ERIC E. WARREN, P.E.

VICE PRESIDENT

KEY QUALIFICATIONS

Eric Warren joined MSCW in 1990 following three years of employment with a private consulting firm. His professional record includes over 21 years of consulting engineering experience with over 17 years in the Central Florida area. His area of expertise includes Project Management for land development projects including single and multi-family residential, office, retail and mixed use developments, as well as roadway, stormwater, utility design and permitting.

RELEVANT EXPERIENCE

Eric's experience in land development includes project management from concept to completion including due diligence assistance, entitlements, design and permitting of projects through local, state and federal agencies and construction administration services. His expertise includes design of stormwater management systems, roadways, water, sewer and reclaimed water systems and infrastructure to support projects ranging in size from small infill developments to large scale Developments of Regional Impact, Planned Developments and Community Development Districts.

His experience has also included significant analysis and design in the areas of hydrology and hydraulics. Eric has prepared drainage studies and design for governmental entities as well as private developers for watersheds varying in size from several acres to as large as 320 square miles. The scope of water resource projects he has provided project management and design for include development of regional master drainage plans for flood protection, design of open channel, closed conduit, online and offline detention facilities, retention facilities as well as pumping and levee systems. Eric has completed studies providing analysis, design and cost opinions for rectification of inadequate drainage facilities. He has also prepared hydrologic and hydraulic studies supporting Flood Insurance Rate Map amendments and revisions and completed their approval through FEMA.

EXEMPLARY PROJECTS

Randal Park, City of Orlando, FL

MSCW provided planning, civil engineering and environmental consulting services for the Randal Park P.D. located in the Southeast Sector of the City of Orlando, Florida. The 712 acre site consists of a mixed use development with three distinct residential neighborhoods, parklands and open space, and Town Center which includes multifamily residential, commercial and retail. Eric served as the project manager on this project for final engineering design and permitting for the Phase 1 Residential Development consisting of 716 single-family units and multi-family units.

Dowden Road, City of Orlando, FL

Dowden Road was designed, permitted and constructed as a City of Orlando roadway which will serve as a major collector road for the Southeast Sector connecting Narcoossee Road to a new interchange at S.R. 417. The project consisted of one mile of four lane (designed for future 6 lane) divided roadway and the extension of infrastructure utilities including 3,804 feet of 16-inch water main, 1959 feet of 16-inch reclaimed water main and 2,036 feet of 12-inch sanitary sewer force main. A portion of the stormwater management system included coordination of a joint use stormwater pond for the roadway. Eric served as team leader for this project.

Summerport (Village of Bridgewater SAP), Orange County, FL

Project Manager for this 1,100 acre project consisting of over 2,300 detached and attached homes, recreation and open space areas and a mixed use Village Center comprised of 330 multifamily units, 160,000 square feet of commercial retail and 70,000 square feet of Office.

County Road 535, Segment B, Orange County, FL

The C.R. 535 project consisted of the realignment and widening one mile of roadway from a two lane rural section to a four lane urban section that could be expanded to six lanes in the future. The existing conditions included a dangerous intersection with West Lake Butler Road and reverse ninety degree turns on C.R. 535. The realignment provided for geometry and turn lanes meeting current FDOT Greenbook standards. The West Lake Butler Road intersection was designed to accommodate mast arms and signalization in the future. In addition to the roadway and drainage improvements, the project included utilities improvements consisting of relocation of 1022 L.F. of 24" water main and the construction of 477 L.F. of 12" PVC water main and 1894 L.F. of 16" DIP, 196 L.F. of 12" DIP and 8" PVC reclaimed water mains. Eric served as Team Leader for this Project

Stillwater Crossing & Center Bridge P.D. Master Lift Station and Force Main, Orange County, FL

The project included preliminary engineering, final design and preparation of construction documents, permitting and construction administration for the construction of a 2,729 GPM triplex lift station, 10,900 L.F. of 16" wastewater force main, 223 L.F. of 15" and 8" gravity sewer and associated manholes, 1,365 L.F. of 24" reclaimed water main and 2,702 L.F. of 20" reclaimed water main. The lift station was constructed within a tract dedicated to Orange County. The force main and reclaimed water main were constructed within the public right-of-way of Ficquette-Hancock Road and Ficquette Road, Orange County, Florida. The project was constructed as part of a Developers Agreement to provide wastewater service for the Village of Bridgewater in Horizon West.

In addition to designing around the existing constraints within the right-of-way (power, gas, telephone and existing pavement), the design required the coordination to cross a critical fiber optic "Darkline". The design also included an 18 foot deep bore and jack

for a gravity line to serve future development coordinating the design and construction of a 250 KW generator and fuel tank. In addition to obtaining Orange County approvals, permitting services included obtaining the necessary FDEP Construction Permit and SFWMD Permit for incidental wetland impacts. Eric served as Team Leader for this project.

Avalon Park, Orange County, FL

Project Manager for the design, permitting and providing construction administration services for five of the 'Villages' and two mixed use buildings within this 1800 acre Traditional Neighborhood Design Planned Development including the 1,500-foot entrance road incorporating a bridge span over a tributary to the Econlockhatchee River. Other key elements of the project design included master stormwater and utility design, residential design utilizing a mix of unit product and rear (alley) access, floodplain management and environmental permitting coordination.

MSCW provided planning and Civil engineering services for this project from concept planning and site design to entitlements, construction plan preparation and approval and construction administration services.

Remington Community Development District, City of Kissimmee

Project Manager for this 734 acre development consisting of 911 single family units, 1502 multi-family units, 20,000 square feet of commercial and an 18 hole golf course. Responsible for project management, design and obtaining permit approvals from SFWMD, Osceola County, City of Kissimmee, FDEP, ACOE and FEMA. The project scope consisted of design and permitting for a conceptual stormwater, dredge and fill and subsequent construction permits through the SFWMD, design and permitting for master water, sewer and reuse systems through the City of Kissimmee, Obtaining FEMA Letter of Map Revisions, Construction plan preparation and Construction administration.

Daytona Beach/LPGA Golf and National Headquarters Project, Daytona Beach, Florida

Responsible for final design, construction plan preparation, water management district permitting and construction administration for the 18 hole championship golf course, 3 hole and driving range instruction academy, maintenance and cart storage facility, tournament house and two mile entrance boulevard.

Randall/Johnson Trust, Orange County, Florida

Project Engineer for permitting a Conceptual Surface Water Management Plan for this 1,500 acre property through the SFWMD and coordinating drainage issues with ongoing Eastern Beltway design within the property.

Inverness Forest Subdivision Flood Study, Harris County, Texas

Project Engineer responsible for data collection, technical analysis and documentation of this study investigating alternatives to rectify frequent flooding of 138 single family homes located in a Water Control and Improvement District. The study investigated alternatives including no-action, buy-out, channel improvements, retrofitting of individual structures, and construction of a levee and pumping station. Detailed cost estimates were prepared for each alternative and social and environmental issues were investigated. Upon determination of the recommended plan for providing flood protection (levee and pumping station), possible funding vehicles were investigated and financial impacts to the District were evaluated if the plan were to be implemented.

Cypress Creek Regional Detention Analysis, Harris County Flood Control District, Harris County, Texas

Project Engineer for this analysis that developed a phasing plan for implementing the Master Drainage plan for this 320 square mile watershed. The planning study and technical analysis included a series of on-line and off-line regional basins providing 55,000 acre-feet of storage for flood attenuation. Basin sites were coordinated with land owners, local developers, and local municipal planning department staffs in order to ensure a workable plan. Environmental concerns were given careful attention in the site selection process and several mitigative actions were proposed in order to maintain wetland and woodland habitats impacted by the drainage improvements. The technical analysis consisted of refining the master plan HEC-1 and HEC-2 computer models of the watershed to reflect the physical characteristics of the proposed detention and channel system and to compute phased and ultimate flood profiles.

Ditch 12 Watershed Analysis, Galveston County Drainage District No. 2, Galveston County, Texas

Project Engineer for this hydrologic and hydraulic analysis of the existing storm sewer, open channel and pumping system for this 1,150 acre watershed located within a hurricane protection levee. The study evaluated the drainage system for inadequate stormwater conveyance and prioritized the most cost effective retrofitting measures recommended to relieve flooding within developed areas.

OTHER PROJECTS

Horizons West Village F SAP and Town Center SAP; Summerlake, Falcon Pines Apartments; The Villages; Newbury Park; Sand Lake Cove; Oakmonte P.D.; The Arbors and the Hamptons and Oakmonte; Kensington; Crestview Condominiums; Golfridge Condominiums; Golfview apartments; Camargo Club Apartments; Maitland Club; Winder Oaks; Landsbrook Terrace; Cypress Reserve; Osprey Pointe; Highlands of Lake Mary; Huntington Pointe; Gatlin Gardens; Ashbury Park; Ashley Park; Bay Hill Villas; Ventura Cove; Ventura Reserve; Johns Lake Stormwater Management Master Plan; Lake Jessamine Water Quality Study; Randall/Johnson Trust Property

Memberships

American Society of Civil Engineers (1994 Co-Chairman, 1995 Chairman, 1996 Chairman, 1997 Treasurer- Water Resources Technical Group)

Registrations

Professional Engineer, State of Florida (PE0045423)

Education

Bachelor of Science in Civil Engineering from Texas A & M University (1987)