

December 29, 2020

Williamson County Purchasing Department  
100 Wilco Way, Suite P101  
Georgetown, Texas 78626

Re: RFQ# T2666 Planning for Ronald Reagan Corridor

Dear Selection Committee Members:

Rodriguez Transportation Group, Inc. (RTG) is pleased to submit this statement of qualifications (SOQ) and express our interest in performing engineering services to assist Williamson County in the development of schematics to add control access lanes to Ronald Reagan between RM 2243 and IH 35. RTG is an Austin-based professional engineering firm established in 1996 and is registered with the Texas Board of Professional Engineers (TBPE: F-587). RTG provides services from preliminary engineering and final design through construction phase services, including feasibility studies, route location studies, preliminary and final design schematics, right-of-way determination and preparation of construction plans (PS&E). Our team has extensive experience in the planning and design of urban and rural facilities, from county roads to controlled-access facilities. Our engineers and technicians average over 20 years of experience in the planning and design of transportation facilities and have developed a reputation for delivering quality service with a cooperative team spirit.

The selection of our team provides the following:

- An Austin based team with significant local experience. As Austin residents, we are extremely familiar with the needs and challenges of the roadways in Williamson County. These aren't just roadways, they are the roads that our families drive daily, and we are invested in ensuring they are designed at the highest level of quality.
- A team with a longstanding history working in and for Williamson County. We understand the County's needs and unique environmental constraints and possess the skill set to successfully deliver the planning project. As Prime, RTG is currently working on Southeast Loop (Segment 1/Phase 1) and recently completed the Georgetown Inner Loop for Williamson County and completed 183A Phase III for the CTRMA / TxDOT, with many of the same team members we are proposing for this program. We possess the depth of experience and breadth of local knowledge to provide design solutions that reflect the County's goals, objectives and values.
- Project Manager Robert Carrillo, PE has over 30 years of experience managing complex projects in Central Texas. In the past 10 years, I have successfully delivered Georgetown Inner Loop, 183A Phase II and III, and SH 45SW. All these projects had numerous environmental constraints and are located over the Edwards Aquifer. I understand the nuances and challenges that will be presented on the Ronald Reagan Corridor. I will be supported by David Krizan as Roadway Design Lead, who brings decades of experience providing "turn-key" production on significant projects in Central Texas. Our combined experience ensures that no matter the challenge, we know how to develop effective, efficient, and innovative solutions to solve it.

All effort required to perform the engineering services will be out of our local Austin office. This ensures team cohesiveness and reduced response time to Williamson County when needs arise. Although not anticipated, if additional resources are needed, RTG has offices in Dallas, San Antonio, Houston, and El Paso to provide support services.

| Austin Office (Office Performing Work)   | Project Contact  |
|--|--|
| 11211 Taylor Draper Lane, Suite 100<br>Austin, TX 78759<br>512.231.9544 (ext. 108) | Robert Carrillo, PE - Project Manager<br>rcarrillo@rtg-texas.com |

The RTG Team is excited to have an opportunity to support Williamson County by providing resources focused on improving the mobility, quality of life and economy of the Central Texas Region. If you have any questions regarding this submittal, please contact me at 512.231.9544 (ext. 108) or [rcarrillo@rtg-texas.com](mailto:rcarrillo@rtg-texas.com).

Sincerely,

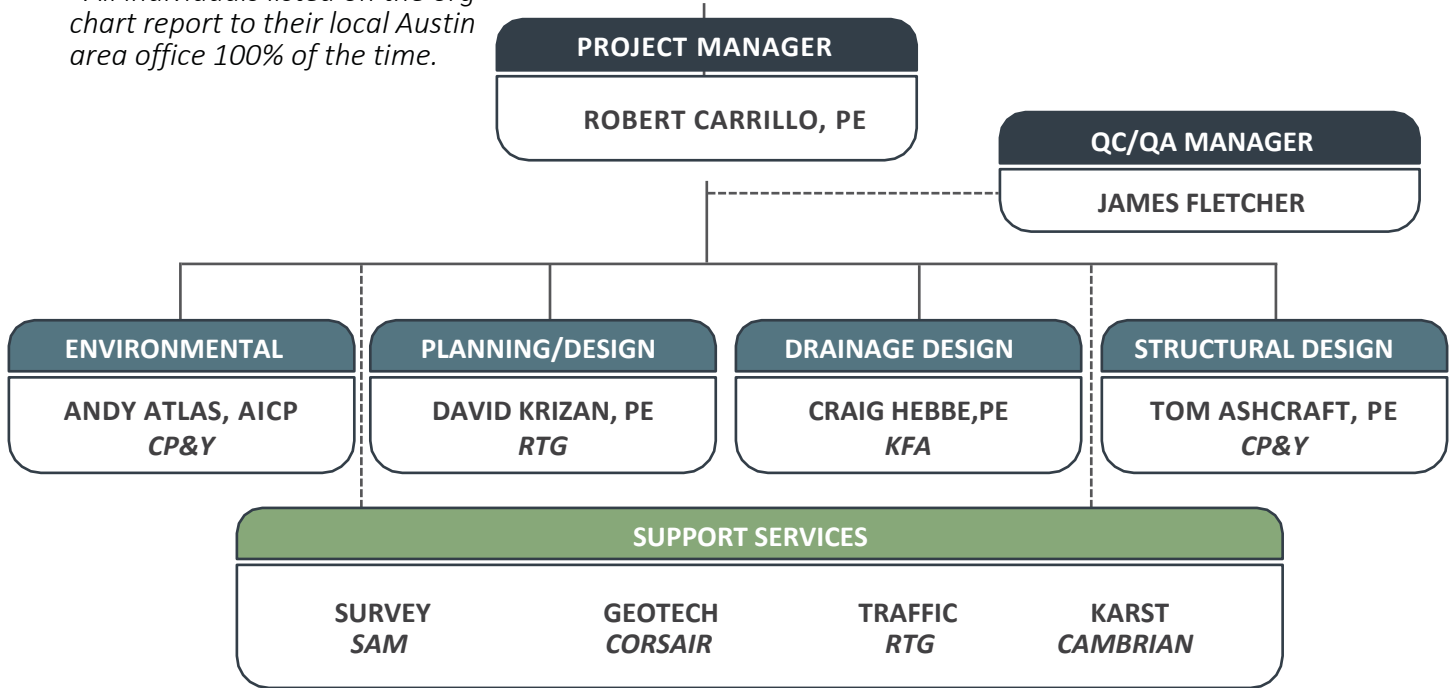
Rodriguez Transportation Group, Inc.



Robert Carrillo, PE



*\*All individuals listed on the org chart report to their local Austin area office 100% of the time.*



RTG’s organizational chart includes key task leads for the required disciplines. We added additional support services (if needed) to manage survey geotech, traffic or karst survey needs. Our team has a shared history working together on environmentally sensitive projects, including SL 360, SH 45SW and the 183A projects for TxDOT and the CTRMA. We have extensive experience working on Williamson County projects and can hit the ground running upon NTP with a team that understands each other as well as the County’s preferences and standards.

| Company:                             | Physical Austin Address:  |
|--------------------------------------|---|
| Rodriguez Transportation Group (RTG) | 11211 Taylor Draper Lane, Suite 100<br>Austin, TX 78759<br>P: 512.231.9544        |
| Cambrian Environmental               | 4422 Pack Saddle Pass, Suite 204<br>Austin, TX 78745<br>P: 512.663.0156           |
| Corsair Consulting                   | 1505 Volta Drive, Suite 200<br>Cedar Park, TX 78641<br>P: 512.342.8877            |
| CP&Y                                 | 13809 Research Boulevard, Suite 300<br>Austin, TX 78750<br>P: 512.349.0700        |
| K Friese & Associates (KFA)          | 1120 S Capital Of Texas Highway, Suite 100<br>Austin, TX 78746<br>P: 512.338.1704 |
| Survey and Mapping (SAM)             | 4801 Southwest Parkway, Bldg. 2, Suite 100<br>Austin, TX 78735<br>P: 512.447.0575 |

**Robert Carrillo, PE**

Robert is a senior Project Manager with 31 years of experience, including 7 years with TxDOT and 19 at RTG. Throughout his career, he has remained committed to completing projects from start to finish, regardless of the duration. Over the past 10 years, he worked on multiple projects located over the Edwards Aquifer (ex. SL 360, SH 45 SW, 183A PH2 & 3, Gattis School Road and Georgetown Inner Loop), each with varying degrees of environmental constraints and commitments. He understands the entire project development process and will be proactive in inter-disciplinary coordination and use “lessons learned” to identify and mitigate project issues. Robert has provided expert witness testimony for over 50 special commissioners hearings, including recent hearings on 183A PH3 and GSR, and will use this experience when identifying ROW needs. He is a respected engineer who encourages his team to collaborate and think outside the box for innovative solutions to increase effectiveness, enhance safety, and ensure our Client’s project goals are met. A few representative projects include:

| SL 360 Program (from Spicewood Springs to S. Mopac) |   |                  |               |
|---|---|------------------|---------------|
| <b>Client:</b>                                      | TxDOT Austin  | <b>Location:</b> | Travis County |
| <b>Description:</b>                                 | GEC’s Ready-To-Let Manager for the program that proposed to replace 7 signalized intersections with grade separations. Portions of the corridor are in threatened and endangered species habitat for the Jollyville Plateau Salamander, karst invertebrates and the Golden-Cheek Warbler. Robert provided guidance to TxDOT’s PMs and the segment engineers during conceptual alternative development, the geometric schematic phase and ultimately the PS&E for all projects. He participated in bi-monthly calls and made sure the segment engineers understood the environmental constraint implications. Robert led the traffic modeling coordination efforts with Steve Sharma (RTG) for the entire program, helping to define the ramp spacing and intersection geometry. |                  |               |
| <b>Relevance to WilCo:</b>                          | <ul style="list-style-type: none"> <li>• Helped communicate and track environmental constraints to the Segment Engineers</li> <li>• Educated TxDOT staff on the benefits of Geophysical Surveys (ex. P-Wave Analysis, ER Surveys)</li> <li>• Identified alternative approaches to securing traffic volumes due to the pandemic impacts</li> </ul>   |                  |               |

| 183A Phase 3 (from North of CR 258 to Hero Way) |   |                  |                   |
|---|---|------------------|-------------------|
| <b>Client:</b>                                  | CTRMA/TxDOT   | <b>Location:</b> | Williamson County |
| <b>Description:</b>                             | Project Manager for schematic refinement and subsequent PS&E for 6-mile mainlane extension of urban “ultimate” 6-lane controlled access tollway located over the Edwards Aquifer Transition Zone. Initial schematic proposed a reverse crown ML typical section with the intent of using the median and a vegetative filter strip. This concept was abandoned, and Robert led the effort to revise the schematic, which required lengthening and adding bridges to accommodate water quality ponds. Robert was proactive in requesting geophysical surveys at the 183A/SH 29 intersection to confirm the absence of significant voids. He also requested additional OHWM/wetland surveys be conducted in a drainage easement scheduled to be disturbed, therefore avoiding potential permitting delays. |                  |                   |
| <b>Relevance to WilCo:</b>                      | <ul style="list-style-type: none"> <li>• Has the experience required to proactively identify and resolve inter-discipline issues</li> <li>• Understands how oversights during planning can have negative consequences on the project development process and will work to eliminate similar oversights.</li> </ul>  |                  |                   |

| SH 45 SW (from S. Mopac to FM 1626) |  |                  |                        |
|-------------------------------------|--|------------------|------------------------|
| <b>Client:</b>                      | CTRMA/TxDOT  | <b>Location:</b> | Travis and Hays County |
| <b>Description:</b>                 | Project Manager for schematic refinement and subsequent PS&E for construction of 4-miles of new location 4-lane tollway located over the Edwards Aquifer recharge zone. During the planning phase, Robert review the technical reports and commented on commitments. One commitment that required 100% of the project be built on embankment (fill) be reduced to 90%. The minor revisions saved money by allowing flexibility during finalization of the design profile. During PS&E, Robert participated in Technical Workgroup Meetings with City of Austin, Travis County, BSEACD, TxDOT and CTRMA subject matter experts identifying strategies to minimize the projects impacts and increase water quality protection. |                  |                        |
| <b>Relevance to WilCo:</b>          | <ul style="list-style-type: none"> <li>• Schematic revision resulted in increased long term design flexibility, increased safety and a minimized project footprint, while maintaining compliance with environmental commitments</li> <li>• Lessons learned during planning and the TWG meetings will be applied where viable</li> </ul>  |                  |                        |

**David Krizan, PE**

David is a senior PM with 34 years of experience, including 10 years with TxDOT where his work ranged from project construction inspection to project management. He has served as Task Lead or Project Manager for numerous projects ranging from rural roadway widening to the design of new location freeways. These projects include geometric design, schematic design, full PS&E, earthwork/grading, retaining wall and bridge layouts, and traffic control. Representative projects include:

| <b>Southeast Loop, Segment 1, Phase 1</b> |  |
|---|--|
| <b>Client:</b>                            | Williamson County  |
| <b>Location:</b>                          | SH 130 to CR 137   |
| <b>Description:</b>                       | Deputy PM/Roadway TL for the schematic refinement and PS&E preparation for the EBFR of the ultimate SE Loop freeway facility from SH 130 to US 79. David led the design effort to revise schematic to include an additional bridge to eliminate retaining walls approaching 45' tall. Inclusion of additional bridge required coordination with WILCO Flood Plain Administrator to ensure no adverse impacts to SCS Pond 21 tributary. Revised PS&E to include a left turn lane on CR 137 at the project terminus. He led the geometric revisions to the schematic, plan preparation, coordination with subs and PS&E development and submittal. |
| <b>Relevance to WilCo:</b>                | <ul style="list-style-type: none"> <li>Coordinated with WILCO Floodplain administrator to ensure no flooding downstream</li> <li>Initial segment of ultimate freeway facility. Provisions included for ultimate facility.</li> </ul>   |
| <b>Team:</b>                              | RTG- Prime; CP&Y- Structures, Environmental; K Friese- Drainage  |

| <b>183A Phase III – from Hero Way to 1 mile north of SH 29</b> |  |
|--|--|
| <b>Client:</b>   | CTRMA / TxDOT  |
| <b>Location:</b>   | Williamson County  |
| <b>Description:</b>  | Roadway TL for the schematic revisions and PS&E development for the 6 mile mainlane extension. David led the design effort to reverse the crown of main lanes (schematic provided main lane cross slopes falling to inside) to a typical 2.50% to the outside. Required geometric revisions to nine ramps while maintaining weave distances and control of access requirements. An additional ramp was added to the project after 30% submittal. This required the shifting of two original ramps to meet the required weave distances. David revised the schematic, prepared exhibits, and led discussions concerning the impacts with the inclusion of the ramp. The ramp was approved and included with the PS&E. The \$173 million project included 54 retaining walls, seven bridge crossings, ITS, and water quality ponds in this project over the Edwards Aquifer Contributing Zone. |
| <b>Relevance to WilCo:</b>                                     | <ul style="list-style-type: none"> <li>Gained geometry revisions experience accommodate water quality BMPs while balancing other constraints. Worked closing with client during the schematic refinement.</li> <li>Water quality was of utmost importance driving the geometric design in some cases</li> </ul>  |
| <b>Team:</b>   | RTG- Prime; CP&Y- Structures, Environmental; K Friese- Drainage; Corsair- Geotech  |

| <b>SH 45 SW</b>            |   |
|----------------------------|---|
| <b>Client:</b>             | CTRMA / TxDOT   |
| <b>Location:</b>           | Travis / Hays County  |
| <b>Description:</b>        | Roadway TL for schematic refinement and PS&E preparation for SH 45 SW, a 3.6 mile 4-lane toll road connecting Loop 1 to FM 1626. Project located over the Edwards Aquifer Recharge Zone and required protection of over 20 sensitive features, including Flint Ridge Cave. David assisted with the schematic refinement to include safety enhancements, minimize the project footprint and provide for long term flexibility, while maintaining compliance with the environmental commitments. Project included a multi-level interchange at Loop 1, grade separated intersection at Bliss Spillar, retaining walls, 1 river crossing, and shared-use path. |
| <b>Relevance to WilCo:</b> | <ul style="list-style-type: none"> <li>Worked closely with CTRMA/GEC to refine schematic and re-evaluation</li> <li>Meeting environmental compliance for water quality was of utmost importance</li> <li>Developed innovative SPUI with FM 1626, reducing construction cost and footprint</li> </ul>  |
| <b>Team:</b>               | RTG- Prime; CP&Y- Structures., Env.; K Friese- Drainage; Cambrian – Karst; SAM- Survey  |

**DRAINAGE DESIGN EXPERIENCE**

**Craig Hebbe, PE** will lead drainage and WQ design. We have worked with Craig on numerous projects over the past 2 decades and with KFA since 2008, and we know the value KFA brings to any project, but particularly those with challenging offsite impact analysis and sensitive karst environments. Craig was the design engineer for an 8-mile extension of RR Blvd. from RM 1431 to SH 29 working on the H&H impact analysis, SWPPP, and WQ design including permitting 3 WPAPs and 1 CZP with TCEQ. KFA and Mr. Hebbe’s experience with regional specifics for H&H impact assessment and mitigation and TCEQ WQ design and permitting has continued. KFA has delivered a range of projects in the WILCO area with RTG, including the following:

| 183A Phase II and III |   |                  |                   |
|-----------------------|---|------------------|-------------------|
| <b>Client:</b>        | CTRMA / TxDOT   | <b>Location:</b> | Williamson County |
| <b>Description:</b>   | <p>For 183A Phase III from Hero Way to CR 258, KFA performed schematic and PS&amp;E design. Like the RR corridor, this project spanned 2 river sheds and included 1 bridge and 8 cross culverts. At the end of the schematic phase, TxDOT adopted NOAA Atlas 14 precipitation data, so KFA revised all cross drainage &amp; impact analysis for PS&amp;E to meet a tight schedule. The Brushy Creek hydrologic best available model was not impacted since it was based on gauge analysis, but the other model required updates Atlas 14 data. KFA assessed impacts and performed mitigation for each cross structure early so the design team could incorporate the required changes. During initial evaluations, the RTG-KFA team successfully met schedule &amp; budget while providing sufficient accuracy for ROW/easement identification &amp; bridge limits, as evidenced by limited drainage-driven design changes. KFA worked with karst specialists to prepare the E&amp;S plan, SWPPP, and TCEQ CZP (currently under review). The team applied design &amp; construction lessons learned from SH45SW (automated coordinated batch detention (BD) ponds, TxDOT geomembrane liner specification, sodding for pond vegetation establishment), from 183A Phase II from 1431 to Hero Way (rip rap use &amp; placement, pond berm compaction &amp; inspections, &amp; ground water low flow bypass).</p> |                  |                   |
| <b>Team:</b>          | RTG- Prime; K Friese- Drainage and Water Quality TL   |                  |                   |

| SH 45SW             |  |                  |        |
|---------------------|--|------------------|--------|
| <b>Client:</b>      | CTRMA / TxDOT  | <b>Location:</b> | Austin |
| <b>Description:</b> | <p>The CTRMA, in conjunction with TXDOT, developed a new tollway from FM 1626 in Hays Co. to the Loop 1/SH 45 intersection in Travis Co. The 4-mile greenfield project included a 4-lane roadway, interchange improvements, and a shared use path. Located within the Edwards Aquifer Recharge &amp; Transition Zones, the project crosses 3 creek watersheds. KFA designed offsite drainage, assessed impact &amp; risk, coordinated with floodplain administrators, prepared permanent WQ design per TCEQ EAPP and consent decree requirements, and prepared the TCEQ WPAP permit. KFA supported public outreach events, public meetings, and stakeholder coordination; led Technical Work Group WQ discussions; and refined design features such as redundant pond lining systems and the BD pond automated systems, which were selected to maximize treatment, reduce excavation depths in the sensitive karst area, and allow for remote monitoring. KFA worked with Mr. Hebbe, who was then designing BD ponds for the MoPac project, to build consistency between TxDOT and CTRMA approaches.</p> |                  |        |
| <b>Team:</b>        | RTG- Prime; K Friese- Drainage TL  |                  |        |

| Southeast Inner Loop |   |                  |                   |
|----------------------|---|------------------|-------------------|
| <b>Client:</b>       | Williamson County   | <b>Location:</b> | Williamson County |
| <b>Description:</b>  | <p>Due to growing demands on the SE Inner Loop corridor due to development, Wilco widened the roadway to the north, adding capacity with westbound right turn lanes. The project is in Edwards Aquifer Recharge and Transition Zones and had to comply with both TCEQ regulations and the stricter COG WQ Ordinance, which requires removal of 85% total suspended solids (TSS) loads at each outfall. KFA provided WQ design and permitting. To meet the aggressive WQ goals, KFA proposed two batch detention ponds that provide a high removal efficiency, double as hazardous materials traps, and allow for shallower excavation than filtration-based ponds. KFA designed the ponds to meet removal criteria for interim &amp; ultimate roadway conditions.</p> |                  |                   |
| <b>Team:</b>         | RTG- Prime; K Friese- Drainage TL   |                  |                   |



For this contract, RTG will utilize the expertise of CP&Y's **Tom Ashcraft, PE** to lead our structural design efforts. We have worked with Tom on numerous projects over the past two decades and know the value he brings to any project. Tom's expertise will ensure that no matter the structure type, our design will be effective, efficient, and focus on safety. He has led a range of projects in the Austin area, including the following:

| SH 45SW             |  |                  |        |
|---------------------|--|------------------|--------|
| <b>Client:</b>      | CTRMA / TxDOT  | <b>Location:</b> | Austin |
| <b>Description:</b> | Tom performed PS&E structural design services on this project involving four bridge widenings, two new overpasses, a 1247' long stream crossing at Bear Creek, a 100' bridge over a karst feature, and four direct connectors at the intersection of SH 45 and Loop 1. Work assignments included the development of all bridge layouts, structural design and detailing for all bridges, drainage structures, overhead sign bridges, DMS signs and toll gantries, foundations and aesthetic detail sheets. Structural elements included prestressed concrete, reinforced concrete, and structural steel. |                  |        |
| <b>Team:</b>        | RTG- Prime, Robert Carrillo- PM; CP&Y- Tom Ashcraft- Structures; Andy Atlas- Environmental   |                  |        |

| 290E/SH 130 Interchange (Manor Expressway Phase III) |  |                  |        |
|--|--|------------------|--------|
| <b>Client:</b>                                       | CTRMA  | <b>Location:</b> | Austin |
| <b>Description:</b>                                  | <p>CP&amp;Y was selected as the prime engineer to develop the PS&amp;E design for improvements to the 290E/SH130 interchange in east Austin. Within three years of opening the 290 Toll Road in 2014, commuters far exceeded initial traffic projections leading to congestion at the intersection of the two high-speed, tolled facilities. CP&amp;Y was tasked with designing a long-term solution: adding three direct connectors in order to provide a safe and efficient link between CTRMA's 290 Toll and TxDOT's SH 130 facilities. The project design also provides the construction of frontage road and ramp improvements to both SH 130 and 290 Toll including a southbound SH 130 collector-distributor road at Parmer Lane.</p> <p>CP&amp;Y proposed a unique design and project development approach to deliver the project within the demanding design schedule, obtaining buy-in from the primary stakeholders CTRMA and TxDOT. In lieu of a traditional 30% PS&amp;E submittal; CP&amp;Y developed a 30% preliminary geometric design layout that identified not only the interim improvements that would be constructed by this project but also the geometric design for the ultimate facilities to ensure their compatibility. The proposed design also factored in the construction of an additional lane in each direction on SH 130 that was built simultaneously with the interchange project as two separate projects by TxDOT. Our 30% submittal also included over 10,000 LF of bridge layouts as well as draft geotechnical, traffic, and drainage studies. The team then transitioned to a traditional PS&amp;E design submittal at the subsequent 60%, 90% and Final submittal milestones with the preliminary geometric design layout serving as a record for any future planning at the interchange.</p> |                  |        |
| <b>Team:</b>   | CP&Y- Prime  |                  |        |

| 183A Phase III – from Hero Way to 1-mile north of SH 29 |  |                  |                   |
|---|--|------------------|-------------------|
| <b>Client:</b>  | CTRMA / TxDOT  | <b>Location:</b> | Williamson County |
| <b>Description:</b>                                     | Tom provided PS&E structural design services for 6-mile mainlane extension including an underpass with separate turnaround structures at SH 29 and overpasses at Seward Junction South, Whitewing Dr., Green Valley Dr., US 183, San Gabriel Parkway and a bridge widening at Hero Way. Mainlane bridges and a SUP bridge were also included over the S. Fork San Gabriel River and separate mainlane bridges were added to accommodate proposed water quality ponds due to ROW constraints. Tom developed a Bridge Type and Cost Report that led to optimization of the bridge design and led coordinated efforts related to rock nail walls in the cut section at SH 29, structural design of the water quality pond splitter boxes and proposed neighborhood walls. |                  |                   |
| <b>Team:</b>  | RTG – Prime, Robert Carrillo- RM; CP&Y- Tom Ashcraft- Structures   |                  |                   |

**Andy Atlas** brings 25 years of experience working on a variety of transportation and environmental issues. Andy has led the environmental efforts for numerous projects in and around Austin, including for Williamson County on Corridor F: 183 (SH 29 to N CL), SH 29 from Burnet/Williamson County Line to D.B. Wood Road, and the 183 North Mobility Project. He has a strong understanding of the local environmental impacts as well as the lessons learned for how to mitigate impacts to schedule and budget when environmentally sensitive features are present. Andy has worked closely with local regulatory agencies to obtain necessary permits and ultimately receive clearance for projects ranging from EIS's to CE's within the Austin area. A few representative projects demonstrating this experience and qualifications are shown below:

| SH 45 SW EIS        |  |                  |                        |
|---------------------|--|------------------|------------------------|
| <b>Client:</b>      | CTRMA  | <b>Location:</b> | Travis & Hays Counties |
| <b>Description:</b> | Andy prepared the environmental impact statement for this complex, high-profile, 4-mile new location toll road over the Barton Springs Segment of the Edwards Aquifer (southern Travis and northern Hays counties). He participated in Regular Technical Work Group meetings, attended by numerous agencies and jurisdictions, including the US Fish and Wildlife Service, the Barton Springs Edwards Aquifer Conservation District, Hays County, Travis County, the City of Austin, TxDOT, and the Central Texas Regional Mobility Authority (CTRMA). A record of decision was issued on March 5, 2015. |                  |                        |
| <b>Team:</b>        | RTG- Prime, Robert Carrillo- PM; CP&Y- Tom Ashcraft- Structures; Andy Atlas- Environmental   |                  |                        |

| SH 29 Corridor and Safety Study |   |                  |                   |
|---------------------------------|---|------------------|-------------------|
| <b>Client:</b>                  | Williamson County   | <b>Location:</b> | Williamson County |
| <b>Description:</b>             | Andy was Environmental Task Lead on this planning study on SH 29 (Burnet County Line to DB Wood Rd) for the purpose of ROW preservation. CP&Y performed extensive environmental investigations in the project corridor: karst features survey, threatened & endangered species habitat survey, candidate & registered historical properties survey, & land-use surveys. In addition, Andy had a large role assisting in the public outreach effort. |                  |                   |
| <b>Team:</b>                    | CP&Y- Prime   |                  |                   |

| US 183 North (SH 45 to Loop 1) EA |  |                  |        |
|-----------------------------------|--|------------------|--------|
| <b>Client:</b>                    | CTRMA  | <b>Location:</b> | Austin |
| <b>Description:</b>               | Andy oversaw schematic preparation, environmental documentation, and public involvement for this 13-mile project to construct two managed lanes in each direction in the median of US 183 from SH 45 North to State Loop 1. The project includes schematic design for 13 miles of express lanes and four miles of additional general purpose lanes in each direction, including direct connectors at two interchanges and identification of ingress/egress locations between the general purpose lanes and express lanes based on origin and destination data and traffic simulations. The purpose of this \$650 million project is to facilitate congestion management, provide a reliable route for transit, and facilitate reliable emergency response. |                  |        |
| <b>Team:</b>                      | CP&Y- Prime  |                  |        |

| SL 360 Corridor Projects |  |                  |        |
|--------------------------|--|------------------|--------|
| <b>Client:</b>           | TxDOT Austin District  | <b>Location:</b> | Austin |
| <b>Description:</b>      | Andy was Env TL for 4 grade separation projects at Spicewood Springs Road, Lakewood Drive, RM 2222/Courtyard Drive, and Westlake Drive as a member of TxDOT's GEC on this 12.5-mile corridor. Projects are located in threatened and endangered species habitat for the Jollyville Plateau salamander (JPS), karst invertebrates, and Golden-cheeked warbler (GCWA), so Andy and his team prepared a Biological Evaluation for GCWA on the Westlake project and a Biological Assessment for JPS, karst invertebrates, and GCWA on the Spicewood Springs and Lakewood projects in collaboration with Cambrian. Andy also completed/oversaw Section 404 permitting, Biological Resources reports, Community Impact Assessments, Hazardous Materials ISAs, Historic Resource documentation, and Archeological surveys for the CE documents. |                  |        |
| <b>Team:</b>             | RTG- Prime, Robert Carrillo- PM; CP&Y- Tom Ashcraft- Structures; Andy Atlas- Environmental   |                  |        |

| Key Task Lead  | Current Projects / % Committed / Completion  | Proposed Projects / % Committed                         |
|--|--|---|
| <b>Project Manager:</b><br>Robert Carrillo, PE<br><br>65% committed to WILCO | <ul style="list-style-type: none"> <li>• 183A (CPS) / 10% / est. July 2024</li> <li>• SL 360 GEC / 10% / est. July 2023</li> <li>• IH 35 Central / 10% / ets. July 2023</li> <li>• Gattis School Road / 5% / est. Mar 2020</li> </ul>  | <ul style="list-style-type: none"> <li>• N/A</li> </ul> |
| <b>Planning / Design:</b><br>David Krizan, PE<br><br>45% committed to WILCO  | <ul style="list-style-type: none"> <li>• IH35/US 183 (CPS) / 10% / est. August 2021</li> <li>• FM 324 / 5% / est. August 2021</li> <li>• IH 35 Central / 5% / est. July 2023</li> <li>• SE Loop PH I, Seg 1/ 35%/est. May 2022</li> </ul>  | <ul style="list-style-type: none"> <li>• N/A</li> </ul> |
| <b>Environmental:</b><br>Andy Atlas, AICP<br><br>70% committed to WILCO      | <ul style="list-style-type: none"> <li>• SL 360 GEC / 5% / Summer 2021</li> <li>• I-35 CapEx Central EIS / 10% / Fall 2023</li> <li>• TxDOT ENV Misc Projects / 10% / Spring 2021</li> <li>• TxDOT HOU Misc Projects / 5% / Fall 2021</li> </ul>   | <ul style="list-style-type: none"> <li>• N/A</li> </ul> |
| <b>Structural Design:</b><br>Tom Ashcraft, PE<br><br>50% committed to WILCO  | <ul style="list-style-type: none"> <li>• Corridor E Improvements, Williamson Co / 5%/ Spring 2021</li> <li>• TxDOT Beaumont District Bridge Replacements, Chambers and Newton counties / 10% / Spring 2021</li> <li>• TxDOT Bridge Division Bridge Repairs, TxDOT Odessa and San Angelo Districts / 5% / Spring 2021</li> <li>• City of Fort Worth Bridge Repairs, Fort Worth / 5% / Fall 2021</li> <li>• TxDOT Yoakum District Bridge Replacements, TxDOT Yoakum District / 15% / Winter 2022</li> <li>• IH 35 Improvements, Gainesville / 10% / Winter 2022</li> </ul> | <ul style="list-style-type: none"> <li>• N/A</li> </ul> |
| <b>Drainage Design:</b><br>Craig Hebbe, PE<br><br>20% committed to WILCO     | <ul style="list-style-type: none"> <li>• FM 549 / 20% / July 2021</li> <li>• US 380 PS&amp;E / 20% / Sept 2021</li> <li>• US 380 Schematic / 20% / July 2022</li> <li>• Oak Hill Parkway / 20% / Dec 2021</li> </ul>   | <ul style="list-style-type: none"> <li>• N/A</li> </ul> |



RTG’s approach, as described below, is based on our understanding of the County’s desire to add controlled access lanes to the Ronald Reagan Corridor between RM 2243 and IH 35. The intent of the planning project is to establish the final geometry and define the ROW footprint that will accommodate future growth.

We will identify major tasks, design methods, criteria and guidelines, using our experience and lessons learned (ex. the ROW width of 18A Phase III was narrower than Phase II requiring longer bridges and retaining walls to accommodate water quality BMPs), from working on similar local projects. Our efforts will focus on multiple constraints such as: environmental and historical factors, home and business displacements, drainage and waterways. RTG’s Team worked on similar projects including: 183A Phase II & III, SH 45SW, and SL 360. All these projects required schematic development or schematic refinement and phased construction.

**Project Critical Issues/Initial Project Approach** – The key to success for any roadway planning is to initially assemble all relative data and history, including known project constraints and studies. A summary of project critical issues and our approach includes the following:

- Surveys – Following initial data collection, karst, historical, design, boundary, geophysical, etc. will be secured.
- Karst Zones – Primarily within Karst Zones 4, but there are larger areas of Zone 3 and pockets with the limits of Karst Zones 1 and 2 within the project t corridor. Sub surface work within zone 1-3 will need additional investigation, coordination, and documentation to comply with local, state, and federal rules and regulation regarding critical karst habitat.
- Karst Invertebrate – The due-diligence process for endangered karst invertebrate should be streamline since the County has already mitigated the entire corridor, including the ROW acquired during the original projects,
- Karst Vertebrates - The due-diligence process for endangered karst invertebrate should be streamline since currently there are no mapped sub surface critical habitats for the Austin Blinded Salamander or the Jollyville Plateau Salamander within the project corridor. We are aware of a spring in the ROW north of Berry Creek that has not been surveyed to determine the potential for effects to salamanders.
- Watersheds – Colorado River, Brazos River
- Major Creeks – Brushy Creek, South and North Fork San Gabriel River, Cowan Creek, Berry Creek & Opossum Creek. Jurisdiction and regulatory areas that the corridor crosses includes Leander, Upper Brushy Creek WCID, Georgetown, WilCo, TCEQ EAPP zones, FEMA zones and USACE jurisdictional areas. Securing best available data for each will be ASAP.
- Drainage Models - Best available models will vary from UBCWCID statistical hydrology models will not need to be updated for Atlas 14 to FEMA models that need to be updated by combining permitted LORMS and precipitation data for Atlas 14. Basins that do not have models will be developed using Atlas 14.
- Edwards Aquifer – Primarily within the Contributing Zone and Recharge zone will small areas located within the Transition Zone. Additional TCEQ Geological Assessments will be required to account for any changes in the existing ROW and to incorporate any areas of new ROW. No significant surprises are expected since most of this area was previously surveyed by Cambrian staff (team member) and significant issues have already been identified.
- Environmental Studies – Since the project is off-system and federal funding is not anticipated, environmental due diligence documentation (i.e., biological, hazmat, waters, and archeological reports) per WilCo requirements will be prepared. If the County pursues federal funding, we will work with the County to determine logical termini and ID segments of independent utility. We will then work with the County and TxDOT to complete the necessary documentation to comply with the NEPA process.
- Traffic Studies – RTG will review and update traffic projections developed by other (if available) or provide the necessary projections. The projections and operation models will be used during the design and environmental effort.
- Schematic Design – The schematic design process will take into account WilCo’s Long Range Transportation Plan, including the amended controlled access facilities map and the conceptual arterial map, environmental constraints, drainage and water quality BMP and traffic requirements. Recent updates to TxDOT Roadway Design Manual will be included as well as future updates expected to be released in early 2021. The design will consider a phased construction approach and ensure long term flexibility. Additional ROW needs will include areas for water quality BMPs and focus on the intersections to ensure sufficient space if provided.

Working to develop a successful schematic requires a thorough technical approach and foresight that only comes through the experience of taking projects both through schematic and then final PS&E, while innovating lessons learned from reflections on construction and inquiries into maintenance. As a transportation focused engineering firm, RTG has the depth of experience and understanding of how to creatively solve problems to provide expedited, cost-effective design solutions.

Attached please find resumes for our key staff as indicated on our Organizational Chart in Section 2. Additional resumes for support services and additional staff are included.



## Robert Carrillo, PE Roadway Design

### EDUCATION

BS, Civil Engineering, Texas Tech University, Lubbock, Texas, 1989

### YEARS OF EXPERIENCE

31

### YEARS WITH RTG

19

### REGISTRATIONS

Professional Engineer: TX  
80169

### TXDOT PRE- CERTIFICATIONS

ESN: 6345

3.2.1, 4.2.1, 4.4.1, 7.1.1, 8.1.1,  
9.1.1, 10.1.1, 10.2.1, 11.1.1

### BIOGRAPHY

Robert Carrillo has 31 years of experience including over 7 years with TxDOT, where he performed duties ranging from project construction inspection to project management. He has been a project manager, project design engineer and project construction engineer on multiple projects located over the Edwards Aquifer. Robert's technical experience includes geometric design, schematic design, right-of-way (ROW) determination, utility coordination, and complete PS&E assembly. He has provided expert testimony in over 60 Special Commissioner Hearings supporting the ROW acquisition effort and in water quality proceedings as well. He is proficient in MicroStation, GEOPAK, AutoTURN, Primavera P6 and SureTrak.

### REPRESENTATIVE PROJECTS

#### SL 360 Program, TxDOT Austin District, Travis County, TX

GEC Ready-To-Let Manager (RTL) for program that proposed to replace 7 signalized intersections with grade separations. Portions of the corridor are located in threatened and endangered species habitat for the Jollyville Plateau Salamander, karst invertebrates and the Golden-Cheek Warbler. Project scope included oversight of conceptual alternatives development, public involvement, geometric schematic, and subsequent PS&E by Segment Engineers. Robert developed a RTL spreadsheet that tracked and communicated all aspects of project development (including ROW needs, schedule status, design exception/waivers, etc.). TxDOT appreciated the simplicity of the format and adopted it for use on the IH 35 project.

Responsibilities included contract administration, coordination GEC/TxDOT and Segment Engineer staff, communicating and tracking environmental constraints, completed special services requested by TxDOT (ex. Reviewing Roadway Design Manual revision and developing summary report of impacts to on-going PS&E. Coordinating traffic modeling to define proposed intersection geometry.

#### 183A Phase 3 Extension, CTRMA/TxDOT, Williamson County, TX

Project Manager for schematic refinement and subsequent PS&E for a 6-mile ML extension (N. of CR 258 to Hero Way) of urban (ultimate) six-lane controlled-access tollway. The schematic design (provided by others) included a reversed crown ML section that intended to use the median area as a vegetative filter strip for TSS removal. After the 30% submittal, the CTRMA decided to abandon this strategy and requested RTG refine the schematic using a normal crown configuration. The revision included lengthening and adding bridges to accommodate water quality ponds.

While reviewing environmental constraints, Robert identified missing information within a drainage easement where disturbance was planned. His pro-active approach led to additional surveys and avoided potential delay during the permitting process. Project is located over the Edwards Aquifer Contributing Zone and required preparation and approval of the TCEQ's Contributing Zone Plan. Project included 6 grade separations at major intersections, 1 river crossings, a shared-use path and over 50 retaining walls. Responsibilities included management and coordination of 9 sub-providers, design guidance, utility and ROW coordination. Robert participated in special commissioner hearings and will serve as the point of contact for construction phase services.

Lesson learned on this project that will translate include:

- When defining the ROW needs for the corridor, make sure design criteria is verified for both the interim and ultimate facility. The intended ML design speed, listed on the schematic (develop by others), was 70 mph. One ML curve only met 55 mph (controlled by sight distance) due to ROW constraints established during the planning phase.
- At project completion, data transfer needs to be accurate and prescriptive. The existing ROW files provided to us for use were based not based on boundary surveys.

# Robert Carrillo, PE

## Roadway Design

### REPRESENTATIVE PROJECTS

---

#### SH 45 SW, TxDOT Austin District / CTRMA, Travis and Hays County, TX

Project Manager for schematic refinement, environmental compliance, and subsequent PS&E for construction of 4-miles of new location 4-lane tollway. Project is located over the Edwards Aquifer Recharge Zone and the 4<sup>th</sup> largest cave in Travis County. RTG was the prime for both the planning and PS&E phase, including preparation of the environmental document. During PS&E, Robert refined the schematic, making significant changes at the SH 45 SW/Loop 1 interchange and minor changes throughout the corridor. The refinements increased safety, reduced the project footprint, provided for long-term design flexibility for future needs and maintained compliance with the environmental commitments. Following issuance of the ROD, Robert provided technical guidance for the development of the Re-evaluation Technical Memo and Design Review.

Technical Work Group meetings were held with subject matter experts from the City of Austin, Travis/Hays County, and the Barton Springs Edwards Aquifer Conservation District. These meetings led to the incorporations of best management practices that enhanced environmental protections (ex. Batch detention ponds were selected as the water quality BMP). The ponds provide geometric flexibility to fit within constrained areas, include a hazardous material trap, and were fitted with communication capabilities to ensure they were properly maintained.) Robert also served as the point of contact for construction phase services for the entire duration of construction.

#### SE Inner Inner Loop at Wilco Way, Williamson County, TX

Project Manager for schematic preparation, environmental compliance, and subsequent PS&E for the S.E. Inner Loop from Maple Street to Rockride Lane. Robert's responsibilities included contract administration, coordinating with the GEC, internal staff and nine (9) sub-providers on project related issues, preparing final PS&E packages, and providing construction phase services. Schematic development included identifying ROW requirements that would satisfy the interim and ultimate facility and subsequent preparation of ROW documents.

Environmental compliance followed WILCO's Project Level Environmental Review and Compliance Protocol. Part of the project is located over the Edwards Aquifer Recharge Zone, requiring compliance with the Edwards Rules and the City of Georgetown's Water Quality Ordinance and preparation of the WPAP for submittal to the TCEQ. The project scope changed on multiple occasions due to funding and other issues. Robert maintained communication with the GEC and design team to ensure changes were carried through all construction related documents.

#### Elroy Road, CTRMA/Travis County, Travis, TX

Project Manager for schematic preparation, environmental compliance and subsequent PS&E for 1.2 mile reconstruction of a county road to a 5-lane urban section. The roadways located in a flood prone area and is adjacent to the Circuit of the Americas racetrack. The proximity to the racetrack has led to rapid development (both residential and commercial). Given these factors, the County Commissioners wanted the replacement bridge to pass the 100-year storm event. During project development, only draft versions of the Atlas 14 rainfall study had been released that concluded (past 100-year = current 25-year and past 500-year = current 100-year event). The drainage criteria resulted in substantial changes to the replacement bridge length and profile, which resulted in an increased project footprint and the need for additional ROW.

Robert worked directly with all task leads (i.e. environmental, bridge, drainage, roadway and utility). Environmental constraints included delineation of OHWM and wetlands. Impacts had to be minimized to maintain compliance with nationwide permit requirements and to avoid the need for an individual permit. Robert also participated in MAPOs and the project was developed using OpenRoads. Robert also served as the point of contact for construction phase services for the entire duration of construction.

#### 183A Phase 2 Extension, CTRMA/TxDOT, Williamson County, TX

Project Manager for schematic refinement and subsequent PS&E for a 5-mile mainlane extension (San Gabriel Parkway to FM 1431) of urban six-lane controlled-access tollway. Project was completed within an accelerated 5-month deliverable schedule. Project is located over the Edwards Aquifer Contributing Zone and required preparation and approval of the TCEQ's Contributing Zone Plan. Project included 5 grade separations at major intersections, 2 river crossings, a shared-use path and over 33 retaining walls. Responsibilities included management and coordination of 9 sub-providers, roadway design, wall layouts, TCP, utility and ROW coordination. Robert also served as the point of contact for construction phase services for the entire duration of construction.



## David Krizan, PE Roadway Design

### EDUCATION

BS, Civil Engineering, UT  
Austin, Austin, Texas, 1983

### YEARS OF EXPERIENCE

34

### YEARS WITH RTG

17

### REGISTRATIONS

Professional Engineer: TX  
66414

### TXDOT PRE- CERTIFICATIONS

ESN: 2168

2.5.1, 3.2.1, 4.2.1, 4.4.1, 8.1.1,  
9.1.1, 10.1.1

## BIOGRAPHY

David Krizan has over 34 years of experience including over 10 years with TxDOT. He has been a project manager, roadway design task leader, project construction engineer on numerous projects. His technical experience includes geometric design, schematic design, right-of-way (ROW) determination and plans, grading and earthwork, retaining wall and bridge layouts, and PS&E assembly.

## REPRESENTATIVE PROJECTS

### 183A Phase 3 Extension, CTRMA/TxDOT, Williamson County, TX

Roadway Task Lead (TL) for schematic refinement and subsequent PS&E for a 6-mile ML extension (CR 258 to Hero Way) of urban (ultimate) six-lane controlled-access tollway. Project is located over the Edwards Aquifer Contributing Zone and required preparation and approval of the TCEQ's Contributing Zone Plan. The schematic design (provided by others) included a reversed crown ML section that intended to use the median area as vegetative filter strips for TSS removal. The CTRMA, after the 30% submittal, decided to abandon this strategy and requested RTG refine the schematic using a normal crown. The schematic revision included the lengthening and addition of bridges to accommodate water quality BMPs. The cross-slope revision required the redesign of the eight (8) ramps to accommodate the revised cross slope and inclusion of an additional ramp not included in the schematic. The ramps were redesigned to meet design criteria and weave distances to ensure optimal operation. The project included 54 retaining walls and six (6) bridge crossings.

### SH 45 SW, TxDOT Austin District / CTRMA, Travis and Hays County, TX

Roadway TL for schematic refinement and PS&E preparation for SH 45 SW, a 3.6 mile 4-lane toll road connecting Loop 1 to FM 1626. Project is located over the Edwards Aquifer Recharge Zone and required protection of over 20 sensitive features, including Flint Ridge Cave. Schematic refinement effort included identifying safety enhancements, minimizing the overall project footprint and providing for long term flexibility, while maintaining compliance with the environmental commitments. Project includes a multi-level interchange at Loop 1 and a grade separated intersection at Bliss Spillar, 1 river crossing, and shared-use path and retaining walls. Developed the construction plans for the inclusion of a Single Point Urban Interchange (SPUI) at the terminus of SH 45 SW and existing FM 1626. The SPUI allows FM 1626 NB traffic 'free flow' conditions at the intersection while providing access to/from SH 45 SW

### SE\_Loop, Segment 1, Phase 1, Williamson County, Williamson, TX

Roadway TL for the PS&E preparation and schematic refinement of Southeast Loop – Segment 1, Phase 1. Project will ultimately be the EB frontage road of the SE\_Loop freeway facility running from SH 130 to US79 in eastern Williamson County. Revised schematic provided to include a second bridge over the SCS Pond 21 tributary. The revision eliminated retaining walls approaching 45 feet in poor soils. Revised schematic to lower the elevation of the main SCS Pond 21 bridge 15', reducing retaining wall requirements and bridge costs, included a left-turn lane at the terminus of the project with CR 137, and included a right-turn bay at the SH 130 intersection. Met with affected property owners during project development to ease concerns about the proximity of proposed road to their property and safety concerns. Project is phased construction of the ultimate freeway facility – all revisions to the EBFR frontage road (lowered bridge, added bridge) were checked against the provided schematic and revisions required to schematic were developed. The revisions included re-aligned a ramp tying to the bridge to meet weave distance and design speeds.





**James Fletcher**  
QC/QA Manager

### **EDUCATION**

Civil Engineering, Texas A&M University, College Station, Texas

### **YEARS OF EXPERIENCE**

32

### **YEARS WITH RTG**

13

### **BIOGRAPHY**

James Fletcher has 32 years of experience including over 14 years with TxDOT. He specializes in the final review and processing of PS&E packages on all classes of roadways from rural widenings to urban controlled-access freeways. James' duties have included construction administration services, performing construction inspections, conducting Pre-Bid and Pre-Construction Conferences, preliminary and final review and processing of PS&E packages, and review of Contractor RFI's and Shop Drawings.

### **REPRESENTATIVE PROJECTS**

#### **TxDOT Experience:**

**Engineering Specialist, Austin District Design Office.** Ten years providing final review and processing of PS&E packages, reviewed preliminary design submissions, assisted Area Offices and contracted design consultants with PS&E preparation and interpreted new design guidelines and specifications. He served as Project Manager for Local Public Agency (LPA) projects and maintained the District General Note Masterfile and Standard Sheets. He reviewed construction plans for approximately 151 projects with a total letting value of \$395M.

**Engineering Technician, Austin District Georgetown Area Office.** Three years providing field support as Inspector/Project Manager on roadway construction projects, including calculating pay quantities, preparing Monthly Estimates, and testing and sampling of materials. Office support duties included verifying pay quantities relative to construction plans, processing of Monthly Estimate and Change Order/Extra Work Order packages, and other project administration tasks.

**Engineering Technician, Austin District North Travis Area Office.** Two years providing field support as Inspector on construction projects, including calculating pay quantities, preparing Monthly Estimates, and testing and sampling of materials.

#### **IH 35, TxDOT Waco District, McLennan County, TX**

Performed QC/QA review, prepared general notes and specifications, and led the review of construction phase service tasks for the PS&E for the reconstruction of 9.8 miles (Bruceville to FM 2063) of rural four-lane freeway to a six-lane facility, including conversion and reconstruction of existing two-way frontage roads to one-way operation. Project includes five interchanges and adjoining roadways, 20 ramps, a direct connector, 12 grade-separations, and 12 stream crossing bridges.

#### **183A Extension, CTRMA, Williamson County, TX**

Performed QC/QA review, prepared general notes and specifications, and led construction phase service tasks for the PS&E for a 5-mile mainlane extension of urban six-lane controlled-access tollway. Project required refinement of existing schematic and subsequent PS&E development within a five-month schedule.

#### **SH 45 and Loop 1, Texas Turnpike Authority, Travis and Williamson County, TX**

Performed QC/QA review of construction plans and final PS&E Packages for over tollway 18 miles. Processed eight toll road projects with a letting value of \$559.5M.

#### **Hays County Bond Program, Hays County, Hays County, TX**

Performed QC/QA review of construction plans and final PS&E packages for the Bond Program. Processed 10 road improvement projects with a total letting value of \$20.3M. Responsible for construction administration services, including conducting Pre-Bid and Pre-Construction Conferences, performing construction inspections, reviewing Shop Drawings, monitoring the testing and sampling of materials, and processing Progress Payments and Change Order packages.

#### **Chisholm Trail (Phase I), City of Round Rock, Williamson County, TX**

Performed drainage review for the PS&E for 0.7 miles of reconstructing a two-lane rural roadway to a five-lane urban section and 0.2 miles of a four-lane divided cross-street on new location (Chisholm Pkwy).



# Tom Ashcraft, PE

## Structures

### Education

Bachelor of Science, Civil Engineering, University of Texas at Austin, 1989

### Registrations

Professional Engineer:  
Texas #81411, 1996  
Oklahoma #25847, 2012  
Louisiana #37203, 2014  
Virginia #0402049989, 2014

### Years of Experience

30

### Years with CP&Y

20

### TxDOT Precertifications

5.2.1 Bridge Design  
5.3.1 Multi-Level Interchange Design

### Office Location

Austin, TX (100% of the time)

### Background

Tom has 30 years of bridge design experience in the state of Texas and manages the Structures Group for CP&Y. He has served as a bridge design task leader on numerous rural and urban projects involving new bridges, bridge replacements, widenings, retaining walls, and drainage structures. Tom is recognized for his strong technical skills and thorough understanding of structural details and plans. He is also an effective communicator who has established a reputation for providing a high level of service to a wide variety of clients. Tom is experienced in the structural analysis and design of prestressed concrete, reinforced concrete, and structural steel.

### Project Experience

#### **290E/SH 130 3 DC Interchange (Manor Expressway phase III), CTRMA, TX**

Deputy Project Manager/Bridge Design Task Leader on toll facility project for the PS&E design for the addition of three direct connectors to the existing interchange at SH 130 and US 290E. Assisted the Project Manager coordinate in-house project design staff and sub-consultants performing survey, SUE, geotechnical investigations/analysis, traffic control plans, drainage design and ITS development. Oversaw the structural design team completing the design of the direct connectors which included prestressed concrete and steel plate girder design, single, multiple and post-tensioned straddle bents, and drilled shaft foundations. Monoshaft foundations were used for single columns to save construction time and cost and mitigate impact to existing traffic. Provided QA review of the structural plans at each submittal. Coordinated activities of a subconsultant providing bridge design support and toll gantry design. Participated in bi-weekly coordination meetings with the CTRMA and TxDOT liaison and in submittal review meetings. Developed Exhibit A documents and participated in coordination meetings with the Cap Metro Transportation Authority regarding their rail crossing within the project limits. Oversaw construction phase services for shop plan review, RFI support, and design solutions for nonconforming structural items.

#### **SH 45 SW Project, CTRMA, Austin, TX**

Structural TL on RTG's team for PS&E of four bridge widenings, two new overpasses, a 1247' long stream crossing at Bear Creek, a 100' bridge over a karst feature, and four direct connectors at the intersection of SH 45 and Loop 1. Work assignments included the development of all bridge layouts, structural design and detailing for all bridges, drainage structures, overhead sign bridges, DMS signs and toll gantries, foundations and aesthetic detail sheets. Structural elements included prestressed concrete, reinforced concrete, and structural steel. Responsibilities included oversight of CP&Y staff working on the project, regular coordination with project team members, participation in CTRMA progress meetings and TxDOT review meetings, and construction phase services involving review of structural shop plans and RFI support during construction. Project is currently at a pre-final level of completion.

#### **Old San Antonio Road at Onion Creek Bridge, Travis County, TX**

Project Manager on bridge replacement project of an existing low water crossing on Old San Antonio Road at Onion Creek. Project involves evaluation of replacement alternatives, environmental assessments, public involvement, utility coordination, survey, geotechnical investigations, roadway design, bridge design, traffic control, survey, and hydraulic design. Managed the preliminary engineering and final PS&E plan development. Responsibilities include coordination and management of in-house design staff and seven subconsultants performing environmental and engineering support services. Regularly coordinates with the Travis County project manager concerning project issues and progress and handles invoicing and other non-technical management aspects required on the project.

# Andy Atlas, AICP

Environmental

## Education

Master of Science,  
Community and Regional  
Planning, University of  
Texas at Austin, 1997

Bachelor of Arts, Spanish,  
University of Texas at  
Austin, 1983

## Registrations

American Institute of  
Certified Planners, Texas  
#110792, 1999

## Years of Experience

25

## Years with CP&Y

17

## TxDOT Precertifications

1.1.1, 1.3.1, 1.4.1, 2.4.1,  
2.6.2, 2.12.1, 2.13.1,  
2.14.1

## Office Location:

Austin, TX (100% of the  
time)

## Background

Andy Atlas has 25 years of experience working on a wide variety of transportation and environmental issues. He has served as environmental task manager or deputy environmental task manager on feasibility studies, categorical exclusions, environmental assessments, and environmental impact statements for roadway projects. He has worked as project manager, environmental task manager, or deputy environmental task manager on five EIS and 21 EA or EID documents that have received final regulatory clearance. Andy has extensive experience coordinating with clients and agencies, collaborating with engineers, and supervising a staff of planners, ecologists, archeologists, historians, and technicians, thus ensuring compliance with all applicable rules, regulations and current guidelines. He is bilingual in English and Spanish.

## Project Experience

### **Corridor F: US 183 (FM 3405 to N CL), Williamson County, TX**

Project Manager for a planning study on US 183 for the purpose of right-of-way (ROW) preservation from SH 29 to the Burnet County Line. The 13-mile project includes planning activities for the construction of a freeway section with up to 400 feet of ROW. CP&Y performed environmental constraints analyses, conducted public involvement, oversaw traffic modeling, and evaluated potential locations for proposed arterials and access-controlled facilities crossing US 183 within the study area.

### **SH 29 from Burnet/Williamson County Line to D.B. Wood Road, Williamson County, TX**

Environmental TL on this fast-tracked, 12 month study covering the 18.8 mile section of SH 29 between D.B.Wood and the Burnet/Williamson County line. The purpose of this almost 19-mile Corridor Study was to identify an alignment for widening SH 29 from a 4-lane undivided roadway to a 6-lane divided facility. The project was located in karst zones 1 and 2 over the Edwards Aquifer Recharge Zone and traversed endangered songbird habitat. Andy oversaw environmental investigations and the preparation of resource-specific technical reports and an environmental constraints map; he coordinated with the design team to accurately reflect and consider environmental issues during the alternative analysis; he managed the preparation of the Alternatives Analysis Report; and coordinated with the design team to avoid/minimize environmental impacts during schematic development. Finally, Andy worked with the County and the County's public outreach team to develop and implement the outreach plan that led to "informed consent" (and, subsequently, corridor preservation activities) for the SH 29 Plan.

### **SH 45SW, State EIS, TxDOT Austin District, Travis and Hays Counties, TX**

Environmental Task Manager on this new location project to construct a four-lane divided toll road from MoPac to FM 1626 in Travis and Hays Counties. Initial planning for this project began in the mid-1980s, continuing off and on until TxDOT issued the Notice of Intent for the DEIS in June 2013. Andy participated in public involvement and oversaw preparation of the DEIS, FEIS, ROD, and project file for this state and locally funded project that was completed on an aggressive, 20-month schedule. The ROD was issued in March 2015. Construction began in November 2016, 30 years after initial planning began, but less than three and a half years after CP&Y began preparation of the DEIS.

**MoKan Corridor Study, Williamson County, TX** – Project Manager on this corridor study to evaluate options for developing the abandoned Missouri-Kansas Railroad from SE Inner Loop to SH 45 North in Williamson County, Texas. Andy oversaw preparation of alternatives, development of cost estimates and traffic analyses, coordination with the GEC and Williamson County, preparation of the drainage study, intersection analyses, development of geometric layouts for various alternatives, and documentation of the results, including the Traffic Analysis Report, Drainage Study Report, SE Inner Loop Intersection Analysis Report, and Final MoKan/Kenney Fort Boulevard Report.

# CRAIG L. HEBBE, PE

Project Role | Drainage Task Lead

Mr. Hebbe has more than 21 years of design, plan production, and management experience in the transportation field. His primary responsibilities have included geometric and drainage design and preparation of plans, specifications, and estimates (PS&E) for related projects. He has extensive experience with TCEQ Edwards Aquifer water quality design, hydrologic and hydraulic computer modeling, storm sewer design, water quality pond design, cross culvert design, erosion control, preparation of Water Pollution Abatement Plans (WPAP), preparation of Storm Water Pollution Prevention Plans (SW3P), and ROW determination. Further, Craig is proficient with MicroStation, GEOPAK Drainage, HEC-RAS, WinStorm, THYSIS, HEC-HMS, HY8, and GEOPAK.

## DRAINAGE

### **CORRIDOR C SH29 BYPASS SCHEMATIC | WILLIAMSON COUNTY, TX |**

Williamson County is performing route analysis for right-of-way preservation for corridors identified in the Transportation Plan. Mr. Hebbe was the Project Manager for the drainage design for the route analysis including the drainage impacts and onsite mitigation requirements. He performed the overall hydrologic and hydraulic impact analysis for several route alternatives including identifying impacts to floodplains and creeks as well as the San Gabriel River. He also identified necessary onsite drainage infrastructure including channels and mitigation facilities to determine the right-of-way preservation requirements.

**CORRIDOR E1 PS&E | WILLIAMSON COUNTY, TX |** Mr. Hebbe served as the Drainage Task Lead for Phase 1 of the Williamson County Corridor E1 PS&E Project. Phase 1 consisted of 2 miles of existing road reconstruction and green field construction of a 2-lane road that will ultimately be the eastbound frontage road. He managed hydrologic studies, modeling, complex hydraulic design and impact assessment for 2 Bridge Crossings and multiple detention ponds. Mr. Hebbe also oversaw design of parallel drainage structures and coordinated SCS Pond #21 mitigation with UBCWCID.

**CORRIDOR C SH29 BYPASS PS&E | WILLIAMSON COUNTY, TX |** Mr. Hebbe served as the Drainage Task Lead for Phase 1 of the Williamson County Corridor C PS&E Project. The first phase of roadway will consist of over 3 miles of green field construction with 1 lane and a shoulder in each direction with part of the project being an urban section and part of the project being a rural that will ultimately be the westbound frontage road. He managed hydrologic studies, modeling, and complex hydraulic design and impact assessment for 2 Bridge Crossings and 2 Bridge Class Culvert Crossings one of which is a FEMA Zone A. Mr. Hebbe also oversaw design of parallel and cross drainage structures, SW3P design and temporary drainage facilities.

## EXPERIENCE

21 Years

## EDUCATION

BS, Civil Engineering  
University of Texas-  
Austin | 1999

## REGISTRATIONS

Professional Engineer  
State of Texas No.  
94722

## CRAIG HEBBE, PE

*(continued)*

**RONALD REAGAN BOULEVARD FM 734 (PARMER LANE) EXTENSION–TXDOT AUSTIN DISTRICT | Williamson County, TX** | Prior to joining KFA, Mr. Hebbe served as Drainage Design Engineer for the extension 8 miles of Parmer Lane (Ronald Reagan Blvd.) from RM 1431 to SH 29, including Kauffman Loop. Tasks included design of ditches, storm sewer, cross drainage, erosion control, and SW3P. Mr. Hebbe also designed the water quality plan over the Edward’s Aquifer, and compiled and submitted three WPAP’s and one Contributing Zone Plan (CZP) to the TCEQ. Water quality design included vegetative filter strips, grassy swales, and sand filtration ponds. Design tools utilized include THYSYS and GEOPAK Drainage.





**Steve Sharma**  
**Traffic Engineering**

### **EDUCATION**

BS, Civil Engineering, Texas Tech University, College Station, Texas, 1992

### **YEARS OF EXPERIENCE**

25

### **YEARS WITH RTG**

21

### **BIOGRAPHY**

Steve Sharma has 25 years of experience including nearly 3 years with the TxDOT Austin District, where he performed duties ranging from Advanced Project Development work to Co-Manager of the Austin District Congestion Reduction Program. In addition, Steve was employed as a research assistant for the Texas Transportation Institute (TTI). His technical experience includes work on all facets of Major Investment Studies, general traffic impact studies, noise analyses using Optima and Stamina, traffic analyses of various roadway facilities and networks including freeways and directional interchanges and was involved in TxDOT's Congestion Management System for the Austin Metropolitan Area. Steve is proficient in the use of various software programs including VISSIM, TSIS-CORSIM, SYNCHRO, SIDRA, PASSER II, PASSER III, TRANSYT, Highway Capacity Software, Optima, Stamina, SignCad and MicroStation.

### **REPRESENTATIVE PROJECTS**

#### **SL 360, TxDOT Austin District, Travis County**

GEC Traffic Engineer for schematic development and PS&E for eight grade separations on SL 360 from US 183 to Loop 1. Steve used Synchro and Vissim to optimize intersection geometry, lane utilization, and optimize ramp configuration for the conversion of SL 360 from an urban arterial to a controlled access facility. Steve used Streetlight Data to fill in gaps where traffic data was not available, as well as the origin-destination data in Streetlight to make recommendations to modify roadway geometry. The design process was not slowed down due to traffic constraints even when the global pandemic did not allow for the collection of traffic data. Steve coordinated with City of Austin traffic staff to ensure the projects met COA guidelines and requirements.

#### **Loop 337, TxDOT San Antonio District, Guadalupe County**

Utilized Vissim and Synchro to analyze the conversion of Loop 337 from a non-controlled access roadway to a controlled access facility. Steve had to develop his own traffic projections due to the deficiencies of the TP&P projections and major development along the corridor. A "Super Street" concept had been accepted by the City of New Braunfels, that design was modified after Steve showed TxDOT the operational issues that would occur at New Braunfels High School. The roadway is currently under construction with many of Steve's recommendations.

#### **FM 1103, TxDOT San Antonio District, Bexar County**

Steve Completed traffic analysis using Synchro along FM 1103 from IH-35 to FM 78 in Cibolo, TX for the addition of a lane in each direction as well as a raised median. The corridor was rapidly developing, and Steve identified that a majority of the congestion at the corridor was due to the signal timings and lack of capacity at the IH-35 grade separation. Steve also identified locations where right and left turn bays were more necessary to improve traffic operations versus having additional thru lanes. The San Antonio District accepted his recommendations and PS&E is complete on this project.

### **IH-69W, TxDOT Laredo District, Webb County**

Steve served as Lead traffic engineer for the schematic development of the addition of one mainlane in each direction from the World Trade Bridge, the busiest commercial truck crossing in the United States, to IH-35. Using Vissim, Synchro, and Streetlight optimized roadway geometry that relieved congestion along the mainlanes but during the traffic analysis discovered modifications to roadway geometry and lane utilization which significantly helped traffic operations at Mines Road (FM 1472) and IH-69 frontage road.

### **US 183A Phase 3 Extension, CTRMA/TxDOT, Williamson County**

Steve served as traffic lead for the PS&E development of the ML extension of US 183A from CR 258 to Hero Way, primarily using Synchro and Vissim to analyze traffic operations during traffic control phasing.



## **Dan Carroll** **Roadway Design**

### **EDUCATION**

BS, General Studies, United States Air Force Academy, 1993

BS, Civil Engineering, Texas A&M, College Station, Texas, 1999

ME, Civil Engineering, Texas A&M, College Station, Texas, 2000

### **YEARS OF EXPERIENCE**

20

### **YEARS WITH RTG**

1

### **BIOGRAPHY**

Dan Carroll has 20 years of experience as a traffic engineer and designer. Dan began as a traffic engineer and developed numerous traffic impact analyses, traffic signal plans, and signing and striping plans. From there he expanded his work to include road, highway, and drainage design on projects varying from two-lane county roads to major highway and interchange designs.

### **REPRESENTATIVE PROJECTS**

#### **I-35 Northeast Expansion Schematic, TxDOT San Antonio District, Bexar County**

Roadway Task Lead for schematic development of the elevated managed lanes and 3 multi-level interchanges along a 20-mile corridor from downtown San Antonio to Cibolo, Texas. Dan used MicroStation InRoads during the design process. The elevated lane models were used to minimize costs and construction conflicts with the adjacent main lanes and frontage roads. The managed lane modeling also proved to be an integral part of the environmental process during the sound and light pollution modeling. Dan worked closely with the team's traffic modelers to locate ingress/egress access points for major traffic generators along the corridors and properly space those within the larger system of ramps for the interchanges.

#### **State Loop 335 Interchange Schematic, TxDOT Amarillo District, Potter County**

Dan served as Roadway Task Lead for the schematic development of the State Loop 335 and I-40 multi-level interchange, upgrading a partial cloverleaf interchange, and the SL 335 expansion. Dan had to coordinate with the FAA and Amarillo International Airport due to the complexities of the vertical geometry of the direct connectors and the flight path of the airplanes. Dan utilized the 3D modeling capabilities of MicroStation InRoads to ensure the aerial and structural vertical clearance envelopes were satisfied as well as modeling the entire project to ensure constructability and verify proposed right-of-way limits.

#### **Galm Road, Bexar County Public Works, Bexar County**

Dan served as the Lead Project Engineer and Deputy Project Manager for the Galm Road Phase 1, 2, and 3 flood control and capacity improvement projects. Dan designed the roadway, drainage, traffic signal, signing and striping, and traffic control elements. The design included two new bridge locations and major creek/channel regrading designed to eliminate hazardous low water crossings. During the Phase 2 project Dan saved the County approximately \$250K in right-of-way and construction costs by recommending and implementing the County's first roundabout at a 90-degree bend. Based on the success of the first phases, Dan's design team was selected to finish the final portion of the roadway. Dan utilized MicroStation OpenRoads to model the roadway and develop a design that required no new right-of-way to clear environmental clearance as quick as possible.

#### **Williamson County Road Bond Program GEC**

Dan served as the roadway, signing and striping, and traffic control plan reviewer for numerous bond projects in the Williamson County Road Bond Program. Dan ensured projects met the Programs design criteria and followed all applicable County requirements.

### **Jones Maltsberger, City of San Antonio, Bexar County**

Dan served as the Lead Project Engineer for the expansion of Jones Maltsberger from a two-lane roadway to a five-lane arterial section. Dan used MicroStation Geopak to model the new five-lane section to provide the necessary design information for grading, driveway penetrations, channel hydraulics, and retaining walls along the corridor. Using HY-8 and HEC-RAS Dan designed the 3 new culverts and channels as well as modeling the hydraulics at a new bridge location. Additionally, he designed the storm sewer and water quality Stormceptor system for the roadway. Dan prepared and received approval for his Water Pollution and Prevention Plan. Dan also designed a new traffic signal and provided oversight on the signing and striping plans.



### Expertise

Karst Hydrology and Geomorphology of the Edwards Aquifer and Balcones Escarpment  
Edwards Aquifer Rules  
Environmental Regulations  
TCEQ Geologic Assessments  
Water Quality BMPs / Stormwater Ponds

### Education and Training

B.S., Geoscience; Texas Tech University, Lubbock, TX; 1990  
M.S., Geology; Texas Tech University, Lubbock, TX; 1992  
Karst Hydrology of the Edwards Aquifer; Western Kentucky University; 1999

### License and Permits

Professional Geoscientist; TX #1350  
USFWS 10(a)1(b) scientific permit covering Central Texas karst invertebrates and *Eurycea* salamanders (TE 37416B-0). Work under supervision of permittees.

### Heather Beatty, P.G.

### Sr. Karst Geoscientist

Ms. Beatty is a Registered Professional Geoscientist (Texas License #1350) with twenty-three years of experience with the Edwards Aquifer karst system pollution prevention. At Cambrian since 2019, Heather is responsible for conducting geological assessments and karst void response for transport and utility projects. Prior to joining Cambrian, she was the District Geologist for the Texas Department of Transportation Austin District Office for 6 years. At the Austin District she functioned as the storm water quality subject matter expert (SME) and often trained transportation engineers in the permanent water quality calculation methods. She worked with a team of environmental scientists to complete NEPA clear transportation projects. Ms. Beatty prepared dozens of geologic assessments and water pollution abatement plans, including those in which she coordinated with consultant geologists and engineers who prepared documents. She was the point of contact for all planning, construction and maintenance matters that related to Edwards Aquifer compliance for the TxDOT Austin District, covering Williamson, Travis, and Hays Counties.

During more than 15 years in the Edwards Aquifer Protection Program (EAPP) at the Texas Commission on Environmental Quality, Ms. Beatty developed expertise in all aspects of water pollution abatement plans, sewage collection system plans and hazardous material facility plans. She functioned as the technical expert for the EAPP after gaining experience in reviewing thousands of geologic assessments and plans for residential and commercial developments in Williamson, Travis, and Hays Counties. Ms. Beatty was responsible for reviewing and approving hundreds of cave closure plans. She conducted environmental compliance evaluations for those various construction projects as well as permanent BMP compliance for completed projects.

Ms. Beatty was an adjunct professor at Austin Community College from 1999 to 2005 where she taught Environmental Regulations Overview and Physical Geology lecture and laboratory. She developed a new course in Environmental Geology and taught that for three semesters. In 2013 and 2014, she returned to ACC for three semesters to develop and teach an online version of the Environmental Regulations course.

### Selected Project Experience

**IH 35 from RM 2243 to RM 1431, TxDOT AUS District, Georgetown, TX**  
Ms. Beatty coordinated a 2019 geophysical study and authored a report for the Texas Commission on Environmental Quality (TCEQ) geologic assessment (completed in 2020) for the project that will cross over Inner Space Cavern, a cave system containing listed endangered species that is also open for public cave tours. Ms. Beatty worked with the geophysicist (Blake Weissling of San Antonio) to install electrical resistivity lines used to image karst features. She used her T





## **Heather Beatty, P.G.**

## **Sr. Karst Geoscientist**

experience interpreting schematic plans to identify project elements that benefit from electrical resistivity imaging. The project will improve the RM and RM 1431 intersections along the interstate while reversing ramps along 35 southbound. Conducting geophysical studies in karst terrain is becoming more common for roadway projects, especially where projects are in the vicinity of caves known to contain listed species. In the geologic assessment authored, Ms. Beatty described potential hydrological impacts to Inner Cave Cavern. She also inventoried potentially sensitive and manmade relict features, as well as spring seeps present in the project area.

### **State Loop 1 (Mopac) Intersections, TxDOT AUS District Austin, TX**

Ms. Beatty functioned as the lead field geologist for the geophysical study of the La Crosse Avenue intersection and adjacent main lanes where construction encountered dozens of karst voids (at one of the grade-separation intersections). The geophysical study, completed in early 2020, was needed to characterize surface bedrock conditions and identify potentially undetected karst features beneath those sections of the project where excavation and drilling revealed poor-quality rock. As a subcontractor to Blanton Environmental, Ms. Beatty developed the work authorization language that was approved by TxDOT and coordinated with the TxDOT Area Office in charge of the construction project access issues for the geophysical survey. Conducting geophysical studies in karst terrain is becoming more common for roadway projects, especially where projects are likely to encounter a higher than normal density of voids. Previously employed by TxDOT earlier in the project (between 2014 and 2019), Ms. Beatty reviewed the TCEQ geologic assessment for the grade separation intersection project on the Edwards Aquifer recharge zone. As there was a concern about encountering karst voids during construction, she drafted void mitigation protocols and wrote a scope for additional geologic studies to examine potential impacts to nearby caves. Ms. Beatty also played an active role directing the design engineer on the contents of the water pollution abatement plan. During the construction phase, Ms. Beatty represented the TxDOT Austin District during stormwater compliance inspections conducted by the Barton Springs Edwards Aquifer Conservation District (BSEACD), and she coordinated agency inspections of approximately 30 subsurface voids that were encountered.

### **Mobility 35 Water Quality Program; TxDOT Austin District**

Between 2016 and 2019, while employed by TxDOT, Ms. Beatty led an effort for the TxDOT Austin District's Mobility 35 program to proactively plan and implement permanent stormwater water quality best management practices (BMPs) for Interstate 35 projects in Williamson County. The coordination program she led was applicable to all IH 35 projects on the Edwards Aquifer recharge zone and coincided with all projects in Williamson County. At the start, Ms. Beatty advised engineers on individual schematic and design phase projects concerning



### **Heather Beatty, P.G.**

### **Sr. Karst Geoscientist**

stormwater BMP selection, drainage facility placement, sizing calculation design elements. As the effort continued, she identified a need for a new scope of work for schematic and design phase water quality deliverables based on a lack of water quality experience between the multiple design engineers. Ms. Beatty, being the water quality subject matter expert at TxDOT, asserted that water quality deliverables be separated from hydrologic/hydraulic reports (requirements were in addition to those described in the TxDOT hydrologic design manual and specific to compliance with the TCEQ Edwards Aquifer Recharge Projects incorporating her scope had better defined water quality expectations. Ms. Beatty can bring this expertise and familiarity with roadway water quality requirements.

### **SH 45SW Environmental Studies and Water Quality Coordination, Tarrant and Hays Counties**

While employed by TxDOT between 2014 and 2018, Ms. Beatty actively contributed to the environmental studies, coordination with local experts and the development of the water pollution abatement plan (WPAP) for the roadway project on the Barton Springs Segment of the Edwards Aquifer recharge zone. She gained experience with multiple environmental issues during the planning phase of the controversial project, namely geologic assessment methods, karst feature excavation coordination, protection of sensitive karst features, participation in a technical working group with local experts, technical review of water quality calculations, and providing environmental protection guidance to the design engineer. While chiefly related to compliance with the TCEQ Edwards Aquifer protection program, these issues have broad application to other roadway projects. Beginning her project involvement with geologic assessment field methods, Ms. Beatty accompanied Cambrian Environmental geologists on their pedestrian survey of the 3.5-mile-long roadway corridor and the other geologists inventoried hundreds of potentially sensitive karst features and reconciled them with documented features from an earlier survey. After the field survey, Ms. Beatty coordinated with TCEQ Edwards Aquifer Protection Program (EAPP) on the excavation of karst features. She prepared a TCEQ application that provided all the key elements the agency requires to approve the work. In the schematic design phase, Ms. Beatty advised the TxDOT environmental and design project managers of TCEQ policies regarding infrastructure avoidance to sensitive karst features. Specifically, she guided them with roadway alignment considerations as it pertained to the more major sensitive karst features. She used her experience from being a former long-time staff member of the TCEQ EAPP about an important subject that is not published in any agency guidance. Any new roadway project on the Edwards Aquifer regulated zone will benefit from this type of experience. Related to alignment considerations, Ms. Beatty coordinated with the Director of the TCEQ Waste Permits Division to obtain approval for drainage modifications to certain sensitive recharge features.



### **Heather Beatty, P.G.**

### **Sr. Karst Geoscientist**

within the project limits. She effectively communicated the proposed protection for the features that, because of natural drainage modifications, were considered by the agency as underground injection wells. The coordination was accomplished after only one brief meeting to review her submittal. As the project moved from schematic and into the design phase, Ms. Beatty participated in about a dozen technical working group meetings with local experts (representing the City of Austin, the BSEACD, and Travis County). During these facilitated meetings, Beatty offered her expertise in aspects of environmental compliance pertaining to the protection of karst features during construction and design elements such as permanent water quality controls. These are universal issues that can relate to roadway and other development projects on the Edwards Aquifer recharge area. During the development of the WPAP, Ms. Beatty reviewed the water quality treatment approach and the associated water quality calculations provided by Frieze and Associates. She provided instructive guidance that would aid in the review of the multiple BMPs in series approach. Ms. Beatty also provided environmental protection guidance to the design engineer, Robert Carrillo, who assisted the engineer in the development of the environmental sequencing for construction. During the construction phase, Ms. Beatty represented TxDOT stormwater compliance inspections conducted by the BSEACD and was involved with environmental construction oversight on behalf of TxDOT.

### **RM 3227 / RM 150 Roundabout and Safety Improvements, Hays County Road Bond Program**

Ms. Beatty completed geologic assessment reports in 2019 and 2020 for related roadway improvement projects sponsored by Hays County. As a subcontractor to American Structurepoint she identified the unique sinkhole terrain located near the RM 3237 and RM 150 intersection, a future roundabout configuration, and the importance of stormwater discharge quality. While there were no consequential geological findings for the intersection safety improvements along RM 3237, Ms. Beatty assisted the client with permanent stormwater BMP selection given the constraint of constructing within existing right of way.



### **Expertise**

Karst Hydrogeology  
and Biology of the  
Edwards Aquifer

Endangered Species  
Act Compliance

State and Municipal  
Edwards Aquifer  
Rules Compliance

Karst Preserve  
Design

Biological  
Assessments

Habitat Conservation  
Planning

### **Education and Training**

Ph.D., Geology;  
University of  
Mississippi, Oxford;  
2006

M.S., Engineering  
Geology; University  
of Mississippi,  
Oxford; 1997

B.A., Geology, m:  
Biology; University of  
Mississippi, Oxford;  
1995

Karst Hydrology of  
the Edwards Aquifer;  
Western Kentucky  
University; 1999

### **License and Permits**

Texas Professional  
Geoscientist, #3863

## **Kemble White Ph.D., P.G.      Senior Karst Geoscientist**

Dr. White has specialized in land-use issues unique to the Central Texas growth corridor since the 1990s. His trusted perspective on complicated karst due-diligence issues has resulted in a long list of repeat clients and high-profile projects. His focus is the Endangered Species Act and water quality regulations pertaining to caves, springs and the Edwards aquifer. He helps his clients find the middle ground between the needs of resource protection and human population growth. Dr. White's specialties include regulatory issues surrounding endangered karst invertebrates and *Eurycea* salamanders, expert witness testimony, land use planning in environmentally sensitive areas, public outreach, preserve design, habitat conservation planning, Texas Commission on Environmental Quality (TCEQ) Geological Assessments and associated reports, City of Austin Environmental Assessments, and consulting on caves encountered during construction. He has a particular depth of experience with transportation projects.

Over the course of his career Dr. White has made a significant contribution to the state of Texas cave science and to the conservation of karst resources. His doctorate was on biospeleology, the study of caves and cave life. His research on *Cicurina* spp. cave spider genetics and the evolution of their habitat was published in *Geology*, the world's flagship peer-reviewed earth sciences journal. He has discovered many new locations for rare and endangered species and two new species have been named in his honor. His karst survey work has contributed to the establishment of thousands of acres of preserve land within the Edwards Aquifer recharge and contributing zones through land acquisitions programs, including the ESA Section 6 program. At the invitation of the U.S. Fish and Wildlife Service, he served on the recovery team for the Bexar County endangered karst invertebrates from 2002 to 2013.

Dr. White was a primary author of the Williamson County Regional Habitat Conservation Plan. Since 2008 he has worked with the Williamson County Conservation Foundation and the USFWS to develop karst preserves to recover Williamson County's endangered karst invertebrates so that they may be removed from the Endangered species list.

Dr. White has worked as a close advisor to Williamson County leadership on technical, regulatory and policy issues during the listing process for the northern Edwards Aquifer salamanders. Since 2012, he has served on the technical working group for the Georgetown and



USFWS 10(a)1(b)  
scientific permit  
covering Central  
Texas karst  
invertebrates and  
*Eurycea* salamanders  
(TE 37416B-0)

**Kemble White Ph.D., P.G.                      Senior Karst Geoscientist**

Jollyville Plateau salamanders. His technical work and consulting experience were instrumental in developing the special 4(d) rule for the Georgetown salamander published by the USFWS in 2015.

After fifteen years as lead karst expert for one of the largest environmental firms in the country, Dr. White founded Cambrian Environmental in 2014.

**Selected Project Experience**

**Williamson County Conservation Foundation - Williamson County Regional Habitat Conservation Plan/Environmental Impact Statement (RHCP/EIS), Williamson County, TX (2008 - Present)** - Dr. White co-authored the RHCP/EIS in support of an ESA 10(a) permit for incidental take of two endangered songbirds, and two endangered karst invertebrates, the Bone Cave harvestman and Coffin Cave mold beetle. Following approval in 2008, the RHCP has evolved into one of the most successful RHCPs in the country. It has served as the primary mitigation vehicle for many Williamson County Road Bond projects including improvements to IH-35, SH 195, Ronald Reagan Blvd., R.M. 620, O'Connor Road, and many others. Dr. White continues to provide implementation services on RHCP preserves including biological monitoring of dozens of caves and several springs on RHCP preserve land.

**Williamson County Engineer - Cambria Cavern Environmental Services, Round Rock, TX (February - September 2018)** - Cambrian provided comprehensive karst services to the Williamson County Engineer following the collapse of a major sinkhole in the Round Rock area. Dr. White led the effort which included exploration and mapping of the cave, assisting with safety protocols, compliance and mitigation reporting to the TCEQ, collaborating with engineering consultants on the mitigation plan, providing construction inspection services, and responding to information requests from the County public information officer. The high-profile project was completed successfully despite intense media attention in a high litigation-potential situation.

**TxDOT and the Central Texas Regional Mobility Authority - State Highway 45 Southwest, Travis and Hays counties, TX (2013 - 2018)** - Cambrian provided a wide range of karst services on a controversial new roadway located in the Barton Springs recharge zone. Services included conducting a karst terrain feature survey, a





**Kemble White Ph.D., P.G.                      Senior Karst Geoscientist**

TCEQ Geologic Assessment, endangered karst invertebrate due-diligence investigations, Barton Springs and Austin Blind salamander technical reports, and attending numerous meetings with the project team, local officials, and the public. Dr. White participated as a key member of the project karst technical working group along with a wide variety of state, local, and Federal officials. The project would include construction of approximately 3 miles of managed lanes between Mo-Pac Expressway and FM 1626 through Travis and Hays Counties.

**TxDOT – Mobility 35 Williams Drive project, Georgetown, TX (2018-2019)** - Dr. White coordinated karst environmental studies for a major improvements project to a Federal highway in sensitive karst terrain. Studies included components of a Texas Commission on Environmental Quality (TCEQ) geologic assessment, excavation and endangered karst invertebrate presence/absence investigations in a newly-discovered cave, and presence/absence surveys for threatened Eurycea salamanders in a newly-documented spring run. These karst studies supported the project NEPA documentation and Dr. White participated in the formal section 7 consultation for the project along with staff from the TxDOT Environmental Affairs Division, the Austin District and the USFWS Austin ESFO. Due in part to the thoroughness of karst studies this project passed the formal consultation completeness check in record time.

**TxDOT – Mobility 35 from RM 2243 to RM 1431, Georgetown, TX (2018-2019)** - Dr. White coordinated a geophysical study and authored a Texas Commission on Environmental Quality (TCEQ) geologic assessment for the project that will cross over Inner Space Cavern, a cave system containing listed endangered species that is also open for public cave tours. Dr. White worked with the geophysicist (Blake Weissling of San Antonio) to layout electrical resistivity lines used to image karst features. The project will improve the RM 2243 and RM 1431 intersections with the interstate while reversing ramps along IH 35 southbound. Conducting geophysical studies in karst terrain is becoming more common for roadway projects, especially where projects are in the vicinity of caves known to contain listed species. The geologic assessment describes potential hydrological impacts to Inner Space Cavern and also inventories potentially sensitive and manmade recharge features, as well as discharge features present in the project area.

**City of Georgetown** - Southwest Bypass / Wolf Ranch Parkway,



**Kemble White Ph.D., P.G.                      Senior Karst Geoscientist**

Georgetown, TX (2014 – March 2016). Cambrian was sub-contracted through SWCA Environmental Consultants and HDR Engineering to provide karst services for an approximately 3-mile roadway. Dr. White conducted a TCEQ Geologic Assessment, an endangered karst invertebrate due-diligence study including a full presence/absence survey for a newly discovered cave, and assisted with the project participation in the Williamson County RHCP. Dr. White also conducted the due-diligence studies required under the City of Georgetown Edwards Aquifer water quality ordinance which supports the USFWS special 4(d) rule for activities with the potential to harm the threatened Georgetown Salamander.

**City of Georgetown - San Gabriel Park Phase 1 Karst Services, Georgetown, TX (2015-2018).** - Under subcontract to RVi Planning, Cambrian provided a series of karst services in support of a major parks improvement project which included ecological restoration of the historic San Gabriel Springs. Dr. White assisted in developing the project Endangered Species Act compliance strategy, informal coordination with the USFWS, conducting a USFWS presence/absence survey for Georgetown salamanders. Dr. White also assisting landscape architects in the ecological design, and providing endangered species inspection services during the construction phase.

**Williamson County – Pearson Ranch Road / State Highway 45 Interchange, Round Rock, TX (2013)** – Dr. White conducted a Jollyville Plateau Salamander habitat assessment and impacts analysis for construction of a new intersection in close proximity to a site known to be occupied by JPS and partially within a designated critical habitat unit. Elements of the analysis included the presence of shallow groundwater and other habitat components and the influence of existing structures associated with SH 45. Dr. White’s analysis assisted in enabling the project to proceed while avoiding impacts to both JPS and critical habitat.

**Williamson County – O’Connor Road Extension - O’Connor Drive Extension Project, Round Rock, TX (2009)** – Dr. White conducted the TCEQ Geologic Assessment investigations and the endangered karst invertebrate due-diligence investigations for a new section of O’Connor Road which now runs 1.5 miles between RM 620 and SH 45. The project was completed which negotiating private landowner concerns on the Robinson Ranch.



**CONFLICT OF INTEREST QUESTIONNAIRE**  
For vendor doing business with local governmental entity

**FORM CIQ**

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

**OFFICE USE ONLY**

Date Received

**1 Name of vendor who has a business relationship with local governmental entity.**

Rodriguez Transportation Group, Inc.

**2**  **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

**3 Name of local government officer about whom the information is being disclosed.**

N/A

\_\_\_\_\_  
Name of Officer

**4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

N/A

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

Yes       No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes       No

**5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

N/A

**6**  Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

**7** 

\_\_\_\_\_  
Signature of vendor doing business with the governmental entity

12/28/2020

\_\_\_\_\_  
Date

## **CONFLICT OF INTEREST QUESTIONNAIRE**

### **For vendor doing business with local governmental entity**

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

**Local Government Code § 176.001(1-a):** "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

**Local Government Code § 176.003(a)(2)(A) and (B):**

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

\*\*\*

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

- (i) a contract between the local governmental entity and vendor has been executed;
- or
- (ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

**Local Government Code § 176.006(a) and (a-1)**

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

- (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
- (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
- (3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

- (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
- (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

- (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
- (B) that the vendor has given one or more gifts described by Subsection (a); or
- (C) of a family relationship with a local government officer.