GPS survey of United States Air Force Proving Grounds in Yuma, AZ for Sensis Corporation.

- Survey Director for GPS survey of airport in Fort Saint John, Canada, for Sensis Corporation.

- Survey Director for GPS survey of airport in Vancouver, Canada, for Sensis Corporation.

- Survey Director for base topographic survey and photogrammetry of various street improvements in the Los Serranos area of Chino Hills, CA.

- Survey Director for construction staking of on-site and off-site water systems improvements, including water transmission main lines, pump stations, a supply well, and reservoir, for the Tremont Ranch residential development in the County of Riverside. The off-site improvements spanned across the San Bernardino/Riverside County Line.

- Survey Director for on-call survey services provided to the City of San Bernardino, including topographic surveys for various street improvement projects, storm drain improvement projects, and rehabilitation projects.

- Survey Director for on-call survey services provided to the City of Loma Linda, including topographic surveys for various street improvement projects, storm drain improvement projects, and rehabilitation projects.

- Survey Director for on-call survey services provided to the San Bernardino Unified School District (SBUSD), including surveys for over 15 (to date) schools throughout the District.