Korey Walker,
Professional Engineer/Principal

EDUCATION

B.S. Civil Engineering, Brigham Young University

REGISTRATION

P.E.: Utah No. 204425

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers (ASCE)
American Water Works Association (AWWA)
Utah Onsite Wastewater Association
American Council of Engineering Companies (ACEC)

EXPERIENCE

President: Epic Engineering, P.C. 1997- Present Manage all marketing, operation, and finance needs of a growing civil engineering company that presently consists of 75 employees.

City/District Engineer Eagle Mountain City – 1997 - 2004
Acted as City Engineering for one of the fastest and largest growing communities in Utah. The community provided all water, sewer, stormwater, power, gas and telephone utilities to its residents. I served as management and consultant for over $135 M worth of infrastructure bonded for and constructed. All development review for over 6500 lots, Capital Facility Planning, Construction Management, Annual Capital Facility Plan Update, Annual Impact Fee Analysis was handled under my direction and through out office. I served in this capacity until the City chose to hire and in-house engineer.

1999 – WASTEWATER FACILITY PLAN - Complete the collection system analysis, wastewater flow evaluation, treatment analysis and project the flows through a 20 year planning period. Identified collection system improvements, treatment alternatives, user rates, and impact fee structure.

2005 – WASTEWATER TREATMENT FEASIBILITY STUDY – Completed a detailed facility plan for the wastewater treatment facility evaluating various treatment options. The plan was submitted and accepted by the Division of Water Quality.

2005 – PONY EXPRESS WELL – Designed a deep well with a pump station that pumps water directly into the middle pressure zone. The well is located on a limestone anticline that provides high quality water in an area with limited water production and quality. The well produces over 1800 gpm and is equipped with a vertical turbine pump. The pump house is chlorinated with a tablet feed system and has telemetry that ties the system back into the City Wide telemetry system. Permitting and source protection plan were completed as part of the project.

2001 – EAGLE MOUNTAIN WELL NO. 2 DESIGN - Designed the first well in the area to produce over 700 gpm with a water quality that met the State minimum standards. The well produces over 1400 gpm and is pumped directly into the lower pressure zone and is equipped with a booster pump to deliver water to the middle pressure zone. The well is located in an anticline geological feature and provides water that from pre-1935 recharge area. The system includes a telemetry system that is connected to the systems Public Works Building and permitting and the source protection work were completed with the project.

2001 – EAGLE MOUNTAIN SADDLEROCK 2 MG TANK DESIGN – A 2 million gallon reservoir was constructed to blend into the hillside and comply with Homeland Security measures. The concrete reservoir was constructed with a access building reservoir that housed the piping and telemetry system. The site was designed to blend into the natural features of the along the wall of the ridgeline and was re-vegetated with native plants.

1999 – GROUNDWATER SOURCE ANALYSIS WATER RIGHT EVALUATION AND PROOFS – Completed an intensive groundwater analysis in which pilot holes were drilled throughout the area to identify potential water sources, water quality related issues, and to identify the recharge area of differing geological features within the community. This report served as the guidelines for four new wells and the consideration by the State Engineer to evaluate the recharge area of the north part of Town separately from the South part of Town which had limited their growth in the past.

Johnson Water Improvement District – 1998 – Present
Served as the District Engineer for a large rural water company serving over 1.5MGD per day. All planning, modeling, capital financing, utility line and infrastructure design is handled under my direction and through our organization.

2007 – SOUTH MYTON 3000 SOUTH WATER LINE LOOPING - Designed over 3 miles of 8 inch water line to connect to dead end pipes and installed a PRV to equalize system pressure. The permitting and approval was obtained under my direction.

2006 – MYTON BENCH WATER LINE REPLACEMENT – Designed over 4 miles of 8 inch pvc water line to replace old 4 inch water lines. ROW, service

connections, and fire flow service were included with the design. Managed the DWQ approval and obtained operation agreements from DWQ.

2005 – JOHNSON WATER POLE LINE ROAD WATER LINE – Designed and constructed over 25,000 linear feet of 10 and 21 inch pvc water line with fire hydrant and residential service connections. The design and construction included rock excavation, canal crossings, and high groundwater areas.

2003 – JOHNSON WATER PRV – Designed and installed a PRV to controlled pressures in middle pressure zone.

2002 – IOKA 750,000 GALLON CONCRETE RESERVOIR – Designed a new concrete reservoir with required telemetry and piping to connect, to a nearby well and distribution system. The reservoir was constructed on a sandstone site with a access road and parking area.

Assistant City Engineer: 1993 - 1997
Alpine City, Francis City, Heber City, and Kamas City - Served as Assistant City Engineer taking care of all day to day contact and needs of the community. Represented the City Engineer at all City and Public Meetings and coordinated all design and consulting tasks.

Assistant District Engineer: 1995 - 1997
Midway Sanitation District – Served as Assistant District Engineer is representing the District Engineer in all reviews, designing, development coordination, and utility reviews. This included the day to day communication with the client regarding projects and tasks.

Project Manager: 1994 - Present
2006 – DUCHESNE CITY CULINARY WATER SYSTEM UPGRADES – Designed 11,000 linear foot of culinary water line replacement. Existing cast iron and asbestos piping was replaced with new C909 PVC piping with a revised metering and flow control system that obtains water from CUWCD. The existing piping was located in alleyways with minimum access. The project included permitting through the DDW and UDOT. The project included the reconnection of 73 residential connections and 14 commercial users.
2004 - ALTAMONT CITY PRESSURE IRRIGATION SYSTEM – Designed a pressure irrigation system for Altamont City that utilized water shares delivered by flood irrigation to the community and delivered the water in a pressurized system through a piping system and open earthen reservoir. The project included finding funding, design, construction management, and start up of the system. Permitting was obtained through UDOT for crossings and the Division of Water Resources Dam Safety.
2004 – MYTON CITY SECONDARY WATER FEASIBILITY STUDY – Prepared a study to determine the feasibility of constructing a secondary water system for Myton City. The project was funded through CUWCD and the

DCWCD. The project performed a detailed water rights analysis for the water rights available to Myton City. Various sources of water were also evaluated including pumping from the Duchesne River, shallow ground water wells, and obtaining the water from various surface irrigation ditches in the area. Test pumping was performed to verify groundwater availability and water quality in addition to ROW evaluation for the delivery system. A detailed feasibility analysis was completed and determined the probable user rates, impact fees, and connection fees for the system.

2000 – MIDWAY CITY WATER LINE REPLACEMENT – Approximately 1100 linear feet of pipeline was replaced with pipe bursting on a street that had high groundwater and that was newly repaved. New residential connections were made to the line and two fire hydrants. The project was bid out with an alternative to trench the line and an alternative to utilize pipe bursting.

1997 – HEBER CITY SECONDARY IRRIGATION FEASIBILITY STUDY – A study was performed for the City that evaluated the ability of delivering water from nearby canals into the City Wide pressure irrigation system. The impacts of roadways and storm water systems were evaluated in addition to a detailed analysis of the impacts of the present culinary water rate with regard to the cost of providing pressurized secondary water.

1997 – DCUCWID WATER LINE IMPROVEMENTS – The design of 1.5 miles of 8 inch culinary water line was performed for the lower Sand Wash area. The system was modeled to determine line sizes and alignments and the line was designed to extend service to a recreational area near Big Sand Wash.

1997 – HEBER CITY MASTER PLAN AND IMPACT FEE UPDATES – Performed the evaluation and update of the City's existing culinary water, streets, stormwater, and park and recreational master plans and impact fees. The master plans included identifying the present service level of the infrastructure and then determining the system needs to meet the 20 year projected growth. A detailed capital expense analysis was performed to project the cost of the future improvements.

Project Engineer: 1992 - 2004

1997 – WASATCH COUNTY WATER EFFICIENCY PROJECT – Served as the project engineer responsible to size pipelines and pump stations for the delivery of water from the Wasatch and Timp canals to water users in the valley. I was responsible for meeting with irrigation systems and determining irrigation demands, flow rates, pipe alignments, and delivery points for users. These demands were coordinated with water rights, historical uses, and NRCS records to verify compatibility. Pipe types and connection types and details were determined using feasibility and life cycle cost analysis. I also worked directly with CUWCD "Value Engineering Team" to determine the most feasible design for the system and appurtenances.

1997 – DUCHESNE COUNTY SALINITY CONTROL APPLICATION AND STUDY – Created a funding application for multiple canals in Duchesne County to be considered for "Salinity Funding" administered through the Bureau of Reclamation. Met with irrigation companies and water users to determine acres

served by irrigation canals and the amount of water delivered. Field tests were also performed to verify the actual canal losses thus determining the salinity reduction if the distribution systems were piped and the applied through sprinkling systems. These applications were submitted to the Bureau for evaluation and rating.

1997 – SPANISH FORK CITY GROUNDWATER STUDY – A groundwater study was performed to determine the source of groundwater that was coming up in a residential area within the community and to evaluate alternatives this groundwater and discharging it. Electronic metering was used to determine location, depth and volumes. Methods of collecting collection were recommended to the City which was later installed by City personnel.

1996 – WALLSBURG WELL AND WELL HOUSE – A submersible pump and small pump house were designed for a well drilled with a cable tool. The well site was determined after geophysical mapping and research. Material and water quality tests were performed during the drilling operation to determine the location for perforations and submersible pump setting. The well house was connected to the nearby distribution system and telemetry was run to operate off of the reservoir water levels.

1996 – CEDAR HILLS SEWER LINE – Designed 18,000 linear feet of 12 inch sewer line. The project included two borings under a canal and a UDOT roadway. Fused HDPE was also used along a section of high pressure natural gas line. Permitting was obtained from the DWQ during design and the line was used to served the east bench of Cedar Hills.

1996 – ALPINE CITY STORM WATER IMPROVEMENTS – New storm water improvements were installed along Grove Drive which included 24 inch an 18 inch piping. New curb and gutter was installed with the storm water piping and discharge was handled into Dry Creek.

1995 – UPPER BATTLECREEK CULINARY WATER IMPROVEMENTS – The water system improvements include 24,000 linear feet of 16,12, 10, and 8 water line installed to replace existing failing lines, upsize transmission lines, and install a new feeder line from a booster pump station to an upper pressure system. Trenchless technology was used in one section of existing residential lines using thermoformed pipe. The section was used as a test section to determine construction costs and viability in areas that have recently experienced roadway improvements. Two canal crossings were performed with microtunnelling utilizing carrier casings and piping. A booster pump was constructed cantilevering over a tank with vertical turbine booster pumps to deliver the water to the upper pressure zone.

1994 – ALPINE CITY BUSCH WELL HOUSE AND PUMP – A well was drilled for Alpine City that included the installation of a submersible pump, a well house, and the connection to the distribution piping with approximately 1300 linear foot of 10 inch pipe. The telemetry was designed to connect to the existing monitoring system.

Master Plans: 1992 – 2004 – Master Plans created are detailed master plans clearly identifying the minimum level of service provided by existing

infrastructure and the improvements needed to meet the desired build out or 25 year projected growth. The master plans are based off of operating models and not constrained to the physical system itself. Additionally, our master plans are not constrained to the infrastructure itself; we include other related constraints such as water rights and known political constraints.

2004 – Myton City Pressure Irrigation Study
1997 – Heber City Culinary, Sewer, Storm water, and Parks Master Plan;
1995 – American Fork City Culinary, Sewer, and Stormwater Master Plan;
1994 – Magna Water Company Master Plan Update;
1993 – Alpine City Culinary, Sewer, Street, and Parks Master Plan Study

Impact Fee and Economic Rate Analysis: 1993 – 2004 – I have administered the creation of Economic Rate Analysis and Impact Fee Analysis for multiple communities and districts within the State. Having performed one of the first impact fees ever performed within Utah, I have kept current will all State requirements. I have successfully defended impact fees that I have created two separate times in court.

2004 – Eagle Mountain Culinary Water, Sewer, Street, Parks and Recreation, and Power
2000 – Eagle Mountain Culinary Water, Sewer, Street, Parks and Recreation, and Power
1998 – Heber City Culinary and Secondary
1997 – Heber City Culinary, Sewer, Storm water, and Park Update;
1992 – Alpine City Culinary, Sewer, and Park;