

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

Senior Water Resources Engineer

Education

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

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.

District, County of Los Angeles, Department of Public Works as follows:

Registrations

Registered Civil Engineer California No. C-47434

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.

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.

Affiliations

*American Society of Engineers
Floodplain Management Association
Chi Epsilon*

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:

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.

Experience

24 Years

- 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 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.

- Project Engineer for the development of software programs with the Los Angeles County Flood Control

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 breached in Mexico. The investigation and study that ensued indicated the firm's in-depth knowledge and management of large drainage systems.

