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October 14, 2021

Williamson County Purchasing Department
Attn: Johnny Grimaldo, Sr. Purchasing Coordinator
100 Wilco Way, Suite P101
Georgetown, Texas 78626

RE: Design Engineering Services for Small Drainage and Small Roadway Projects For Williamson County Road and Bridge Division Transmittal Letter

Dear Mr. Grimaldo,

Please accept this Statement of Qualifications for the referenced contract on behalf of Lockwood, Andrews & Newnam, Inc. (LAN). Founded in 1935, LAN is a full-service civil engineering firm with local offices in Austin and San Marcos providing planning, engineering, and program management services. With more than 350 professional, technical, and support personnel, LAN has the comprehensive in-house capabilities to successfully deliver drainage and roadway projects for the County. Our local office has 14 Professional Engineers to support these projects. Our firm is registered with the Texas Board of Professional Engineers – Firm # F-2614.

Craig Wilson, PE, will serve as Project Manager and the primary contact person for this SOQ and is authorized to represent our firm. He can be reached at 8911 N. Capital of Texas Hwy, Building 2, Suite 2300, Austin, Texas 78759, by phone at 512.214.6028 and email at CMWilson@lan-inc.com.

Working with Williamson County on the 2019 Small Maintenance Projects IDIQ, Craig was successful at delivering quality plans for multiple work authorizations he managed. We have assembled a team of local LAN roadway and drainage experts to support Craig in continuing to deliver these small projects efficiently and on schedule.

LAN is a local industry leader providing engineering services for drainage and roadway projects throughout Central Texas. The firm previously worked with Williamson County on the Bagdad Road at CR 278 under the 2016 Bond Program. We have also recently delivered similar small roadway and drainage projects for Travis County (shoulder notch and widen, turn lane, median gap closure and residential street reconstruction), City of Austin (ADA for parking lot, sinkhole pavement repair), Hays County (low water crossings), and the City of Round Rock (open channel and culvert upgrades).

LAN has examined its current and future workload and determined we have qualified personnel available to meet the staffing needs for this effort. The key staff listed in the organizational chart will be committed to the successful performance of work for Williamson County.

We thank you for your valuable time in evaluating and considering our qualifications. You have my assurance that we are committed to delivering these services in the manner described in this Statement of Qualifications. Please contact me if you have any questions or need additional information.

Sincerely,

A handwritten signature in blue ink that reads 'Travis Michel'.

Travis Michel, PE, LGPP
Associate, Project Principal

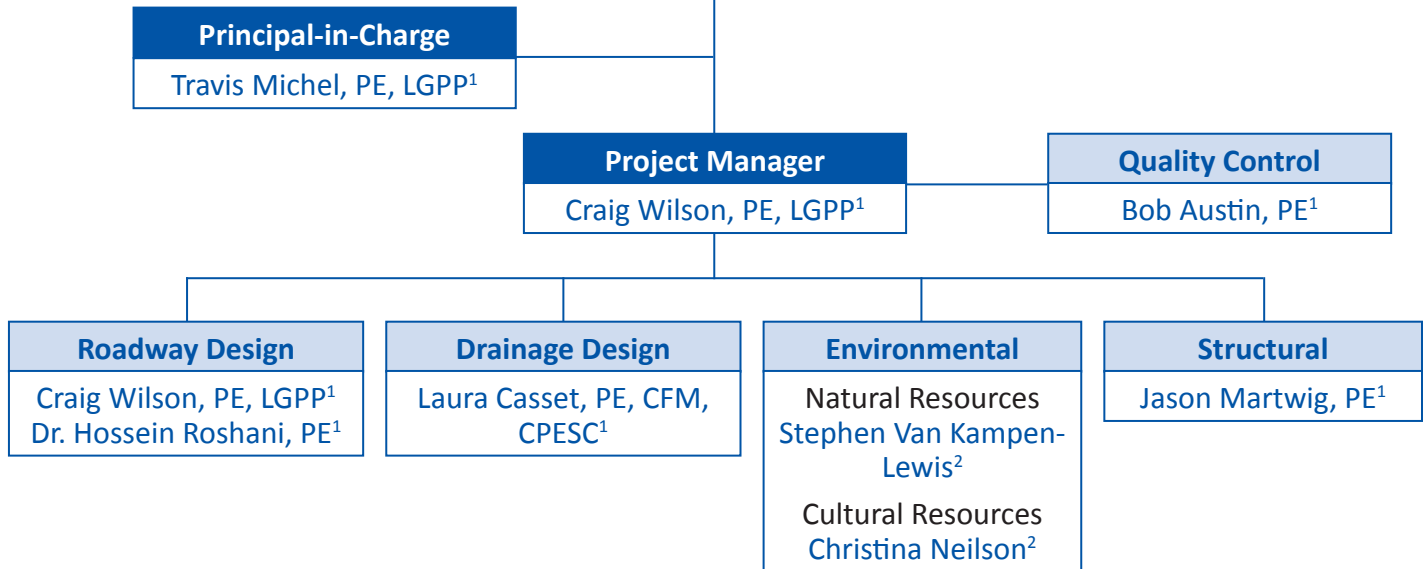
Organizational Chart



Road & Bridge Project Manager

Firm Legend

- 1 - LAN
- 2 - SWCA



As described on the following page and in his resume, LAN's Project Manager, Craig Wilson, is well versed in TxDOT's Local Government Projects Program and TxDOT design criteria, Williamson County's Subdivision Regulations, and the City of Austin's Drainage Criteria Manual, and is able to manage any projects assigned by the Road and Bridge department.

Office Locations & Percent of Time

Staff	Office Location	Percent of Time
Travis Michel	Austin	100%
Craig Wilson	San Marcos / Austin	80% / 20%
Bob Austin	San Antonio	100%
Hossein Roshani	Austin	100%
Laura Casset	Austin	100%
Jason Martwig	Fort Worth	100%
Stephen Van Kampen-Lewis	Austin	100%
Christina Neilson	Austin	100%

**We collaborate with *our* clients, peers,
and coworkers for the benefit of us all.**

Project Manager Experience and Qualifications

Craig Wilson, PE, will serve as LAN Project Manager for any projects we receive from Williamson County. *He served as a Project Manager for Williamson County's 2019 Small Maintenance Projects IDIQ* with a previous employer and has brought that knowledge and relationship to LAN. He has 25 years of experience working with cities, counties, TxDOT and other agencies performing engineering design, project management, and construction management of roadway and drainage projects. His roadway design work includes reconstruction, full-depth reclamation, overlay, slurry seal, and seal coat projects. Along with roadway design, his experience includes open and closed storm system design, structural bridge design, erosion and sedimentation controls, low water crossings, accurate cost estimating, and constructability reviews.

For eight years, Craig served the City of Oak Leaf as a council member and mayor. In that capacity, he worked with Ellis County officials to coordinate roadway and drainage maintenance projects for the city. The city did not have public works staff, so it was necessary for him to secure those services for maintenance of the city's roadway and drainage infrastructure.

For the Williamson County IDIQ, Craig performed roadway and drainage design for the **Garden Park subdivision in Hutto** and phase one of the **Durham Park subdivision near Liberty Hill**. The streets in Garden Park are tight developed corridors, so roadway and ditch grading had to be efficient to fit within the ROW

while meeting drainage criteria. Durham Park streets were wider ROW but required more attention to cross culverts to improve conveyance of stormwater.

The City of Hill Country Village had budgeted \$1.8M to reconstruct five streets based on a recommendation from the City's previous consultant. As the City's new consultant, Craig reviewed the geotechnical information available and determined that changing the method to reclamation would save the City nearly 40% of their budget for the project. That savings was moved to the following budget year and allowed the City to perform maintenance on more streets than originally planned.

Working for Hays County, Craig produced preliminary engineering reports for two low water crossings as Project Manager. He communicated with affected property owners to gain right-of-entry for survey and environmental subconsultants, performed roadway and drainage design, managed the team conducting hydraulic studies, communicated regularly with the GEC program manager, and met with the County Commissioner and County Engineer as needed.

Craig is adept at seeing the project's big picture, able to identify possible threats to schedule and budget early, and not only notifies the client but where possible, he provides solutions or direction toward solutions that helps to keep his client's projects on track.

On the City of Kirby's Ackerman Road project, Craig identified

potential conflicts with a large AT&T fiber duct bank. He worked with AT&T to pothole 20 locations to determine impacts to the proposed storm sewer system and made design changes to eliminate all but two conflicts. AT&T contracted the relocation design and performed their work prior to Ackerman Road being awarded for construction.

When issues arise during construction, Craig faces them head on evaluating the design and making changes needed to keep work on schedule and reduce impacts to the budget. On his Kerlick Ave project in New Braunfels, pavement cores were not collected during design. When the contractor began performing base repairs, they discovered the existing pavement section was different from what was expected. Craig discussed the issue with the City and contractor to develop a pavement section that provided the desired strength for traffic, and minimized quantity changes and construction effort. This coordinated effort kept the project on schedule and within budget.

Since moving to Central Texas in 2018, Craig has become familiar with the City of Austin criteria manuals, adopted by several cities within the County, and the Edwards Aquifer rules. The construction documents generated under his project management are complete and have a clarity that rarely generates addenda during bidding and leads to few RFIs during construction. He routinely receives positive feedback from clients and contractors on the quality of documents.

Project Team's Experience/Qualifications with Seal Coat & Overlay Plan Development

Dr. Hossein Roshani, PE, has 11 years of experience with roadway geometric design and Plan, Specifications, and Estimate (PS&E) services for street preservation and rehabilitation packages, similar to the scopes listed in this RFQ. Dr. Roshani is aware of potential issues that may impact the successful design of a Mill and Overlay (M&O) or Seal Coat project within residential and nonresidential neighborhoods. He has managed 76 preservation and rehabilitation projects in Central Texas. He managed two M&O street-rehabilitation packages for the City of San Antonio with 42 streets requiring pavement base repair. Dr. Roshani supervised professional and technical staff in the development, design, and construction of those projects.

Dr. Roshani is not only experienced in the development of plans for M&O and Seal Coat projects, but he also has made significant contributions to the field of pavement engineering. Through the TxDOT project #0-6878 titled "Characterization of Aggregate Texture and Correlation with Surface Skid Resistance", *Dr. Roshani provided a specific improvement to the TxDOT Seal Coat (Chip Seal) design, giving TxDOT engineers a specific, ideal ratio of aggregate to asphalt binder to work with.* Dr. Roshani's research was focused on helping TxDOT to measure the average least dimension (ALD) of Seal Coats more quickly, efficiently, and precisely as compared with conventional approaches, saving time and cost for TxDOT not only by reducing human resources expenditure, but also by enhancing the Seal Coat design and its performance. He also contributed to the TxDOT level-up pavement patching methods by evaluating the life cycle costs of existing methods and identifying the factors impacting the service lives of M&O and pavement patching. Dr. Roshani's findings were published in the ASCE Journal of Transportation Engineering in 2018.

City of San Antonio – 2019 Pavement Preservation Program:

LAN served as the overall program manager and provided project and construction management and field observation services for the 2019 Pavement Preservation Program (PPP). The total program had a budget of \$1.4 million and included 30 fog seal and Onyx projects.

LAN conducted site visits to each street to identify surface repairs, the location and percentage of base repairs and utility adjustments, obtain measurements, and develop quantities and task order spreadsheets for each project.

Travis County – Austin's Colony & Forest Bluff Right-of-Way Improvements:

LAN provided final PS&E for street rehabilitation (M&O) and sidewalk repair in two Travis County Pct. 1 Neighborhoods. LAN identified the required pavement repair areas along the 13 residential streets and developed M&O plans, details, proposed pavement sections and quantity summary sheets.

City of Schertz – 2018 Pavement Preservation: LAN provided design (Plan development), bid and construction phase services for projects associated with the City of Schertz's 2018 Pavement Preservation Program with a total construction cost of \$4.2 million. The program includes two M&O, two Seal Coat, and three reconstruction projects. On M&O projects, LAN conducted field exploration to identify base repair, flatwork-ADA ramp replacement, striping, signage, and surface utility adjustments. LAN also prepared quantity summary sheets, general sheets to include flatwork-ADA wheelchair ramp replacement, general striping changes, mill-overlay limits, plan sheets for revised crosswalk striping, and identified outdated signage and prepare list of replacements.

For Seal Coat projects, LAN conducted site visits to identify chip seal limits, base repair, additional crack seal, prepared cover/layout sheets, quantity summary sheets, and prepared proposed typical section to identify striping configuration.

City of San Antonio – FY 2022 Pavement Preservation Plan Development:

LAN is developing plans/exhibits for the FY 2022 pavement preservation projects. By October 2021, LAN has prepared plans for more than 42 projects requiring M&O and pavement base repair.

City of Kyle – Masonwood Drive Rehabilitation: LAN provided complete PS&E design, bid and construction phase services for this M&O package with select full-depth spot repairs and various curb and gutter and sidewalk replacement along the 0.6 mile residential street.

Project Team's Experience/Qualifications with Roadway Design

Roadway Design Task Lead, Craig Wilson has worked with many cities, counties, and TxDOT districts across the state. Since moving to Central Texas in 2018, Craig has designed 12 roadway projects totaling 19+ miles at a cost of \$35M that include reconstruction, widening, full-depth reclamation, overlays, and maintenance surface treatments.

On all projects, our team verifies and thoroughly reviews survey and other information provided for our use to gain complete understanding of existing conditions before we begin advancing the design. A site visit gives us a clear picture of things that need to be considered outside of survey limits such as impacts from off-site drainage, driveway tie-ins, types of vehicles that will use the road, and trees or other objects that may become obstructions to a proposed design.

Developing a functional roadway design begins with the drainage infrastructure. Adequately capturing and conveying stormwater through both open and closed storm drain systems drives the ultimate roadway geometry. We take a 3-D look at roadway projects to determine where adjustments to the profile or alignment may be needed to provide the desired project result. That effort helps to ensure the grading design ties the proposed elements to the existing conditions within the available ROW.

Presentation of design plans is key to success. Our team is well versed in producing PS&E packages that convey design intent using TxDOT specifications. When reviewing these documents, Craig is focused on accuracy and clarity to ensure they provide all information necessary for accurate bidding.

Focusing on the strategies mentioned above, our team produces quality designs that are constructible, easy to manage, risk averse, and budget conscious.

Some of the successful small roadway projects the LAN team has completed in recent years are shown below:

Williamson County – Bagdad Road at CR 278: Design of a 2,500 LF entrance road to River Ranch County Park and intersection improvements to Bagdad Road to accommodate the increase in traffic and add dedicated turn lanes. The intersection improvements added a SB right-turn lane, a SB acceleration lane, and a NB left-turn lane following TxDOT guidelines for storage and transition lengths. The entrance road was designed as a divided road with a wide median to allow for entering traffic to easily U-turn when the park gates are closed.

City of San Marcos – Coers Drive: Design of roadway reconstruction including drainage improvements. To provide for LAN's drainage recommendation, the road section was widened and realigned in two locations to minimize the relocation of utilities. LAN coordinated improvements with TxDOT on their concurrent Old RR12 project to improve the intersection layout and suggested changing their proposed culvert and wingwall configuration to eliminate utility conflicts and the need for ROW acquisition.

Travis County – Bullick Hollow Turn Lanes: Design of improvements to the T-intersection of Bullick Hollow with RM 2769 providing dedicated turn lanes. LAN designed the widening of Bullick Hollow to allow dedicated left and right turn lanes to RM 2769 and improved the right turn from RM 2769 to Bullick Hollow by increasing the curve radius to meet truck turning criteria. With the widening of the roadway, grading design was performed to ensure stormwater flow patterns were not affected. Signage and marking improvements were designed to provide necessary visuals for drivers. Performed utility coordination through Austin Utility Location and Coordination Committee (AULCC).

Travis County – Bullick Hollow Bike Safety: LAN performed design services to improve safety for bicyclists using Bullick Hollow Road. The project widened roadway shoulders to six feet in five locations and our team designed the replacements for five driveways. Grading design was performed to maintain existing stormwater flow patterns. Signage and marking improvements were included in the project. Performed utility coordination through AULCC.

Travis County – Austin's Colony and Forest Bluff: LAN performed design for reconstruction of 13 residential streets. A total of 70 driveways in the two neighborhoods could not be rebuilt within the existing ROW using typical details and meet slope criteria. Our team utilized mountable curbs and varying cross slopes to design almost all the driveways to meet criteria and not extend beyond the existing ROW.



Project Team's Experience/Qualifications Providing Environmental Clearance

SWCA Environmental Consultants (SWCA) provides a full-service approach to managing the planning, permitting, and environmental compliance efforts for all types of transportation and drainage projects. SWCA has the experience and in-house resources to handle all environmental consulting needs for these projects. All environmental clearance and permitting support will be provided by the local Austin office, with Stephen Van Kampen-Lewis serving as the Natural Resources task lead and Christina Nielsen serving as the Cultural Resources Lead.

For over 25 years, SWCA has acted as a trusted technical advisor to Williamson County with regards to endangered species planning and policy implementation. SWCA completed the County's Regional Habitat Conservation Plan (RHCP). Since the permit was issued in 2008, we have assisted the Williamson County Conservation Foundation (WCCF) with the implementation of the RHCP in a manner consistent with the expectations of the U.S. Fish and Wildlife Service (USFWS). SWCA publishes three annual reports, which are sent to USFWS for compliance purposes and detail activities executed throughout the prior year by the WCCF. Activities detailed in the report include biota survey results in nearly 40 WCCF managed caves (many of which contain endangered species), golden-cheeked warbler (*Setophaga chrysoparia*) surveys at WCCF managed preserves, Eurycea salamander surveys, WCCF adaptive management committee meetings; all of which SWCA is involved with executing in the field.

Similar experience providing environmental clearance for projects in central Texas include the projects listed on the right.

Williamson County Road Bond Projects - SWCA has conducted pre-construction environmental due diligence studies and environmental reporting/permitting to support numerous projects funded by the County's Road Bond Programs passed in 2006, 2013, and 2019. Environmental services typically include protected species surveys and impacts assessments, karst surveys, cultural resources surveys, aquatic resources delineations, Geologic Assessments, NEPA documentation, and facilitating individual project enrollment in the Williamson County RHCP. Recent Road Bond Program projects include:

Williamson County – Intersection at DB Wood Road and State Highway 29: This Intersection improvement project includes the complicated ESA permitting process requiring the preparation of a Biological Assessment and formal Section 7 consultation with USFWS for potential impacts to protected species, including the Bone Cave harvestman and Coffin Cave mold beetle, Georgetown salamander, and Jollyville Plateau salamander. Formal consultation was completed with the USFWS issuing an incidental take permit for relevant species. SWCA also completed coordination with the Texas Historical Commission, Texas Commission on Environmental Quality, and an application for participation in the Williamson County RHCP for Endangered Species Act compliance.

Williamson County – County Road 176 Realignment and New Location: This project consisted of the realignment, widening, and construction on new location of a segment of CR 176 near Leander Road. Project required coordination with the USFWS for potential impacts to the Bone Cave harvestman. Environmental services also included the preparation of a Geologic Assessment, intensive cultural resource surveys for coordination with the THC, Section 404 permitting, and an application to the Williamson County RHCP for Endangered Species Act compliance as part of the project. Furthermore, intersection improvements at Leander Road required preparation of a TxDOT Categorical Exclusion, which was prepared by SWCA and coordinated with TxDOT-Austin District environmental staff.

Williamson County – Bagdad Road at CR 278 Improvements (River Ranch County Park Road): This project involved improvements to the existing Bagdad Road and CR 278 intersection and the construction of River Ranch County Park Road to allow access to the River Ranch County Park. In addition to a habitat assessment for threatened and endangered species, SWCA completed an intensive cultural resource survey, in accordance with the requirements of the Antiquities Code of Texas (ACT) and coordinated with the THC for archaeological clearance for the project.

Project Team's Experience/Qualifications Providing Drainage Planning & Drainage Conveyance

Laura Casset, PE, CFM, CPESC has 18 years of experience with drainage planning and conveyance design for Central Texas counties and cities. She has worked on the drainage components for more than 15 Street Reconstruction/Pavement Rehab Projects/Roadway projects, totaling \$282M in construction cost and \$12M in design fee.

Laura has developed stormwater master plans for Travis County, City of Buda, and City of Copperas Cove including low water crossing upgrades, shallow lot to lot neighborhood flooding, culvert upgrades, and roadway parallel drainage improvements. She has performed field data collection for localized and creek flooding problem areas, met with residents and County/City maintenance staff to evaluate cost effective flood risk reduction alternatives that limit impacts to adjacent parcels, and she has presented project improvements at public meetings. Laura is familiar with all stages of executing flood risk reduction projects including development of construction plans, specs, and engineering estimates, as well as performing bid phase services, and construction oversight.

Laura is well versed in the City of Austin Drainage Criteria Manual, which the Williamson County Subdivision Regulations require for the purpose of performing drainage computations. She has worked directly for the City of Austin in planning and designing flood risk reduction projects for more than 15 years, implementing their criteria and specifications. Additionally, Laura is experienced at meeting FEMA requirements for regulated streams and developing alternatives that limit floodplain impacts.

Laura is supported by a team of fourteen drainage planners and engineers, which permits her to meet critical client deadlines and have availability to provide Williamson County quick response and turn around to requests and project solutions.

Travis County – Circle Drive Bike Safety Improvements

Project: LAN led the drainage analysis and design to supplement the proposed shoulder improvements (roadway widening, side streets, and driveways). The roadway widening includes addition of intermittent shoulders on both sides of the roadway, varying from two to four feet in width along the 1.74-mile length of the project. LAN analyzed multiple cross culverts and parallel drainage systems, performed field inspections, and developed hydrologic runoff computations. For the Hydraulic study, LAN developed HY-8 models for each crossing, and evaluated the impact from the design storm and the 100-year storm on existing and proposed infrastructure. In addition, LAN provided drainage plan sheets, determined water quality remediation strategies, and prepared a Contributing Zone exception request for the TCEQ.

City of Round Rock – Oak Bluff Drainage Analysis: LAN analyzed flooding conditions in the Oak Bluff neighborhood, which revealed the complex nature of flooding in the region due to shallow lot to lot flooding, as well as insufficient storm sewer conveyance. LAN built a detailed InfoWorks ICM 2D model to accurately assess the performance of the existing drainage infrastructure and better understand the cause of observed flooding. Frequency events were simulated, and the design criteria was set to the 25-year event. This complex, localized stormwater modeling project defined the 25- and 100-year floodplain outside of a typical FEMA or creek flooding area. Conceptual improvements were developed with the ICM model to cost-effectively bring as many homes as possible out of the 25-year floodplain, and three final alternatives were presented to the City. LAN then developed final design documents for the selected alternatives including plans, specifications, and estimates.

City of San Marcos – Coers Drive Drainage Improvement

Project: LAN performed a drainage study using two methods: 2D model assessment using InfoWorks ICM and a “rain-on-mesh” simulation and a traditional hydrologic and hydraulic impact analysis using HEC-HMS and HEC-RAS. Results from existing conditions modeling indicated a significant structural and nuisance flooding to multiple homes in the area. As a solution, LAN designed improvements to an existing storm channel to include reinforced concrete lining with limestone block retaining walls, as well as installation of 5-foot by 3-foot reinforced concrete box culverts along 1,100 feet of residential roadway with associated area and curb inlets. The project also included inline water quality BMPs; full-width roadway and sidewalk design within the right-of-way; replacement and relocation of water/wastewater lines; development of a full set of construction documents; construction cost and schedule estimating; bidding services, and management of all construction activities.

Project Understanding

Firm Experience with the County

LAN, and our Project Manager Craig Wilson, have performed on projects for Williamson County in recent years. Bob Austin led the LAN team designing Bagdad Road at CR 278 under the 2016 Bond Program, and Craig was PM for the 2019 Small Maintenance Projects IDIQ contract. Both engagements allowed our team to earn the trust of County staff and become familiar with the design criteria and processes utilized by Williamson County.

Project Understanding & Approach

Our previous experience and current understanding of this program is this IDIQ contract will include the design of improvements to county roads and associated drainage infrastructure. We are aware the County has secured contracts from other consultants to provide topographic and ROW survey data, subsurface utility engineering, and geotechnical engineering. The collected data, drawings, reports, and subsequent recommendations will be provided for our use in developing the design of assigned projects. LAN will prepare our analyses and designs according to the recently updated Williamson County Subdivision Regulations.

LAN will follow the Williamson County Subdivision Regulations for all design elements. We will use TxDOT specifications and standard details where applicable, and provide special specifications and details to convey design intent.

On each project, LAN will start by coordinating with our environmental subconsultant to begin any investigations needed to permit the project. When survey and SUE files are delivered, we will review the provided data and walk the project to determine if all elements necessary for design were collected. Where deficiencies exist or there is a need for additional survey, LAN will discuss any subsequent work needed with the County PM. Once the provided data has been verified, we will begin our design efforts.

The County will provide the pavement section as designed by their geotechnical engineer for roadway projects. LAN will lay out the roadway based on the desired width and make adjustments to the centerline alignment to minimize impacts to driveways and need for additional ROW. Driveway culverts will be analyzed, sized to carry the 10-year storm, and replaced with the determined pipe size (minimum of 18-inch diameter) with nine inches of cover. Driveways will be redesigned where culvert replacements are required.

On both roadway and stand-alone drainage projects, LAN will perform our hydraulic and hydrologic analyses based on the City of Austin's Drainage Criteria Manual and incorporate Atlas 14 flows when requested. Our team will utilize HEC-HMS, HEC-RAS for analysis, HY-8 for culvert hydraulics, StormCAD for systems, and InfoWorks ICM for any 2D modeling that is necessary. Coordination with FEMA is generally not expected

on projects typical of this IDIQ, but LAN has the experience and capabilities to assemble packages for FEMA review and approval. Cross culverts and bridges will be designed to pass flows from the 25-year storm event, and longitudinal structures and systems will be designed to the 10-year storm event.

Any structural design that may be necessary on a project will be handled by Craig or Jason Martwig. Both have extensive experience and possess TxDOT precertifications designing bridges, bridge-class culverts, and transportation structures.

During the preliminary design phase, LAN will determine any ROW needs, provide a list of referenced specifications, determine an opinion of probable construction costs, and deliver 50% drawings for review. The County will provide the plans to their SUE consultant for utility coordination.

Upon receipt of review comments from the County PM for preliminary engineering documents, LAN will begin the Final Engineering phase by addressing those comments and developing design details and other plans sheets needed for construction. After the 90% review, LAN will incorporate any remaining comments by the County PM and finalize the bidding documents. LAN will assist County staff during bidding by answering bidder's questions, providing support during construction, reviewing shop drawings, and responding to contractor RFIs.

Project Team Availability

LAN staffs each project with an appropriate level of experienced personnel ensuring strong leadership to provide well-planned, reviewed (via our quality assurance/quality control process), and coordinated results. Our firm approaches every project with the necessary scalable resources to complete tasks on time and on budget.

Our Project Manager, Craig Wilson, joined LAN earlier this year and is providing support for the infrastructure team while developing clients and bringing on new projects. His availability will allow Williamson County projects to be a top priority.

Additionally, the rest of the proposed team have several projects nearing completion and will also be able to prioritize projects for the County. Since the start of the Covid-19 pandemic in March of 2020, this project team has not missed a scheduled deliverable (over 20 submittals).

The following table shows our team members' percent of availability starting in the next calendar year. As you can see, we have the necessary time available for the County and are prepared to start work right away.

Staff	Role	Availability
Craig Wilson	Project Manager/Roadway Design	60%
Travis Michel	Principal-in-Charge	45%
Bob Austin	Quality Control	40%
Hossein Roshani	Roadway Design	50%
Laura Casset	Drainage Design	50%
Stephen Van Kampen-Lewis	Environmental - Natural Resources	45%
Christina Neilson	Environmental - Cultural Resources	35%
Jason Martwig	Structural	50%

Founded in 1935, LAN is a Texas-based full-service civil engineering firm. With more than 350 technical, professional, and support personnel throughout 21 offices in the US, LAN provides complete planning, engineering, and program management services. Service areas of expertise include water, wastewater, transportation, stormwater management, transit, facilities, education, right-of-way, and mechanical, electrical, plumbing, and structural engineering.

LAN has a long and successful 50-year history in Central Texas, from Copperas Cove all the way to San Antonio. The three LAN offices within the Austin to San Antonio corridor amount to 75 local experts available to successfully develop and implement a wide range of engineering projects. We are available to fully staff assignments upon notice to proceed and have the local resources necessary to support any project assignment or schedule.

With local offices in Austin, San Marcos, and San Antonio, projects for Williamson County will be delivered with local project management and production with support, as necessary, for highly specialized or technical elements from our team of national experts and industry leaders.

75 local experts

total number of experts in San Marcos, San Antonio, and Austin to support this project

350 national experts

total number of experts in 12 Texas office locations to support this project

Appendix A

Resumes



Craig Wilson, PE, LGPP

Project Manager / Roadway Design



25 Years of Experience

Education

Master of Engineering | Civil Engineering | University of Texas at Arlington | 2001

Bachelor of Science | Applied Mathematical Sciences | Texas A&M University | 1992

License/Certifications

Texas Professional Engineer No. 94710

TxDOT, Local Government Project Procedures (LGPP) Certified

TxDOT Precertifications:

1.5.1, 3.2.1, 4.2.1, 4.5.1, 5.2.1, 5.5.1, 8.1.1, 9.1.1, 10.1.1, 10.2.1, 11.1.1, 14.3.1, 17.5.1, 18.3.1, 18.4.1

Background

Craig has 25 years of experience managing and designing public works capital improvement projects for clients across Texas including numerous cities, counties, TxDOT and other state agencies. He has a broad range of experience with roadway, bridge, and drainage projects. Those projects involved both schematic design and preparation of plans, specifications, and estimates (PS&E) packages. Craig also has experience providing constructability reviews, construction management, contract administration, and utility coordination.

Experience

2019 Small Maintenance Projects IDIQ – Williamson County, Texas:

Project Manager who oversaw four work authorizations - On-call Engineering Services, Garden Park Subdivision Improvements, CR 278, and Durham Park Subdivision Improvements Phase 1.

Street Bond Projects (Phase 2) & Hickory Hill Drive Reconstruction – City of Kirby, Texas:

Project Manager and Design Engineer for seven bond funded streets totaling 9,800 LF and the CDBG funded reconstruction of Hickory Hill Drive. Craig performed roadway design, sidewalk and driveway grading, pavement design, underground storm sewer, utility coordination, specification and contract manual, subconsultant management, design contract management, construction contract administration, and client management.

2018 and 2020 Street and Drainage Improvements Projects – City of Hill Country Village, Texas:

Project Manager for two maintenance projects including reconstruction and reclamation of nearly 9 miles of existing roadways, adding drainage improvements where needed. Since the base material was found to be solid with adequate depth, Craig proposed pavement reclamation to improve the road surface and significantly reduced the cost of each project.

E. Slaughter Lane – Brookfield Residential, Austin, Texas: Quality Control Review of the 60% roadway and drainage design plans prior to submittal. To advance the 90% design plans, Craig designed the culvert layouts, headwalls, and adjacent grading. He will perform full QC review of future PS&E submittals for the project.

FM 1625/US 183 Improvements – Brookfield Residential, Austin, Texas:

Project Manager for the widening of two TxDOT facilities impacted by the Easton Park development. With this project approaching 60% design, Craig has designed the roadway layout, performed utility coordination, and coordinated with the drainage design and environmental compliance teams.

FM 1660 Turn Lanes – Hutto ISD, Hutto, Texas: Project Manager and Lead Engineer for this project serving a new school site for Hutto ISD. The existing roadway was widened to include a left turn lane and a dedicated right turn lane to serve the school site. No drainage improvements or utility relocations were necessary. Significant coordination was necessary with the TxDOT area office to provide environmental and other LGPP elements to clear the project for construction.

Craig Wilson, PE, LGPP

Project Manager / Roadway Design

Experience (Continued)

Kerlick Avenue – City of New Braunfels, Texas:

Project Manager and Design Engineer for this street rehabilitation project. Craig revised design elements to improve constructability, prepared project specifications and contract documents, assisted city PM with construction contract administration, and performed field engineering.

2019 Street Maintenance Projects – City of

Floresville, Texas: As Project Manager for the Street Maintenance Program, Craig finalized the list of streets to be included and recommended reconstruction and rehabilitation methods appropriate to the evaluated condition of each street.

S. Pine and Greer Street Drainage Improvement

Project Phase 1 – City of San Antonio, Texas: Project Manager and Design Engineer for the reconstruction of S. Pine Street, Greer Street, and Topeka Boulevard totaling 3,800 LF. Craig performed hydrologic and hydraulic analyses, underground storm sewer design, utility relocation design (water, wastewater, and gas), roadway design, pavement design, erosion and sedimentation control design, utility coordination, specification and contract manual, subconsultant management, design contract management, and client management.

Alderette Drive – City of Del Rio, Texas: Quality Control Review of 90% plans and revised the final design to improve the operation of reconstructed ditch sections along the widened street. The project was funded through the Coordinated Border Infrastructure (CBI) with TxDOT having authority. Local Government Project Procedures (LGPP) for TxDOT were used to comply with federal funding regulations.

Pleasant Run Road – City of Colleyville, Texas:

Project Manager and Lead Engineer for the reconstruction of 2,700 LF of a local street conversion from a rural to urban section. Craig performed roadway design, trail design, hydrologic and hydraulic analyses, underground storm sewer

design, off-site detention, utility adjustments, utility coordination, erosion and sedimentation control, signage and pavement markings, grading, assisted with property evaluation for ROW acquisition, and assisted the city with documentation for NCTCOG funding.

Mockingbird Lane – City of Midlothian, Texas:

Lead Engineer for design of the reconstruction and widening of 6,000 LF of asphalt roadway with ditches to improve the condition of a high-volume local street. The roadway section included reclaiming 8-inches of the existing base/subgrade and adding cement to improve base strength, a 3-inch HMA base course and a 2-inch HMA wearing surface.

Low Water Crossing Improvements Project – Hays

County, Texas: Craig took over this preliminary study project in its early stage, completed obtaining right-of-entry and began coordination for the survey, geotechnical and environmental portions of the project. He provided new alignments and profiles for two low water crossings to improve mobility and access for properties affected by the flooding crossings. The road profiles were raised to provide access during the 10-year storm event. HEC-RAS models were verified and revised to the new geometry. Schematic layouts, engineering reports including geotechnical and environmental findings, drainage reports and HEC-RAS data were provided to the GEC for review and approval.

Westwood Circle Drainage Improvements – City of Rowlett, Texas:

Joining the project at the 90% design phase, Craig made changes to the design improving constructability and performed construction administration tasks for this project. He designed a storm sewer system and flume to alleviate ponding in a cul-de-sac. The storm sewer was placed on a flat grade allowing 75% of the area to be collected in the underground system. The remaining 25% was directed to a flume constructed along a property line.



Travis Michel, PE, LGPP

Principal-in-Charge



21 Years of Experience

Education

Master of Science |
Engineering Management |
University of Texas | 2014

Bachelor of Science | Civil
Engineering | Louisiana State
University | 2000

License/Certifications

Texas Professional Engineer
No. 95805

TxDOT Local Government
Project Procedures (LGPP)
Certified

TxDOT Precertifications:

2.4.1, 10.2.1, 17.5.1, 18.4.1

Background

Travis manages LAN's Public Works Infrastructure Group. He has over 21 years of experience in analysis, design, project management, and construction management for traffic control plans, arterial and collector road design, ADA compliant facilities, utility design and coordination, stormwater collection systems, and creek bank stabilization.

Travis currently serves as Principal on the Travis County Small Projects Pre-Qual, City of Austin Small General Civil Rotation List, and City of New Braunfels Pre-Qual.

Experience

Austin's Colony CDBG Right-of-Way Improvements – Travis County, Texas: Principal-in-Charge for the design of roadway reconstruction, curb inlet and curb and gutter replacement, and sidewalk and curb ramp replacement to seven residential streets in Travis County Precinct 1, design completed in September 2021.

Forest Bluff CDBG Right-of-Way Improvements – Travis County, Texas: Principal-in-Charge for the design of roadway reconstruction, curb inlet and curb and gutter replacement, and sidewalk and curb ramp replacement to six residential streets in Travis County Precinct 1, design completed in September 2021.

Bullick Hollow Road Left Turn Lane – Travis County, Texas: Principal-in-Charge for the design of a new left-turn lane at the intersection of Bullick Hollow Road and RM 2769 in Northwest Austin. Design included full-width mill and overlay of the intersection, in addition to the notch-and-widen for the turn lane.

Wells Branch at Howard Median – Travis County, Texas: Principal-in-Charge for the addition and extension of the eastbound left turn lane on Wells Branch Parkway approaching the Howard Lane intersection and closing the median opening between Howard and Loop 1 (Mopac). Travis provided subconsultant management and oversaw all transportation engineering and geometric design, drainage design, traffic control and phasing planning, cost estimating and permitting.

Oak Bluff Drainage Improvements – City of Round Rock, Texas: Principal-in-Charge and Project Manager for design of an open channel and box culvert replacement on County Road 123.

Coers Drive Drainage & Utility Improvements – City of San Marcos, Texas: Project Manager for the 1.1-mile roadway and drainage improvements project, which also included water and wastewater replacement, new sidewalks, and full-width street reconstruction.

Main Street at FM 967 Intersection Improvements – City of Buda, Texas: Project Manager for the design of a new right turn lane on Main Street in downtown Buda. The design included new ADA-accessible curb ramps, pavement striping, signage, intersection layout design, and coordination with TxDOT for revisions to traffic signals and pedestrian crosswalk.

Travis Michel, PE, LGPP

Principal-in-Charge

Experience (Continued)

Rosewood Zaragoza Neighborhood Center (Walkways & ADA Ramps) – City of Austin, Texas:

Project Manager for the ADA and parking lot improvements at the Rosewood-Zaragoza Neighborhood Center in east Austin. The project included the design of ADA accessible ramps and pathways to three separate entryways, along with modifications to three parking lots. For the main entrance, three alternative designs were provided, and 3D renderings were prepared using GEOPAK Site Modeler.

Goforth Road – City of Kyle, Texas: Quality Control Lead and Task Lead for the design of all City of Kyle utility relocations for the 1.2 mile expansion and widening of Goforth Road, from IH 35 to Bunton Road. Relocations included approximately 900 LF of 8- and 12-inch PVC water mains, including the reconnection of existing water services and adjustment of appurtenances, and design of approximately 510 LF of new 8-inch PVC wastewater line, service connections and adjustments to existing manholes.

E. Slaughter Lane – Brookfield Residential, Austin, Texas: Principal-in-Charge for design of schematic of 2.2 miles of 6-lane arterial from Thaxton Road to US 183. Travis oversees coordination with TxDOT for alignment and intersection geometrics at FM 1625 and US 183 Preparing PS&E for Phase 1 improvements including storm sewer, intersection layouts, four traffic signals, bike lanes, sidewalks and CLOMR application for Cottonmouth Creek and tributary.

Bullick Hollow Road Bike Safety Improvements –

Travis County, Texas: Principal and Project Manager for the design of 6-foot shoulders along Bullick Hollow Road. The project scope included detailed design of shoulder widening and drainage infrastructure at six locations. Travis managed roadway, drainage, erosion and sedimentation, signing and striping, and cost estimating.

Pillow Road Reconstruction – Sunset Valley, Texas:

Project Manager for the design of approximately 0.6 miles of road improvements for a 2-lane residential street. The final design included full-depth street reconstruction of a 2-lane residential street, reconstruction of a stormwater box culvert, relocation of water and wastewater lines, storm drains and new curbside inlets, reconstruction of decorative limestone rock retaining walls, and reconstruction of approximately 30 driveways.

Shoal Creek, Ridgelea Storm Drain Improvements – City of Austin, Texas:

Project Manager for the design of storm drain improvements within the Ridgelea neighborhood in central Austin to alleviate local flooding issues. The project included approximately 4,000 LF of 18- to 72-inch new storm drain pipe, including two new outfalls into Shoal Creek, nearly 8,000 LF of water and wastewater utility relocations, and full-depth street reconstruction throughout the entire neighborhood.

Shoal Creek-Rosedale Phase IIA and IIB Storm Drain and Water Quality Improvements – City of Austin, Texas:

Project Manager for drainage improvements to alleviate local flooding issues within the Rosedale neighborhood, an older, residential area with Central Austin within the Shoal Creek watershed. The project included nearly 7,000 LF of 18- to 60-inch new storm drain pipe, 7-foot by 5-foot box culverts, new outfall into Shoal Creek, approximately 10,000 LF of water and wastewater utility relocations, installation of a Filterra stormwater bioretention inlet along Medical Parkway, and surface milling and street paving throughout the entire neighborhood.

Radio Shop Sink Hole Repair – City of Austin, Texas:

Principal/Project Manager for the geotechnical investigation, assessment, design and construction of parking lot repairs for a sink hole that occurred at the City of Austin's Fleet Management Radio Shop parking lot.



Bob Austin, PE
Quality Control



38 Years of Experience

Education

Bachelor of Science |
Chemical Engineering | Texas
A&M University | 1982

License/Certifications

Texas Professional Engineer
No. 67596

TxDOT Precertifications:

1.1.1, 1.2.1, 1.3.1, 1.4.1, 1.5.1,
3.2.1, 4.2.1, 4.4.1, 7.1.1, 8.1.1,
10.1.1, 10.2.1, 10.3.1, 10.5.1

Background

Bob is experienced in implementing QA/QC procedures in all manner of transportation and roadway projects, and has more than 38 years of progressive experience in project management and design. He serves as the QA/QC lead on numerous projects, has written Design Quality Management Plans, and participated in audits for the \$2.7 Billion IH 635 Managed Lane Design-Build Project in Dallas.

Pre-certified in 14 TxDOT engineering categories of planning and design, Bob wrote the latest TxDOT Preliminary Design Course Manual and instructs it, the PS&E Package, and the AASHTO Green Book courses for TxDOT.

Experience

Bagdad Road at CR 278 – Williamson County, Texas: Quality Control Manager responsible for overseeing the development of the plans and overseeing the design staff for the improvements to Bagdad Road and River Ranch County Park Road. The project consisted of designing the main access road for the proposed River Ranch County Park from Bagdad Road (CR 279) east to the park property. Intersection improvements were also designed on Bagdad Road to accommodate anticipated park traffic. The improvements included the reconstruction of an interim section of Bagdad Road for approximately 1,000 feet to the north and 1,000 feet to the south of the new access road and the construction of 2,500 feet of the access road west of Bagdad Road. The main park access road is an extension of CR 278 and is referred to as Park Road. A shared-use path will be designed on the west side of the Bagdad Road and along the north side of Park Road.

Goforth Road Schematic and PS&E – City of Kyle, Texas: Project Manager and Roadway Design Lead for the design and widening of a 2-lane roadway to a curb & gutter, 3-lane section with a center two-way left turn lane within the southern section and a 4-lane section with 2 lanes in each direction within the northern section. Bob led the preparation of a schematic to accommodate school buses and pedestrian school children, Public Involvement, typical sections, TCP, roadway plan & profile, a shared-use path, illumination plans and design cross sections on an expedited schedule. Bob worked with the City of Kyle and utility companies to design the storm sewer system around many utilities within a tight 80-foot ROW width to minimize costly utility adjustment design and construction.

Market Street Realignment Schematic and PS&E – City of San Antonio, Texas: Design Manager and Roadway Design Lead for the development of five alternative schematics and a geometric schematic which was approved by CoSA and TxDOT. Bob also managed the design and development of roadway plans and cross sections for three city streets, four IH 37 ramps including an over/under ramp configuration, a pedestrian bridge, bicycle and ADA compatible pedestrian facilities, and two IH 37 frontage roads. Bob worked with VIA and the City to provide an intersection with clearances and pavement design to accommodate a future streetcar system at the IH 37 south bound frontage road and Montana Street. He worked with the Landscape Architect to implement many trees, shrubs, ground coverings, sidewalks, bike paths, shared-use

Bob Austin, PE

Quality Control

Experience (Continued)

paths, and street furnishings. Bob completed the expedited development of over 200 roadway plan sheets and oversaw the compilation of over 1,000 sheets. He followed the QA/QC policy of detailed checks, independent technical reviews, inter-discipline reviews, and constructability reviews. Bob worked closely with the City to develop the “Complete Streets” theme to provide a well-functioning, aesthetically pleasing, and ACEC Award-Winning addition to the San Antonio Convention Center, Tower of the Americas, and Hemisfair Park area.

Bulverde Road Schematic and PS&E – Bexar County,

Texas: Project Manager and Roadway Design Lead for the design, widening, and reconstruction of a 2-lane roadway to a curb & gutter 4-lane section with turn lanes. Bob led the preparation of a schematic, typical sections, traffic control plans (TCP), roadway plan & profiles. He accommodated pedestrians with a sidewalk along the east side of the roadway and bicyclists within a shoulder along the outer lanes. Bob investigated the cost of MH type water quality infrastructure (Jellyfish, etc.) compared with traditional water quality ponds and recommended using water quality ponds to save Bexar County over \$125,000 in funding (considering future maintenance costs also). Bob worked with the storm sewer alignments to minimize SAWS waterline adjustments.

FM 969 Preliminary Engineering – TxDOT Austin

District: As Project Manager, Bob led the team that developed alternative schematics to widen a 4-lane urban arterial to a 6-lane urban arterial with raised median. The team developed design cross sections, DSR, hydraulic report, and conceptual TCP; coordinated right-of-entry; assisted TxDOT with public involvement; and oversaw the development of an environmental constraints map, ROW map, and an EA document.

Transportation Bond Program – Hays County,

Texas: Program Manager responsible for the design and construction of 14 county roadways and the planning and design of eight state roadways contained in a \$47M bond program. Bob managed 13 subconsultants in a GEC role, provided design criteria, monitored production, and reviewed schematics and PS&E. His team developed a policy and procedures manual, a construction phase services manual, a “go-by” set of plans, and bidding documents for construction and provided construction phase services.

US 79 Urban Arterial – TxDOT Austin District:

Project Manager and Roadway Task Lead for development of a conceptual and geometric schematic to convert a 5-lane section to a 6-lane divided with turn lanes to accommodate a significant increase in traffic within a ROW constrained corridor. Bob led his team to develop a Traffic Operations Report that included SYNCHRO & VISSIM Traffic models to help develop the preferred interchange configurations, number of lanes, signalization and turn bay lengths. Bob managed the development of three grade separations including a CFI at IH 35, a partial cloverleaf at Mays St., and a Tight Urban Diamond Interchange (TUDI) at A.W. Grimes Blvd. Bob provided 10-foot shared-use paths meeting ADA & TDLR criteria along both sides of US 79 to accommodate pedestrians and bikes. To incorporate stakeholder input, identify issues and develop solution recommendations, Bob worked with TxDOT to conduct a round of MAPOs prior to each of two Open House Public Meetings and a Virtual Public Hearing. Bob’s team and TxDOT met with three historic properties to discuss the project and identify their needs. These MAPOs and the Open House Public Meetings garnered public support for the project which is on track and within budget.



Hossein Roshani, Ph.D., PE

Roadway Design



11 Years of Experience

Education

Doctorate | Civil Engineering - Pavement Engineering | University of Texas at San Antonio | 2016

Master of Science | Road and Transportation Engineering | University of Guilan | 2011

Bachelor of Science | Civil Engineering | University of Mazandaran | 2009

License/Certifications

Texas Professional Engineer No. 129156

Background

Dr. Roshani has more than 11 years of experience in roadway geometric design, sidewalks and pedestrian facilities, pavement design and management, and construction materials. He has worked on 46 street reconstruction/pavement rehabilitation projects throughout his career, totaling \$19 million.

Hossein was recognized as a 2020 Rising Star in Full-Service Engineering by *Civil + Structural Engineer* and a 2022 Top Young Professional by ENR Texas & Louisiana for his contributions to local communities and academic research.

Experience

2018 Street Rehabilitation Packages – City of San Antonio, Texas:

Project Manager for two street rehabilitation packages for the City of San Antonio with a total construction cost of \$15 million. The project included mill and overlay of 42 streets with a significant amount of base failure work, sidewalk repair, and wheelchair ramp adjustments to meet ADA compliance guidelines. Hossein also supervised professional, technical, and assorted team members in the projects' development, design, and construction of street maintenance.

Austin's Colony and Forest Bluff Right-of-Way Improvements – Travis County, Texas:

Design Engineer and ADA Specialist for improvements to roadways, intersections, drainage structures and systems, and sidewalks. Services include providing Texas Department of Licensing & Regulation (TDLR) certification; land survey to establish correct grades for failed curb & gutter, sidewalks, ramps, driveways and stormwater inlets/outlets; revegetation design; traffic control plan; compliance with the 2010 title III American with Disabilities Standards (ADA); the National Environmental Policy Act (NEPA), and the Federal Department of Housing and Urban Development (HUD) environmental standards; technical support and expert testimony for public meetings and hearings, and construction administration services.

2019 Pavement Preservation Program – City of San Antonio, Texas:

Program and Project Manager for 30 street preservation projects that consist of micro-surface, fog, onyx applications. Hossein led the LAN team and managed multiple consultants throughout construction, providing monthly progress reports and program updates. Hossein coordinated with multiple contractors to resolve conflicts, reviewed and negotiated change orders and assisted CoSA with project and contract closeout support.

Tolle Road Reconstruction and Shoulder Widening – City of Cibolo, Texas:

Project Manager for reconstructing about 1.4 miles of roadway, widening at several right/left turns, drainage improvements to several cross culvert and ditch grading. As prime consultant, LAN is providing roadway, drainage, erosion and sedimentation control, signing and striping, utility coordination, and cost estimating services.

Hossein Roshani, Ph.D., PE

Roadway Design

Experience (Continued)

Bullick Hollow Road Left Turn Lane – Travis County, Texas: Project Engineer for reviewing and improving the traffic control plans and design of roadway sections to include a left-turn lane on Bullick Hollow as it approaches an intersection. Hossein coordinated with the Travis County project manager and contractor to re-evaluate the scopes and changes requested by Travis County.

Street Maintenance Program – City of San Antonio, Texas:

Program Manager for developing a \$550 million, 5-year (FY 2020 to FY 2024) Street Maintenance Program for the City of San Antonio. Hossein analyzed the City of San Antonio's 75 million SY of pavement network condition statistically and developed budget allocation scenarios based on the size and need of each sub network for 10 council districts within the City. Hossein developed an automated method for street project selection and project prioritization considering 12 different criteria including equity, bus frequency, closeness to important City destinations such as education facilities, public assemblies, governmental facilities, and emergency services.

Pavement Condition Assessment – City of Copperas Cove, Texas:

Project Manager for pavement condition assessment and pavement management plan development. The street network consists of about 147 centerline miles with a total value of over \$200M. LAN as prime consultant is providing engineering services for review and organize the existing pavement inventory, pavement condition assessment, data analysis, 5-year street maintenance plan development, and City staff training.

Pavement Condition Assessment – City of San Antonio, Texas:

Project Coordinator for the City of San Antonio's pavement condition survey performed by a consultant (DTS). This project included surveying 4,155 centerline miles of streets and providing the PCI. Hossein oversaw the progress of subconsultants, QA/QC of the pilot data, and verifying the PCI

considering the needs of the City's pavement network.

2020 Schertz Drainage Maintenance Projects – City of Schertz, Texas:

Project Manager for Design and Construction phases of three drainage projects at Castle Hill Dr., Colonies Ditch, and Osage Ave. These projects' scope is to maintain and improve the quality of drainage channels. Hossein has been coordinating with the City of Schertz Project Manager and the Contractor, C-3 Environmental Specialists, to make sure the project is on schedule, on budget, and delivering a quality product that meets the requirement of the scope statement.

Accelerating Innovation in Partnered Pavement Preservation – TxDOT Austin District:

Post-doctoral researcher for two phases of the TxDOT project investigating innovative pavement preservation technologies. This project was performed in four phases at the Center for Transportation Research at the University of Texas at Austin and provided TxDOT with innovative highway pavement preservation materials, technologies, and procedures to provide a new platform for accelerating innovation in highway pavement preservation. Hossein oversaw the research team in field pavement data collection. He also assisted in preparing the reports presented to TxDOT.

2019-2020 Sidewalk Program – City of San Antonio, Texas:

Project Manager for design and project/construction management services for nine sidewalk projects for CoSA which utilized multiple funding sources. These projects improve pedestrian mobility and safety for all citizens and bring current or nonexistent infrastructure to American with Disabilities Act (ADA) standards. Hossein served as Construction Manager and an extension of City staff, helping resolve conflicts and provide field engineered solutions. He coordinated with stakeholders to gain consensus and support, and managed the schedule and budget.



Laura Casset, PE, CFM, CPESC

Drainage Design

18 Years of Experience

Education

Bachelor of Science | Civil Engineering | University of Texas at Austin | 2003

License/Certifications

Texas Professional Engineer
No. 99387

Certified Floodplain Manager
No. 0996-06N

Certified Professional in
Erosion and Sediment Control
No. 5639

TxDOT Precertifications:

10.7.1, 10.8.1

Background

With more than 18 years of experience serving public clients in stormwater and floodplain management, Laura's background includes civil engineering design of flood mitigation projects, surface water hydrology/hydraulics, identifying project funding opportunities, grant application development, FEMA map revisions and studies, as well as site development, utility relocation, and transportation drainage projects throughout Central and South Texas.

Experience

Parmer Lane (FM 734) Widening Project – TxDOT Austin District, Williamson County, Texas: Drainage and Water Quality Task Manager for the Parmer Lane Roadway widening final design from SH 45 to Whitestone Blvd. The project limits include one major bridge crossing, seven minor culvert crossings, and one bridge class culvert crossing. Performed hydrologic analysis utilizing HEC-HMS and compared to previously completed hydrologic evaluations. Performed hydraulic evaluation of project crossings utilizing HY-8 for minor culverts and HEC-RAS for bridge class culvert and bridge. Led the water quality design which included two sedimentation ponds and vegetated filter strips to meet TCEQ Edwards Aquifer Contributing Zone requirements. An additional biofiltration pond was designed for the project as a partnership project with the City of Austin. Prepared site plan review plans for the biofiltration pond to meet City of Austin standards.

Coers Drive Improvements – City of San Marcos, Texas: Drainage Task Lead who performed data collection, field reconnaissance, and coordinated with the surveyor to collect critical drainage elements that defined cross basin flow patterns. She oversaw the InfoWorks ICM 2D modeling, prepared a HEC-HMS hydrologic model for comparison which included two localized detention ponds, and developed three alternatives to reduce flood risk for more than 40 homes. Laura prepared the preliminary engineering drainage report which detailed three alternatives for conveying roadway paralleled drainage and estimated construction costs. The proposed alternatives considered limiting impact to existing ROW, utility conflicts, construction phasing, and potential for downstream scour.

Circle Drive Bike Safety Improvements – Travis County, Texas: Drainage Task Lead for the roadway drainage analysis and drainage infrastructure design to supplement the proposed shoulder improvements (roadway widening, side streets, and driveways) along Circle Drive. Laura performed the water quality and hydrologic and hydraulic analysis of multiple culvert crossings and parallel drainage systems to support the County road widening. She performed field inspection, responsible for development of rational method hydrologic computations, development of HY-8 hydraulic models for each crossing and evaluated impacts to the design storm and 100-year check storm. The water quality design Laura performed consisted of treating total suspended solids with vegetative filter strips in accordance with TCEQ criteria. She developed drainage plan sheets and a TCEQ Contributing Zone Exception Request.



Laura Casset, PE, CFM, CPESC

Drainage Design

Experience (Continued)

Bullick Hollow Road Bike Safety Improvements – Travis County, Texas: Drainage Task Lead for the hydraulic model for the design of 6-foot shoulders along Bullick Hollow Road, from Oasis Bluff Drive to the intersection at RM 2769. The project scope includes adding a shoulder to the existing roadway and modeling the existing and proposed hydrology using HEC-HMS, HY-8. Laura updated the existing drainage features, roadside ditches and driveway culverts, to accommodate the adjusted roadway width.

Jacobson Road Low-Water Crossing Improvements – Travis County, Texas: Deputy Project Manager for hydrologic and hydraulic modeling, alternatives evaluation, and final design for improvements to an existing low-water crossing. Laura used GIS data and HEC-GeoRAS to extract channel geometry for input into hydraulic modeling software (HEC-RAS). She worked closely with County Project Manager to develop alternatives for ease of construction for maintenance staff.

David Moore Drive Low Water Crossing Improvements – City of Austin, Texas: Project Manager for the hydrologic and hydraulic evaluation of an existing low water crossing, alternatives evaluation, and development of construction documents. The project tasks included environmental constraints mapping and assessment, geotechnical analysis, public meetings, survey, roadway design, floodplain mapping, CLOMR and LOMR application, preparation of construction plans and specifications included SWPPP, permitting, bid phase services, and construction oversight.

Oak Knoll Drainage Improvements – City of Austin, Texas: Project Manager for final design of 3,500 LF of storm drain retrofit to a 1970s residential subdivision to accommodate Atlas 14 design flows. Design included modification of existing surface ponds to maximize storage volume as well as design of a new 1-acre-foot underground detention storage system.

Laura designed 2D and 1D hydraulic modeling. The project Phase 1 Environmental assessment uncovered a contamination plume that required rework of the proposed detention pond design. The project results in reduced flooding for more than 21 homes.

Truck Bypass FM 967 to FM 1624 – Hays County, Texas: Quality Assurance for the drainage and water quality analysis for approximately 1.92 miles of new roadway between RM 967 and FM 1626 and widening of approximately 2,000 LF of road for RM 967 and FM 2770. The project is partially over the Edwards Aquifer and required calculations for Total Suspended Solids (TSS) removal to meet TCEQ requirements. Laura performed H&H modeling for minor cross drainage structures and parallel drainage systems (inlets, open channels, ditch and storm sewer).

IH-35 San Marcos – TxDOT Austin District, San Marcos, Texas: Drainage Task Lead who performed hydrologic (HEC-HMS) & hydraulic (HEC-RAS) modeling and schematic drainage design for 5.6 miles of roadway improvements to widen the existing roadway. The drainage design Laura performed included hydrologic and hydraulic analysis of parallel ditches and storm sewer, six cross culverts and three bridge/bridge class culverts. Proposed improvements included the sizing of two detention structures and floodplain delineations to mitigate for project conveyance increases along four FEMA Zone AE streams with floodways.

US 79 Improvements – TxDOT Austin District, Round Rock, Texas: Drainage Task Lead who performed hydrologic (HEC-HMS) and hydraulic (HEC-RAS) modeling and schematic drainage design for 2.5 miles of roadway improvements to widen the existing roadway. The drainage design Laura performed included hydrologic & hydraulic analysis of four cross culverts, one bridge, and storm sewer system.



Stephen Van Kampen-Lewis

Environmental - Natural Resources



12 Years of Experience

Education

MBA | Business
Administration | University of
Hawaii at Manoa | 2008

Bachelor of Arts | Marine
Sciences | University of Hawaii
at Hilo | 2004

Permits

Certified Advanced Open
Water Diver

PADI Professional Association
of Diving

Background

Stephen is a project manager with experience in karst biology, geology, hydrogeology, and endangered species issues. His fieldwork experience includes geologic and karst assessments, cave biota collection surveys, Eurycea salamander presence/absence surveys, and habitat assessments for karst invertebrates and Eurycea salamanders. Stephen is also entrenched in regulatory issues relevant to Williamson County pertaining to karst invertebrates and Eurycea salamanders.

Experience

Southwest Bypass Extension, Wolf Ranch Parkway to State Highway 29 – City of Georgetown, Texas: Project Manager who provided environmental services for the extension of the Southwest Bypass from Wolf Ranch Parkway to State Highway 29. SWCA has worked through several iterations of this project over the years and has provided natural resources surveys atop the Edwards Aquifer Recharge Zone, including a geologic assessment (GA), karst survey, karst feature excavation, threatened and endangered (T&E) species habitat assessment, archeological survey, and an application to the Williamson County Regional Habitat Conservation Plan (RHCP) to address potential impacts to the golden-cheeked warbler. Project activities also require the preparation of a TxDOT Categorical Exclusion for coordination with TxDOT Austin District environmental staff.

Southwest Bypass - Segment I and II, Void Excavation and Endangered Karst Invertebrate Presence/Absence Survey – Williamson County, Texas: Project Manager who excavated potential cave habitat for presence/absence survey for federally listed troglobitic invertebrates covered by Williamson County's RHCP. Performed GA and karst survey fieldwork/report preparation, T&E species fieldwork/report preparation, RHCP preparation.

2013 Williamson County Road Bond Project Work Authorization 3 – Williamson County, Texas: Project Manager and Lead Author who prepared a white paper addressing taxonomy of Inner Space Caverns mold beetle (*Batrissodes texanus*) distribution within USFWS recovery units.

2013 Williamson County Road Bond Project Work Authorization 13 – Williamson County, Texas: Project Manager, Field Surveyor, and Report Writer who performed GA fieldwork/report preparation and karst survey fieldwork/report preparation for expanded right-of-way, wrote Biological Assessment for TxDOT environmental review, prepared RHCP.

Southwest Bypass Extension – Williamson County, Texas: Environmental Specialist who serves as task lead for the performance of a GA, karst survey and report preparation, potential karst feature excavation, and T&E species habitat assessment.

Stephen Van Kampen-Lewis

Environmental - Natural Resources

Experience (Continued)

Intersection Improvements at DB Wood Road and State Highway 29 – Williamson County, Texas:

Environmental Specialist who performed geological assessment fieldwork/report preparation and karst survey fieldwork/report preparation for expanded right-of-way, wrote Biological Assessment for TxDOT environmental review, regional habitat conservation plan preparation

WCCF Biological Services – Williamson County Conservation Foundation, Williamson County, Texas:

Project Manager and Field Surveyor who perform annual biota surveys in accordance with the RHCP within approximately three dozen caves in 13 karst preserves to ascertain cave fauna health. Karst preserves are known to contain *Texella reyesi*, *Batrissodes texanus*, *Batrissodes cryptotexanus*, *Rhadine persephone*, and *Eurycea naufragia*.

On-Call Work Authorization Planning – Williamson County Conservation Foundation, Williamson County, Texas:

Project Manager who wrote and updated three annual reports (Preserve Description, Annual Activities, Management Plan) pertaining to WCCF activities for submission to USFWS in support of the Williamson County RHCP. Attended WCCF Board meetings and adaptive management meetings to answer questions and give recommendations to elected officials.

Bone Cave Harvestman Species Status Assessment Comments – Confidential Client, Multiple Counties, Texas:

Environmental Specialist who authored white paper regarding perceived vs. actual threats by red imported fire ants on the endangered Bone Cave harvestman; as discussed by USFWS. Jenny Wilson (USFWS karst lead) considered this white paper very useful for the 2018 Bone Cave harvestman species status assessment.



Christina Nielson
Environmental - Cultural Resources



17 Years of Experience

Education

Master of Arts | Anthropology |
Texas State University | 2017

Bachelor of Arts |
Anthropology | University of
Texas at Austin | 2004

License/Certifications

Texas Permitted as a Principal
Investigator by BLM in Great
Plains Region No. 19-GP-09-S

TxDOT Precertifications:

2.10.1

Background

Christina is currently responsible for the supervision of cultural resources staff, management of projects, preparation of proposals, research designs, and technical reports, and previously served as manager for archaeological collections. Christina has participated in field investigations at the survey, testing, and mitigation levels, as well as architectural survey and archaeological monitoring. She serves as field director for large survey projects and manages survey teams, assists with recommendations for historic and prehistoric site eligibility and management, coordinates access with land agents, relays information to clients, and coordinates with appropriate agencies.

Experience

South Williamson/ North Travis Mobility Project – Williamson & Travis Counties, Texas: Project Manager for background studies for portions of TxDOT roadway along IH-35 in Williamson and Travis Counties, Texas. This work involved coordination with TxDOT and THC.

Southwest Bypass Environmental Services – Williamson County, Texas: Cultural Resource Specialist who conducted pedestrian and shovel test surveys and site delineation for the proposed Southwest Bypass Roadway in the City of Georgetown, Williamson County, Texas. Assisted with report and site eligibility recommendations.

Bagdad Road Improvements Environmental Services – Williamson County, Texas: Cultural Resources Specialist who led crew in pedestrian and shovel test survey for the proposed Bagdad Road (CR 279) Project in Williamson County, Texas. Served as Task Lead, overseeing logistics and organization, and managing reporting and agency consultation for the project. Curated all photographs and records associated with the project.

Williamson County Road Bond Program PSA – Williamson County, Texas: Cultural Resources Specialist who assisted with numerous background studies and pedestrian surveys with shovel testing for projects under the bond program for Williamson County (e.g., RM 620, O'Connor Road, CR 111).

2013 Road Bond Program – Williamson County, Texas: Cultural Resources Specialist who assisted with background studies, pedestrian and shovel test surveys, and site delineation for three projects under the bond program (i.e., Arterial H, Lakeline Blvd, and CR 176). Assisted with report and site eligibility recommendations. Completed curation of field paperwork and photographs for projects subject to the Antiquities Code of Texas.

Georgetown Mays Street Extension Project – Williamson County, Texas: Cultural Resources Specialist who led crew in linear archaeological pedestrian survey. Produced cultural resources report. Also assisted with the karst survey and identified potential karst geological features within the study area.

41DN612 Staged Mitigation – TxDOT, Denton County, Texas: Project Archaeologist for excavations of a Transitional Archaic burned rock midden site. Responsibilities included overall project management, leading the excavations, reporting, analyses, and curation.

Christina Nielson

Environmental - Cultural Resources

Experience (Continued)

FM 110 Re-Evaluation Cultural Resources Services – Hays County, Texas: Project Manager for ongoing fieldwork, reporting, and client coordination for an intensive pedestrian survey of portions of TxDOT roadway in San Marcos in Hays and Caldwell Counties, Texas. This work involves coordination with TxDOT and the Texas Historical Commission (THC). Texas Antiquities Permit #8509.

26x3 Evergreen 948 ELP Environmental Services CP&Y – TxDOT, Williamson and Travis Counties, Texas: Project Manager for background studies, fieldwork, reporting, and client coordination for an intensive pedestrian survey for portions of TxDOT roadway along IH-35 at Parmer Lane and SH 45. This work involved coordination with TxDOT and THC. Texas Antiquities Permit #7988.

2016 Statewide Archeological Survey – TxDOT, Various Counties, Texas: Project Manager and Cultural Resources Specialist who led crews in shovel test and backhoe trench surveys and site delineation for numerous road and bridge projects across the state of Texas. Co-authored numerous survey reports and assisted with report formatting and editing. Performed management duties including project set-up, invoicing, QA/QC, and report reviews.

State Highway 32 (Piper Plantation) Mitigation – Cameron County, Texas: Cultural Resources Specialist who conducted background research of the historic-age plantation and assisted with artifact analysis and reporting. Curated all photographs, records and artifacts collected during the testing project.

South Texas IEs and Surveys – TxDOT, Various Counties, Texas: Cultural Resources Specialist who conducted numerous impact evaluations of bridge replacement locations. Reported recommendations to TxDOT for archaeological survey through Impact Evaluation reports.

Siren Site (41WM1126) East Side IH 35 – TxDOT, Williamson County, Texas: Cultural Resources Specialist/ Laboratory Manager who excavated a multiple occupation site with numerous cultural features within Interstate 35 right-of-way along the South Fork of the San Gabriel River. Processed field artifacts and samples, organized artifacts for later analysis, created artifact and sample inventories. Prepared special samples for analysis. Managed laboratory analyses and curation of artifacts, paperwork, and photographs.

Siren Site (41WM1126) West Side IH 35 Investigations – TxDOT, Williamson County, Texas: Cultural Resources Technician who excavated a multiple occupation site with multiple features within IH 35 right-of-way along the South Fork of the San Gabriel River. Processed field artifacts and samples, organized artifacts for later analysis, created artifact and sample inventories. Prepared special samples for analysis. Assisted with report writing and completed curation of artifacts, samples, paperwork, and photographs.

US 175 Anderson County Scraping and Data Recoveries – TxDOT, Anderson County, Texas: Project Manager and Principal Investigator for scraping at potential burial locations and excavations of multi-component, late-nineteenth to twentieth-century farmstead and Caddo campsite along US 175 in Anderson County, Texas. Responsibilities include overall project and staff management and overseeing the excavations, reporting, and later analyses and curation.



Jason Martwig, PE
Structural



22 Years of Experience

Education

Bachelor of Science | Civil Engineering | Texas Tech University | 1999

License/Certifications

Texas Professional Engineer No. 99295

TxDOT Precertifications:

5.2.1, 5.3.1, 5.5.1

Background

Jason has 22 years of experience in structural engineering and design of major civil engineering projects. His experience includes the design of minor off-system bridges; major highway bridges; major railroad bridges; and multi-level, fully directional highway interchanges. These projects have encompassed a wide variety of structural elements including: drilled shaft and spread footing foundations; drilled shaft, cantilevered and MSE retaining walls; prestressed concrete I-beam and U-beam girders; simple-span steel plate girders, continuous-span steel plate girders, simple-span trapezoidal steel box girders, and simple-span steel through plate girders.

Experience

Ellis County and Navarro County Bridge Replacements – TxDOT Dallas District:

Quality Manager for two on-system bridge replacements; FM 637 at Cedar Creek and FM 308 at Draw. The two bridge replacements were stage constructed with one-lane, two-way signal controlled traffic control and required that the broken-back existing fat-slab bridge utilize a retrofitted edge beam/barrier for strengthening. FM 637 utilized Slab Beams and FM 308 utilized I Girders.

Annual Structural On-Call Engineering Services – City of Irving, Texas:

Structural Engineer responsible for designing the structural elements in coordination with the City trail design and the H&H Lead Engineer. Task orders included retaining wall assessment, steel water tank assessment and repair recommendations with details, a pedestrian bridge design including associated H&H modeling and report, creek bank stabilization design and assessment and repair recommendations for several City owned buildings. The project included a new 300-foot pedestrian bridge. Jason modeled different bridge types and lengths coordinating the trail alignment alteration for the various bridge options. This collaborative effort resulted in a cost-effective alternate bridge type from the conceptual plan. He also designed a 4-span TxDOT-style bridge to satisfy the hydraulic impact limitations without altering the channel cross section.

Denton County Bridge Replacements – TxDOT Dallas District: Bridge Task Lead for two on-system bridge replacements; FM 428 at Pecan Creek and FM 2153 at Culp Branch. The two bridge replacements were stage constructed with one-lane, two-way signal controlled traffic control and required that the broken-back existing fat-slab bridge utilize a retrofitted edge beam/barrier for strengthening.

FM 373 at Dry Elm Creek – TxDOT Wichita Falls District: Bridge Task Lead responsible for 1160 ft of roadway replacement and a 110 ft single span bridge replacement for the 2-lane FM 373 Bridge at Dry Elm Creek. This was a fast-tracked project for the Wichita Falls District with a total design schedule of 60 days from notice to proceed to final PS&E. The existing bridge was a three span CIP concrete pan girder superstructure with two column concrete bents and abutments. The bridge lies in a tangent section of the roadway and at the bottom of a sag vertical curve.

Jason Martwig, PE

Structural

Experience (Continued)

FM 1358 at Salt Branch, Live Oak County – TxDOT

Corpus Christi District: Bridge Engineer. The project site is located 3.1 miles east of SH 72. Constructed in 1951, the existing bridge is located in a tangent roadway section and the preference is to maintain the existing horizontal alignment for the bridge replacement structure. The vertical profile was raised to accommodate the new bridge structure depth and required hydraulic freeboard. In addition, the bridge was lengthened with slope embankment headers. The proposed bridge replacement structure utilizes TxDOT prestressed concrete slab beams with exterior T223 bridge rails to minimize impacts to the main channel and vertical profile.

IH 35 Underpass at Yager Lane – TxDOT Austin

District: Bridge Engineer responsible for designing three 2-span, prestressed U-beam structures over IH 35. Design considerations for the underpass and the two adjacent IH 35 turnaround bridges include designing the substructure through an existing culvert and designing cantilevered beam supports for the turning radii in the turnaround bridge decks. An existing three cell box culvert crossed under IH 35 on a 30° skew. Special bridge substructure details were prepared for placing drilled shafts through the existing culvert and the culvert extension with an additional drainage cell bored under the freeway.

Wurzbach Parkway – TxDOT San Antonio District:

Bridge Engineer responsible for designing four multi-span prestressed I-beam structures on the proposed Wurzbach Parkway, including the Blanco Road Overpass, the San Antonio River Authority (SARA) Dam #7 Emergency Spillway Bridge, the Walker Ranch Bridge and the West Avenue Overpass. Jason was responsible for the layout of 15 MSE retaining walls adjacent to the Blanco Road Overpass, the Emergency Spillway Bridge, and the West Avenue Overpass. He was also responsible for the layout of a soil nail wall parallel to the west bound frontage road.

Spur 366 (Woodall Rodgers) Extension – TxDOT

Dallas District: As Bridge Engineer, Jason designed the extension of the existing Main Lane Bridges of Spur 366 to the East levee of the Trinity to tie in to the proposed Margaret Hunt Hill “Signature” bridge, as well as four ramp bridges to connect Spur 366 traffic to IH 35 and Industrial Boulevard. He served as structural engineer for the 0.66 mile Spur 366 extension from east of IH 35E to west of the Trinity River with a tie into Singleton Blvd. The project involved the reconstruction of the existing Beckley Ave and Continental Ave cloverleaf interchange and the Spur 366 and Riverfront Blvd intersection. The final PS&E project included schematic refinement, urban aesthetic design, field surveys, geotechnical, SUE, traffic control, roadway design, storm drainage design, retaining walls, bridge design, illumination, temporary/permanent traffic signals, SW3P and pedestrian elements.

IH 10 Schematic & PS&E – TxDOT Beaumont

District: Bridge Task Lead on the Schematic and PS&E development of the IH 10 corridor (from Walden Road to Boyt Road). Jason was responsible for the design of two bridge replacements and one bridge widening along IH 10. The Brooks Road Underpass is a six span PS concrete I-girder structure over IH10. The Willow Marsh Creek Bridge is a three span PS Concrete Slab Beam bridge. The Walden Road Overpass is a PS concrete I-girder widening of and Existing three span continuous rolled steel I-girder bridge.

SH 161/SH 183 Interchange – TxDOT Dallas District:

Bridge Task Lead. Through a TxDOT Bridge Division indefinite delivery contract, the design team was assigned to provide final PS&E bridge plans for three Direct Connectors in the existing interchange for the Dallas District. To meet the District’s letting schedule, the signed and sealed submittal had to be completed in 13 weeks.