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STATEMENT OF QUALIFICATIONS

EDUCATION

- MBA** **CRAIG SCHOOL OF BUSINESS – FRESNO STATE (Summer, 2001)**
Masters of Business Administration (With Distinction)
Award: Craig School of Business - MBA Scholar in MIS
- BS** **CALIFORNIA STATE UNIVERSITY – FRESNO (Fall, 1992)**
Civil Engineering (Magna Cum Laude)
Award: The Dean's Medalist (School of Engineering)
- Education Certificate** **STATE BOARD OF REGISTRATION, CALIFORNIA (Summer, 1996)**
Registered Engineer (Lic. No. 055519)
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Professional Experience

ENNIS CONSULTING, Owner/Sole Proprietor – Fresno, CA Nov. 2003 - Present
Sole Proprietor of engineering consulting business. Project history includes:

- 2,200-Acre Master Planned Community – Rio Mesa (County of Madera)
 - Developed infrastructure master plan, engineered 750 lot tentative tract map, authored Specific Plan, client project manager to all EIR studies, review and response to comments of EIR for the North Shore at Millerton Lake project in southern Madera County. Client representative to all County of Madera, State and Federal project entitlements.
 - Created rough grading plan for over 30 roadway segments and over 450 housing and super-pads for project development.
- 1,500-Acre Master Planned Community – Rio Mesa (County of Madera)
 - Engineering and political consultant
- Madera County Infrastructure Master Plan – Rio Mesa (County of Madera)
- Madera County Service Area 22 – Restoration of Latent Powers
- City of Kingsburg - Water Master Plan Update
 - Digitized and modeled the water distribution system and authored master plan update report. Continuing consultant to the City of Kingsburg on all water distribution system issues.
- City of Brentwood – Corporation Yard Master Plan
 - Created new master plan for the City's corporation yard to include a new solid waste recycling facility. Created new master grading plan and provided facilities management space capacity analysis for projected city population increase to over 100,000 citizens.
- Tract 5335 – City of Clovis
- Tract 5356 – City of Fresno
- Tract 5345 – County of Fresno
- 12-Acre Commercial Park – Kettlemen City, CA.

CITY OF FRESNO, Project Manager – Fresno, CA Aug. 2002 – Oct. 2003

Project manager for the \$15 million city-wide fiber optic telecommunications project. Responsible for the management and master planning of network infrastructure for the synchronization of traffic signals throughout the City of Fresno. Manager of the City's Traffic Operation Center, responsible for signal timing and coordination. Author of feasibility report exploring revenue generation opportunities in leasing fiber optic bandwidth to outside public and private entities. In addition to these responsibilities:

- City of Fresno Cable Franchise Negotiation Team – Technical Oversight
The City of Fresno is conducting its first ever negotiation with the local cable provider. The technological oversight representative ensures that issues relating to I-Net and other proposed technological improvements are in the best interests of the City of Fresno.
- Collaborative Regional Initiative (CRI) Technology Task Force
CRI's take a "stewardship" responsibility for the economic, environmental, and social equity future of their regions and their communities. With a new, entrepreneurial leadership style, the CRI's determine the most important challenges facing their communities; develop practical, effective strategies to address those challenges; and mobilize the leadership and other resources necessary to carry out those strategies.
- Regional Jobs Initiative (RJI) Technology Task Force
The regional jobs initiative is tasked with creating 30,000 net new jobs in the greater Fresno metropolitan area over the next 5 years. One aspect of job creation is ensuring that a technological infrastructure exists to promote growth, curb unemployment and attract businesses to relocate to the Fresno area. Using the City's high speed fiber optic backbone network will further facilitate job creation.

MWH SOFT INC., Director of Engineering – Pasadena, CA Oct. 2000 – Aug. 2002

Responsible for timely development and deployment of hydraulic modeling software for the open market. Charged with oversight of a new sewer modeling application while ensuring engineering 'ease-of-use' from product programming by technical staff. Conducted all technical writing of on-line help file system for multiple software programs, user interface design, and ensuring quality control and quality assurance of final software products. Other responsibilities include the identification, marketing and execution of specialized consulting engineering services for a multitude of customers as well as product sales and support of the company's engineering suite of software. In addition, authored and conducted a training course in advanced water master planning as well as and conducting numerous training seminars on the use and application of company software.

While at MWH Soft, sales increased 67% while 5 new software applications were launched. Profit margins jumped to 37% while the company continuously delivered high quality products with continued excellence in customer service.

About: MWH Soft is a civil engineering software company that specializes in water distribution and sewer collection analysis applications for the open market. It's core product, H₂ONET, is used by hundreds of utilities across the United States. The company is a wholly-owned subsidiary of MWH, a 6000 person environment and construction management firm with annual revenues in excess of \$800 million.

Public Works Experience

- **Intelligent Transportation System Implementation Project - Fresno, CA.**
Project manager and technical leader responsible for the preparation of plans, specifications, and estimate for 14 miles of Gigabit Ethernet fiber optic backbone, 23 CCTV's, 11 radar detection stations and a traffic operations center. Project scope included interconnecting 40 traffic signal controllers and coordinating signal timing through CCTV and radar detection observation from the traffic operations center for improved traffic flow and reduced traffic congestion across the City of Fresno, particularly the State Route 41 freeway corridor.
- **Gunner Ranch Master Plan Development - Madera, CA.**
Project engineer for Gunner Ranch development in southern Madera County. Design work involved the master planning of all related infrastructure for the 1000 acre site which included storm drain retention basin design, hydraulic and hydrologic calculations for storm drain transmission system, calculation of sewage inflows and sizing of sewer collection system, analysis of water usage and fire flows for sizing of water mains, storage facilities, and wells, geometric layout of infrastructure and the generation of cost estimates for multiple design alternatives.
- **California Air National Guard – Fresno, CA.**
Project engineer for design of site restoration at California Air National Guard Base–Fresno, California. Design work included analysis of existing and future sewer collection systems, pipe sizing, horizontal and vertical alignments, and generating preliminary sanitary sewer and storm drain plan and profile sheets in AutoCAD. Design work also included horizontal and vertical layout of all new roads, curb and gutters, parking lots, as well as locating and sizing through analysis new water mains and gas lines.
- **Landfill Closure – Eastern Fresno County, CA.**
Project manager for the Central Valley Hide Company saltwater facility closure plan. Work entailed surveying the project site, creating an existing site plan, post closure grading plan, and cross sections for the closure of the pond. Design was completed in conformance with a Title 23, Class II landfill as required by the California Water Quality Control Board. Responsible for construction specifications, selection of geomembrane liner, and was principal author of post-closure report.

Roadway Design Experience

- **Claribel Road Intersection Improvements - Stanislaus County, CA.**
Project manager responsible for the geometric redesign and signalization of two separate intersections in eastern Stanislaus County. Project entailed widening and improving two rural intersections to ultimate configuration to allow greater traffic volume. Responsible for roadway geometrics, cross-sections, striping and vertical alignments as well as realigning drainage ditches and designing 3 separate drainage structures for future development. Increased traffic volumes at two key intersections on Claribel Road (Claus Road and Oakdale Road) necessitate road approach widening and signalization. Work includes preparation of construction documents, legal descriptions, and traffic analysis.

- **Friant Road Widening – Friant, CA.**
 Project manager responsible for the geometric redesign of 1 mile of rural arterial through the town of Friant, CA. Responsible for new roadway horizontal and vertical geometrics, landscaped median, typical cross sections, striping, plan and profile sheets as well as the design of a small storm water detention basin. The widening of Friant Road was critical in ensuring that motorists have adequate sight distance through the town of Friant as it is the primary corridor between north Fresno and the Table Mountain Rancheria and the Sierra Nevada Foothills.
- **Clovis Avenue Widening - Fresno, CA.**
 Project manager responsible for the widening of 2 miles of urban expressway (Kings Canyon Blvd. to Belmont Avenue) from 4-lanes to 6-lane divided roadway. Project included landscaped medians, 5 traffic signal modifications, street lighting and coordinating with Caltrans, the geometrics for Clovis Avenue at the future SR-180 interchange. Responsible for horizontal and vertical geometrics, typical cross-sections, striping, roadway drainage design and plan and profile sheets.
- **Scripps Poway Parkway - Poway, CA.**
 Project engineer for the 3.5-mile extension of Scripps Poway Parkway (SPP) and geometric redesign of State Route 67 (SR-67) for the city of Poway. Design work included through the use of earthwork modeling software, the balancing of over 3 million yards of cut and fill while taking into account shrinkage and soil swell, surveying errors in rough terrain, and varying soil characteristics. Responsible for the horizontal and vertical redesign of SR-67, Ria Maria and SPP intersection to Caltrans and county standards.
- **Elk Grove - Florin Road, Sacramento, CA.**
 Project engineer responsible for the design of 2 miles of rural and city road at Elk Grove - Florin Road in south Sacramento. Project entailed the expansion of existing 2 lane rural road to 4-lane rural and six-lane city street. Responsible for horizontal and vertical geometrics, typical cross-sections, striping, roadway drainage design and plan and profile sheets.
- **State Route 43/State Route 99 Interchange - Selma, CA.**
 Project engineer responsible for design of off-ramp at SR-43 and Highway 99 and nearby intersection at Stillman Street. Responsible for horizontal and vertical geometrics of the new off-ramp and intersection as well as the layout and design of storm drainage system including hydrologic and hydraulic calculations, pipe sizing, and creating preliminary construction plans in AutoCAD.
- **Manning Avenue Widening - Fresno, CA.**
 Project engineer responsible for design of 13-miles of county road at Manning Avenue in central Fresno County between I-5 and Highway 99. Designed two new intersections to Caltrans standards at SR-43 and Calaveras Avenue and reconfigured a third at Contra Costa Avenue. Structural design of storm drain and irrigation crossings. Design also included identification of new right-of-way to be acquired and preparation of legal descriptions.

Construction Management Experience

- **Storm Damage Bridge Repair – Coalinga, CA.**
 Resident engineer for the reconstruction of Warthan Creek bridge in western Fresno County. Work included oversight of bridge falsework construction, rebar placement, and deck pour of 150 foot span bridge.

- **Simpson Street Reconstruction – Kingsburg, CA.**
Resident engineer for the reconstruction and widening of over 1 mile of urban collector. Work included contract administration, mobilization, demolition, compaction, form construction, concrete driveway, curb and gutter, and median, aggregate base and asphalt placement. Work also included street lighting, traffic signal modification, and landscaping of trees and shrubs as well as final signing and striping.

Water/Wasterwater Experience

- **Reclaimed Water System Master Plan - City of San Diego, CA.**
Project manager responsible for creating hydraulic model of the City's reclaimed water system to determine chlorine decay and system performance at different stages of system integration. The overall system covered over 20 miles of pipeline that serve the world renowned Torrey Pines Golf Course to the west, all the way to the City of Poway to the east. Performed extended period system simulations at 20 days and developed system graphs illustrating chlorine residuals within the system. Managed client relations, authored analysis report and presented the results to city staff and members of city government.
- **Water System Master Plan – City of Escondido, CA.**
Project manager responsible for model creation and integration of GIS data for use in H2ONET hydraulic computer model. Integrated and modeled over 40 pressure reducing stations, 3 pump stations and 7 reservoirs. Developed database program to automate data creation from intersected GIS coverages for use in model analysis. Established water demand coefficients for use in system analysis and created demand and pressure zone polygons for use in analysis as well as creating wall maps through the use of ArcView for City staff.
- **Water System Master Plan – City of South Lake Tahoe, CA.**
Project manager responsible for modeling and calibrating complex hydraulic network consisting of over 20 wells and 15 pressure reducing stations using Cybernet water modeling software. Responsible for quality control of the hydraulic model and coordinating with staff the necessary changes required for model calibration.
- **Water System Master Plan - Otay Water District (San Diego), CA.**
Project engineer for the Otay Water District 850 Regulatory and 850 La Presa hydraulic water model conversion. Responsible for creating GIS base map, polygon tributary areas, and pipe topology for over 1000 pipes and nodes. Modeled over a dozen scenario simulations for pressure zone build-out and authored draft and final analysis report for District staff.
- **Water System Master Plan – City of Hanford, CA.**
Project work included creating a GIS and modeling of existing and future master plan alternatives. Managed model creation and, through the use of EPANET, calibrated Hazen-Williams coefficients to correlate with existing steady-state conditions. Used dBase programming to facilitate the creation of EPANET input files from existing pipes, nodes, tanks, and wells databases.
- **Water System Hydraulic Computer Model Conversion - Poway, CA.**
Project manager responsible for converting and successfully integrating 16 separate water models to an 1800 pipe and node H2ONET computer model for the purpose of performing a water master plan.

Created and intersected pressure zone boundaries, demand areas, and land use coverages for the creation of water demands to be used in the analysis.

- **Water System Hydraulic Computer Model Conversion - Ontario, CA.**
Project manager responsible for converting the city's existing water system GIS to a 2000 pipe and node H2ONET computer model for the purpose of performing a water master plan. Created and intersected pressure zone boundaries, demand areas, and land use coverages for the creation of water demands to be used in the analysis as well as insured quality control in original GIS database obtained from city staff.
- **Water System Hydraulic Computer Model Conversion – Corona, CA.**
Project manager responsible for converting the city's existing water system GIS to a 6500 pipe and node H2ONET computer model for the purpose of performing a water master plan. Created and intersected pressure zone boundaries, demand areas polygons, and converted land use coverages for the creation of water demands to be used in the analysis. Conduct thorough quality control analysis to ensure model accuracy.
- **Sanitary Sewer Master Plan – Coalinga, CA.**
Project engineer for sanitary sewer master plan and facilities management system for the city of Coalinga. Responsible for the accumulation of all rim and invert elevations through survey and the compilation of graphic and non-graphic data into AutoCAD/GIS format. Work included the generation of all AutoCAD drawings and dBase files, determining sewer tributary areas, calibrating landuse coefficients with treatment plant inflows, digitizing and polygon processing general plan landuse, service areas, and tributary areas with ArcCAD . Computer modeled five separate growth stages and was principle author of draft and final reports.
- **Storm Drainage Master Plan – City of Redondo Beach, CA.**
Project engineer for the City of Redondo Beach, CA Storm Drain Master Plan. Project included master planning of the city's storm drain system as well as the nearby Herondo storm drainage outfall. Responsible for creating GIS data links to external databases to reflect modeling scenarios. Polygon processed and intersected through the use of ArcCAD all landuse, tributary areas, soils, and rainfall data. Extrapolated necessary modeling data through the use of dBase programming.
- **Storm Drainage Master Plan – City of Malibu, CA.**
Project engineer for the City of Malibu, CA Storm Drainage Master Plan and GIS Data Creation. Project included inspecting and identifying all storm drainage facilities inside the city of Malibu and documenting the location of such facilities on hard copy maps. Responsible for contracting with the County of Los Angeles in acquiring digital basemap data for the city and scrubbing data for the preparation of hard copy basemaps. Project work also included digitizing city facilities and tagging such facilities with the necessary GIS data to link to external databases for delivery to the city.
- **Water System Master Plan – City of Atwater, CA.**
Project engineer for the City of Atwater water distribution analysis. Responsible for acquiring GIS coverages of general plan landuse, creating vacant landuse coverage, creating water distribution model in AutoCAD, and design digitizing demand areas "on the fly". Intersected all relevant data, created EPANET input file and determined demands from Excel lookup tables for placement into EPANET input file. Created network file with lisp programming and modeled system.

- **Storm Drainage Master Plan – Porterville, CA.**
Project engineer for the Downtown Redevelopment Storm Drainage Study for the City of Porterville. Responsible for modeling the city’s storm drain system through the use of AutoCAD drawings and Excel spreadsheets, developing runoff coefficients for various landuses, determining paths of flow and analyzing Q’s to determine problem areas within the city. Responsible for the development of storm drain plats for the downtown area and recommending to the city replacement pipes and sizes.
- **Storm Drainage Master Plan - County of San Joaquin, CA.**
Project engineer for the storm drain master plan for the County of San Joaquin. Work included the creation of all modeling coverages (Landuse, Soil, Isohydes, and Tributary Areas) for use in the hydrologic model of the county.
- **Sanitary Sewer Master Plan – City of Visalia, CA.**
Project engineer for sanitary sewer master plan and facilities management system for the city of Visalia. Responsible for the accumulation of flow meter data, installation of meters, downloading of meter data to computer database, entry of non-graphic existing sewer data, and assigning verification of data for quality assurance.
- **Sanitary Sewer Master Plan – City of Tulare, CA.**
Project engineer for the Sanitary Sewer Master Plan for the City of Tulare, CA. Responsible for verification of identified future sewer slopes, depths, and alignment for feasibility of tie-ins to existing sewer system.

Geographic Information Systems Experience

- **Olivenhain MWD Water Storage Project Assessment District - Rancho Santa Fe, CA.**
Project engineer responsible for the creation of GIS system for use in calculating assessment fees for water users. Responsible for coordinating and accumulating data from county agencies and intersecting 8 separate coverages for assessment creation. Managed verification of 16,000 parcel database with 420 county assessor maps, created slope overlay coverage for use in project evaluation and through the use of AutoCAD and dBase programming, created over 100 assessment diagrams for use in the assessment report. Managed GIS efforts in creating assessment parcel database.
- **Storm Drain Master Plan, Facilities Management and GIS - Torrance, CA.**
Project engineer responsible for converting, rubber-sheeting and creating graphical links for over 240 city sewer and storm drain plats as well as tying in the City’s Pavement Management System with GIS. Developed database programs to extract ASCII data from hundreds of text files for insertion into a common database table and managed modeling and GIS coverages through the use of ArcCAD and ArcView. Work also included through the use of dBase programs, extracting existing sewer facility data from multiple ASCII text files to database tables for linkage to drawing files, and creating a city-wide topological map from sewer rim elevations through the use of CAD software.
- **State of Idaho - Nez Perce Indian Water Rights Study**
Work included the creation of pumping distance vs. height of lift cost curves with capital cost data provided by the U.S. Bureau of Reclamation. Extensive use of Microsoft Excel to simplify results from over 30 analysis spreadsheets. Project included heavy use of ArcCAD and ArcView to develop maps covering the 40 quadmap study area and developed mock delivery system to over 8000 acres of

potentially irrigable land. Determined through the use of cost curves and maps if lands qualified for irrigation water rights.

- **Wellhead Protection Study – County of Merced, CA.**

Project engineer for the Wellhead Protection Study for the County of Merced Department of Health Service. Responsible for advising DHS staff on all GIS related issues, including the demonstration of ADE, ArcCAD and ArcView for the creation of a county-wide environmental GIS assessment. Responsible for converting state well files to NAD-83 Zone 3 California State Plan Coordinates and establishing overlay plots for USGS 7.5' Quadrangle sheets to determine protective capture zones for all county well sites..

Special Qualifications

Computer skills: MS Project, SQL, MS Access, RoboHelp, ESRI (ArcView, ArcCAD), Autodesk (AutoCAD, Map, LDD, MapGuide), Eagle Point, TerraModel, MS Office, Borland dBase, et.al.