

UNEXPIRED TERM:

John Karlsruher, P.E., CFM, CNU-A

Principal

Position: Principal-In-Charge

Education: B.S., Civil Engineering, University of Texas at El Paso - 1977

Professional Registration: Texas #53878 / New Mexico #13819 / Arizona #33364

Construction Licenses: New Mexico Contractors License #361618 for GA98, GF04 and GF09

Professional Background:

Mr. Karlsruher has 39 years of experience in the field of civil engineering. His experience includes studies, design, construction and project management of both civil engineering and multi-discipline projects. The range of his professional assignments includes everything from site design for industrial parks to planning, design and project management of large public works projects. As demonstrated by his successful project history, Mr. Karlsruher excels at management of complex, multi-discipline projects requiring effective interaction with owners and agencies with approval authority over the projects.

Since Mr. Karlsruher's arrival at CSA in 1991, he has directed and participated in the design of all types of civil engineering projects. In the public sector, he has served as Principal-in-Charge for sixteen (16) City of El Paso Street and Drainage Improvement projects; worked on eleven TxDOT highway related projects; six major transportation studies; and five (5) border crossing projects. Listed below is a sample of the projects Mr. Karlsruher has served on:

Resler Drive Extension

This project consisted of a \$10.5 million, 2-mile extension of 6-lane major roadway. CSA was responsible for all aspects of the work, including studies and projections of traffic volumes, calculations of intersection levels of service, traffic signal warrant studies, design of intersections and horizontal and vertical alignments, sight distance calculations, traffic control plans for construction and permanent traffic signage and striping plans. The entire design was approved by both the City of El Paso and the Texas Department of Transportation.

Alameda Avenue Feasibility Study & Preliminary Engineering

CSA first assisted TxDOT with a comprehensive feasibility study of street, traffic and drainage improvements along this 12-mile corridor from Piedras Street to Loop 375 (Avenue of the Americas). Traffic volumes were studied and projected, pedestrian and vehicular crashes were analyzed and school zones were examined. The information was used to prepare a user cost-benefit analysis and report containing recommendations and cost estimates. As a long-term plan to handle the storm water runoff, CSA identified eleven potential basin locations,



Principal

mapped existing storm sewer systems, determined watershed boundaries, completed layouts of proposed storm sewer and tabulated cost estimates. Then in a later phase, CSA became part of a consulting team that is preparing schematic design and engineering reports for 10-miles of the original project. This requires further consideration of storm water discharge options and recommendations of retention pond sites in the densely developed Lower Valley.

Loop 375 Cesar Chavez Highway IH-10/Schuster Ave. Intersection Improvements Feasibility Study – Traffic Study

CSA performed 72-hour traffic counts at eight intersections feeding or fed by IH-10 and Schuster Avenue at the UTEP campus. CSA furnished the automated counters and analysis software along with a report of our findings. CSA also performed existing conditions reconnaissance and preliminary design of proposed infrastructure modifications.

FM1281 (Horizon Boulevard), El Paso, Texas

CSA assisted the prime engineering firm with the “fast track” design for the widening of 1.5 miles of farm to market highway (FM 1281). CSA’s services included drainage analyses, culvert design, storm sewer design and coordination with area utility companies.

Texas Low Level Radioactive Waste Disposal Authority – IH-10 Diamond Interchange near Sierra Blanca, Texas.

CSA designed a diamond Interchange to serve as the entrance to the proposed low-level radioactive waste disposal project. The project was completed through complete PS and E and placed on the highway letting schedule prior to the cancellation of the low-level radioactive waste disposal project at the Sierra Blanca location.

Stanton Street International Bridge Dedicated Commuter Lane

CSA served as prime consultant for design and construction administration for this electronically automated international port of entry. In addition to its overall design management function, CSA served as civil and traffic engineering consultant for design of this facility. The facility is designed to accommodate 6,000 daily commuters between Juarez, Chihuahua, Mexico and El Paso, Texas. Specific design elements were conversion of one traffic lane to northbound on a previously southbound four-lane bridge; a 180 degree descending ramp into the inspection facility comprised of three primary inspection booths, six secondary inspection booths and a 4,000 square foot administration building. CSA Also coordinated installation of the Automatic Vehicle Inspection System of the ITS equipment.

Feasibility Study for Guadalupe-Tornillo (Fabens) Bridge

Aside from the services CSA provided to the City of El Paso for the Fabens international bridge in 1996, we later prepared a feasibility study for the State of



Principal

Chihuahua's public works department. The study examined bridge crossing volumes, an analysis of wait times and travel times, and projections of expected commercial and passenger vehicle traffic and tolls. The study formed the basis for the state's decision to allocate funding and proceed with the project.

Fabens International Commercial Vehicle Crossing, Fabens, Texas
CSA performed a three part preliminary feasibility study to determine the potential of building a new international vehicle crossing near Fabens, Texas. Services included preliminary environmental studies; traffic studies and toll feasibility analysis; planning of highway access, coordination in both the United States and Mexico. CSA provided services from June 1996 until December, 1996 for the initial study for the Metropolitan Planning Organization. From May 1997 through May 2001 CSA served as a consultant to the County of El Paso on this project providing consulting services for the Presidential Permit process.

The Laredo/Colombia Border Station, GSA Project No. ITX89926 included design of Phases I and II of the new border station on an 84-Acre site. The project was completed in August of 1993 at an estimated total cost of \$14,000,000.

The Bridge of the Americas project, GSA Project No. ITX89902, included the design of a major expansion to the Port of Entry, which was completed in August of 1992. The construction cost was approximately \$9,000,000.

Truck Route Study (El Paso County), El Paso, Texas
CSA Consulting Engineers was retained to perform a comprehensive truck route study for the County of El Paso and affected areas of New Mexico. CSA served as prime consultant and coordinated activities with two other subconsultants. Extensive research was conducted for the project including reviews of truck dimensions and weights; municipal ordinances and maps; pavement design procedures and transportation improvement programs. A public and private task force of 60 members was assembled for continuous input during the study. Four public meetings were held to obtain additional input from the community. CSA assembled information from research and public involvement to produce recommendations for roadway improvements, ordinance modifications, signing and enforcement programs, weigh stations, intelligent transportation system recommendations and funding strategies.

Traffic Impact Study for Proposed Arena

CSA assessed the impacts of a new 6000-seat sports arena so team owners and property owners could evaluate the construction of the new facility. The study area included arterials, local streets and two freeway interchanges. Existing traffic volumes, trip generation, travel distribution, levels of service and



Principal

driveway volumes were studied. Both pre-event and post-event traffic control concepts were developed in the study.

On-System Bridge Inspections (1993 and in 1994 with LAN)
I-10 Diamond Interchange in Sierra Blanca (TxLLRWDA with LAN)
Alameda Feasibility Study – Phases I and II (1995-1998)
Street Light Project (with LAN 1998)
1997 BRINSAP System Inspections (assisted Pickett Kelm)
FM 1281 (1997 with LAN)
Alameda Avenue Schematic Design (2000 with LAN)
Border Highway West (2002 with URS)

Street & Drainage Improvement Projects:

Roadway Impact Fees Study
Emerson Street & Heid Avenue Street and Drainage Improvements
San Jose Road Street and Drainage Improvements
Cates Addition Street and Drainage Improvements
Duran/Red Bud/Alexander Street and Drainage Improvements
Wooldridge Street and Drainage Improvements
San Antonio Street and Drainage Improvements
Ladrillo Street and Drainage Improvements
Storm 2006: Thornton Street & Drainage Improvements
Pellicano/Lomaland and McCombs/Rushing Concrete Intersection Improvements
Pasodale Subdivision Phase IV Street Improvements
Myrtle Streetscape Design

Prior to returning to El Paso in 1991, Mr. Karlsruher's past experience has included the following projects:

Big Brown Steam Electric Station - a 1150 MW Lignite Plant. Mr. Karlsruher assisted in operations during a 1977 strike. At a later date he modified a gas metering station.

Martin Lake Steam Electric Station - 3000 MW Lignite Plant. Mr. Karlsruher was responsible for construction contracts for Units 3 and 4 and ash disposal areas; mining support facilities; railroad and highway extensions.

Monticello Steam Electric Station - 1900 MW Lignite Plant. Mr. Karlsruher was responsible for the construction contracting for a Flue Gas Desulphurization System; NPDES compliance and circulating water canal modifications.

Twin Oak Steam Electric Station located near Franklin, Texas - This project consisted of plant site rough grading; boiler foundations; 10 miles of freight railroad; county road relocations and bridge structures; 8,500 foot long earthen dam and 2,300 surface acre reservoir; and 14 miles of 42" diameter



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Principal

raw water pipeline. Mr. Karlsruher's responsibilities included preparation of construction cost estimates, budgets, schedules and bid documents; receiving and evaluating bids; award of contracts; administration of contracts; and directing the activities of and providing support for field personnel. The construction cost was \$44 million.

Stoneridge Business Park - Project management and design of this 275 acre industrial subdivision was performed by Mr. Karlsruher while he was employed by Graham & Associates, Inc. This project involved design of prominent thoroughfares, storm drainage facilities, water and sewer facilities, both on and offsite. Coordination with City and State officials was required for the successful completion of this project due to existing and proposed infrastructure in a relatively undeveloped part of the City of Dallas.

Raw Water Transmission Facilities from Lake Fork to Lake Tawakoni - Mr. Karlsruher assisted in preparation of a design report and recommendation for this \$49 million project for Dallas Water Utilities. The project consisted of 22 miles of 84" diameter pipeline, pump station and outlet works. Responsibilities included preparation of preliminary plans for the pump station and equipment and piping layout; pump station site; access road; outlet structure; pipeline plan and profiles; preparation of preliminary construction estimate; and aiding in development of the narrative for the design report.

Professional Affiliations:

American Water Works Association
National Society of Profession Engineers (and TX Chapter)
American Society of Civil Engineers (and TX Chapter)
Southwest Specialty Contractors Association – El Paso Chapter
American Public Works Association
Texas Public Works Association
Congress of New Urbanism
Texas Floodplain Managers Association

Previous Employment:

United States Army	1/71 to 5/74
Texas Utilities Services, Inc.	6/77 to 7/78 and 3/79 to 10/83
El Paso Natural Gas Company	7/78 to 10/78
Robert E. McKee, Inc.	10/78 to 3/79
Jones & Boyd, Inc.	10/83 to 7/84
Graham Associates, Inc.	7/84 to 9/85
Ginn, Inc.	9/85 to 1/91
Cardenas-Salcedo & Associates	2/91 to 4/96
CSA Design Group, Inc.	4/96 to Present
CSA Constructors	4/02 to Present



csa design group, inc.