

2024-001 El Mirage Road; SR 303L to Jomax Road - Design Concept Report and Environmental Assessment

Arizona Department of Transportation
Engineering Consultants Section
205 South 17th Avenue, Mail Drop 616E
Phoenix, Arizona 85007

August 22, 2023

Re: 2024-001 El Mirage Road, SR 303L to Jomax Road - Design Concept Report and Environmental Assessment



Dear Members of the Selection Committee,

Burgess & Niple (B&N) is pleased to submit this Statement of Qualifications (SOQ) for the El Mirage Road; SR 303L to Jomax Road - Design Concept Report and Environmental Assessment project. The growth of the area northwest of SR 303L is outpacing roadway network improvements. Multiple developments are being constructed in the cities of Peoria and Surprise and in unincorporated Maricopa County, primarily along the Happy Valley Road corridor. Two access points, 7 miles apart connect this area to the greater region: SR 303L/Happy Valley Parkway Traffic Interchange (TI) and US 60 (Grand Avenue)/163rd Avenue intersection. The time has come to connect El Mirage Road from SR 303L to Jomax Road to provide additional regional connectivity, relieve burdened infrastructure and open lands for additional economic development.

B&N will be led by Project (Contract) Manager David Lenzer, PE, an accomplished leader who has repeatedly and successfully delivered federally funded, multi-agency scoping projects and environmental documents for ADOT, Peoria and MCDOT. David has strong relationships with the key staff at ADOT, Peoria and MCDOT to efficiently build consensus. He is the best person to lead your project! B&N will commit David and our key personnel to the extent necessary to meet and exceed ADOT's quality and schedule expectations for this contract. The B&N team offers ADOT the values listed below:

VESTED PARTNERSHIPS

ADOT | City of Peoria | MCDOT | FCDMC

B&N has strong, productive partnerships with all key stakeholders! Through the MCDOT Northern Parkway program, B&N has completed five federally funded arterial street projects for Peoria. This includes over eight miles of urban roadway, four TIs and several bridges. Key stakeholders included ADOT, Peoria, MCDOT, FCDMC, MAG and others that will also be engaged in this El Mirage Road project. Additionally, B&N is in rare territory as a firm who provides on-call engineering services to ADOT, Peoria and MCDOT. We understand agency interests and requirements.

B&N is uniquely positioned to efficiently address project challenges and build consensus around a strong technical solution!

TEAM CONSISTENCY

Burgess & Niple | Jacobs | AZTEC

B&N and our major subconsultants Jacobs and AZTEC have partnered to deliver scoping and design projects throughout the Valley. Recent, relevant examples include the MCDOT/Peoria Northern Parkway projects, where B&N served as prime firm with AZTEC completing environmental documentation. The three firms recently delivered the high-profile SR 303L DCR, Lake Pleasant Parkway to I-17, which engaged stakeholders like Peoria and ASLD. This team also serves ADOT as the MAG Regional Freeway Program Management Consultant team, where we routinely partner for scoping projects.

The value to ADOT is a highly collaborative team that knows ADOT's processes and expectations. We have a proven track record of delivering results for you and your local agency partners!

PROJECT AREA EXPERTISE

MAG Study | Team's Projects in Area

The B&N Team has extensive and exclusive experience in the project area. Our team member Jacobs completed the 2022 MAG El Mirage Road Feasibility Study Report, the precursor to this El Mirage Road DCR and EA project. MAG feasibility studies identify priorities, intentions and major challenges. Our team has first-hand knowledge and understanding of the project history, needs and stakeholders.

We will leverage our work from this study and other project experiences in the area for ADOT, Peoria and MCDOT to jump start project technical analyses, proactively monitor and mitigate potential risks discussed and build consensus to advance the project into final design.

B&N is not a certified Disadvantaged Business Enterprise (DBE), however, our team includes DBE firms AeroTech Mapping (mapping), Ethos Engineering (geotechnical and structural engineering support) and United Civil Group (traffic data collection). We expect to meet ADOT's 5.05% DBE goal and meet all DBE requirements. B&N has a long-standing history with ADOT dating back to 1984. We will provide the same level of quality and expertise to this project by providing a team that meets your expectations while delivering our services on-schedule and within budget. We appreciate this opportunity and ask that you select B&N as your consultant for the El Mirage Road; SR 303L to Jomax Road - Design Concept Report and Environmental Assessment project.

Respectfully Submitted,

Jason Pagnard, PE (AZ#47958)
Project Principal | Vice President
p. 480.580.4333 (mobile)
e. jason.pagnard@burgessniple.com

David Lenzer, PE (AZ#61197)
Project (Contract) Manager
p. 480.427.9575 (mobile)
e. david.lenzer@burgessniple.com

Engineering Consultants Section SOQ Proposal Certifications Form

Contract #: 2024-001

Consultant Name: Burgess & Niple, Inc.

Please read the fifteen (15) statements below. The statements are to ensure Consultants are aware and in agreement with Federal, State and ECS guidelines related to the award of this contract. Consultants shall submit the specific Certification form attached to each RFQ advertised, as revisions to the form may occur from time to time. **Failure to sign and submit the certification form specified in the RFO with the SOQ proposal will result in the SOQ proposal being rejected.**

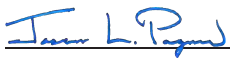
Submission of the SOQ by the Consultant certifies that to the best of its knowledge:

1.	The Consultant and its subconsultants have not engaged in collusion with respect to the contract under consideration.
2.	The Consultant, its principals and subconsultants have not been suspended or debarred from doing business with any government entity.
3.	The Consultant shall have the proper Arizona license(s) and registration(s) for services to be performed under this contract. Furthermore, the Consultant shall ensure that all subconsultants have the proper Arizona license(s) and registration(s) for services to be performed under this contract.
4.	The Consultant's signature on any SOQ proposal, negotiation document or contract constitutes that a responsible officer of the Consultant has read and understands its contents and is empowered any duly authorized on behalf of the Consultant to do so.
5.	The Consultant's Project Team members are employed by the Consultant on the date of submittal.
6.	All information and statements written in the proposal are true and accurate and that ADOT reserves the right to investigate, as deemed appropriate, to verify information contained in proposals.
7.	Key members of the Project Team, including subconsultants, are currently licensed to provide the required services as requested in the RFQ package.
8.	All members of the Project Team who are former ADOT employees did not have or provide information that gives the Consultant a competitive advantage; and either (1) concluded their employment with ADOT at least 12 months before the date of the SOQ or (2) have not made any material decisions about this project while employed by ADOT.
9.	Work, equating at least 51% of the contract value, shall be completed by the Consultant unless otherwise specified in the SOQ or contract.
10.	No Federally appropriated funds have been paid or shall be paid, by or on behalf of the Consultant for the purpose of lobbying.
11.	The Consultant understands that it is required to have a compliant accounting system, in accordance with Generally Accepted Accounting Principles (GAAP), Federal Acquisition Regulation (FAR) of Title 48, Code of Federal Regulations (CFR)-Part 31, applicable Cost Accounting Standards (CAS), and ADOT Advance Agreement Guideline.
12.	If project is funded with Federal Aid funds, the Consultant affirmatively ensures that in any subcontract entered into pursuant to this advertisement, Disadvantaged Business Enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award, in accordance with Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations.
13.	The Consultant shall utilize all Project Team members, subconsultants and DBE firms, if applicable, submitted in the SOQ, and shall not add other Project Team members or subconsultants, unless the Consultant has received prior written approval from ADOT.
14.	The Consultant shall either meet its DBE goal commitment and any other DBE commitments or make Good Faith Efforts to meet the DBE goal commitments as stated in its SOQ proposal or Cost Proposal and shall report on a timely basis its DBE utilization as detailed in the contract.
15.	If selected, the Consultant is committed to satisfactorily carry out the Consultant's commitments as detailed in the contract and its SOQ proposal.

I hereby certify that I have read and agree to adhere to the fifteen (15) statements above and/or that the statements are true to the best of my knowledge as a condition of award of this contract.

Print Name: Jason Pagnard

Title: Vice President

Signature: 

Date: August 8, 2023

Revised 2/11/2022

ARIZONA DEPARTMENT OF TRANSPORTATION
ENGINEERING CONSULTANTS SECTION
PARTICIPATION IN BOYCOTT OF ISRAEL - CONSULTANT CERTIFICATION FORM
ADOT ECS Contract No.: 2024-001

This Certification is required in response to legislation enacted to prohibit the State from contracting with companies currently engaged in a boycott of Israel. To ensure compliance with A.R.S. §35-393, this form must be completed and returned with any response to a solicitation (SOQ), Contract Cost Proposals, and Contract Time Extensions. The Consultant understands that this response will become public record and may be subject to public inspection.

Please note that if any of the following apply to this Solicitation, Contract, or Contractor, then the Offeror shall select the “Exempt Solicitation, Contract, or Contractor” option below:

- The Solicitation or Contract has an estimated value of less than \$100,000;
- Contractor is a sole proprietorship;
- Contractor has fewer than ten (10) employees; OR
- Contractor is a non-profit organization.

Pursuant to A.R.S. §35-393.01, public entities are prohibited from entering into contracts “unless the contract includes a written certification that the company is not currently engaged in, and agrees for the duration of the contract to not engage in, a boycott of goods or services from Israel.”

Under A.R.S. §35-393:

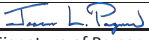
1. "Boycott" means engaging in a refusal to deal, terminating business activities or performing other actions that are intended to limit commercial relations with entities doing business in Israel or in territories controlled by Israel, if those actions are taken either:

 (a) Based in part on the fact that the entity does business in Israel or in territories controlled by Israel.
 (b) In a manner that discriminates on the basis of nationality, national origin or religion and that is not based on a valid business reason.
2. "Company" means an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, limited liability company or other entity or business association, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate, that engages in for-profit activity and that has ten or more full-time employees.
 ...
5. "Public entity" means this State, a political subdivision of this State or an agency, board, commission or department of this State or a political subdivision of this State.

The certification below does not include boycotts prohibited by 50 United States Code Section 4842 or a regulation issued pursuant to that section. See A.R.S. §35-393.03.

In compliance with A.R.S. §§35-393 *et seq.*, all offerors must select one of the following:

- ☒ The Company submitting this Offer does not participate in, and agrees not to participate in during the term of the contract, a boycott of Israel in accordance with A.R.S. §§35-393 *et seq.* I understand that my entire response will become public record in accordance with A.A.C. R2-7-C317.
- ☐ The Company submitting this Offer does participate in a boycott of Israel as described in A.R.S. §§35-393 *et seq.*
- ☐ **Exempt Solicitation, Contract, or Contractor.**
Indicate which of the following statements applies to this Contract:
☐ Solicitation or Contract has an estimated value of less than \$100,000;
☐ Contractor is a sole proprietorship;
☐ Contractor has fewer than ten (10) employees; and/or
☐ Contractor is a non-profit organization.

Burgess & Niple, Inc.				
Company Name			Signature of Person Authorized to Sign	
1500 N Priest Drive, Suite 102			Jason Pagnard	
Address			Printed Name	
Tempe	Arizona	85288	Vice President	August 8, 2023
City	State	Zip	Title	Date



FORCED LABOR OF ETHNIC UYGHURS BAN
Certification Form

Forced Labor of Ethnic Uyghurs Ban

Please note that if any of the following apply to the Consultant, then the Offeror shall select the “Exempt Consultant” option below:

- Consultant is a sole proprietorship;
- Consultant has fewer than ten (10) employees; OR
- Consultant is a non-profit organization.

Pursuant to A.R.S. § 35-394, the State of Arizona prohibits a public entity from entering into or renewing a contract with a company unless the contract includes written certification that the company does not use the forced labor, or any goods or services produced by the forced labor, or use any consultants, subconsultants, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

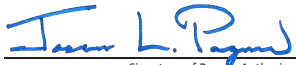
Under A.R.S. §35-394:

1. "Company" means an organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, limited liability company or other entity or business association, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate, that engages in for-profit activity and that has ten or more full-time employees.
 - (a) Based in part on the fact that the entity does business in Israel or in territories controlled by Israel.
 - (b) In a manner that discriminates on the basis of nationality, national origin or religion and that is not based on a valid business reason.
2. "Public entity" means this State, a political subdivision of this State or an agency, board, commission or department of this State or a political subdivision of this State.

In compliance with A.R.S. §§ 35-394 et seq., all offerors must select **one** of the following:

☒	The Company submitting this Offer does not use, and agrees not to use during the term of the contract, any of the following: • Forced labor of ethnic Uyghurs in the People’s Republic of China; • Any goods or services produced by the forced labor of ethnic Uyghurs in the People’s Republic of China; or • Any Consultants, Subconsultants, or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People’s Republic of China.
☐	The Company submitting this Offer does participate in use of Forced Uyghurs Labor as described in A.R.S. § 35-394.
☐	Exempt Consultant. Indicate which of the following statements applies to this Consultant (may be more than one): ☐ Consultant is a sole proprietorship; ☐ Consultant has fewer than ten (10) employees; and/or ☐ Consultant is a non-profit organization.

Burgess & Niple, Inc.
Company Name
1500 N Priest Drive, Suite 102
Address
Tempe Arizona 85288
City State Zip


Signature of Person Authorized to Sign
Jason Pagnard
Printed Name
Vice President
Title

PROJECT UNDERSTANDING

Development west of El Mirage Road (EMR) in unincorporated Maricopa County and Surprise is overloading the existing roadway network. Chris Lemka, Peoria Traffic Engineer, has identified the Happy Valley Road (HVR) and Vistancia Boulevard intersection as the most overloaded in Peoria. Connecting EMR to SR 303L will alleviate the stresses on that intersection and other nearby corridors.

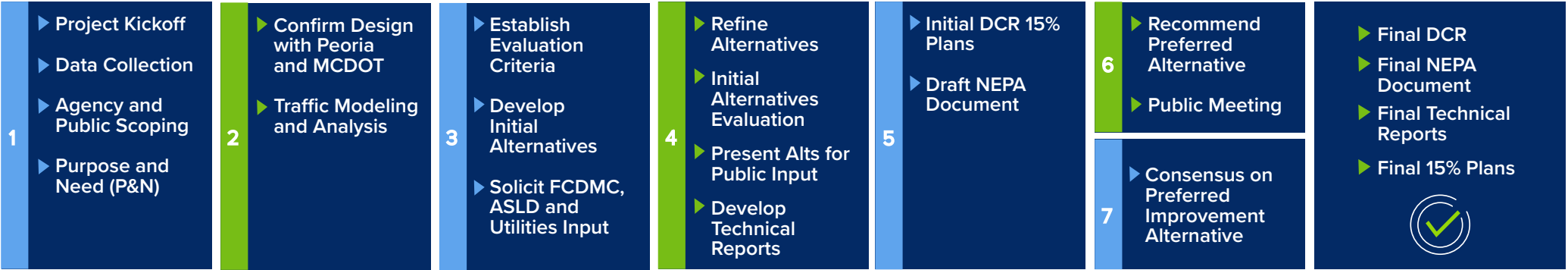
MAG and Peoria engaged B&N team member Jacobs to complete the 2022 El Mirage Road Feasibility Study. During the study, it was noted that while the EMR corridor resides in unincorporated county lands, Peoria—not MCDOT—is the project sponsoring agency. During the MAG study, MCDOT and Peoria began dialogue regarding annexation, operations and maintenance (O&M) and design standards. The initial understanding between both MCDOT and Peoria is that regardless of annexation, elements of the corridor O&M will be Peoria. During scoping, the framework for future IGAs will be further developed; the anticipated O&M responsibilities will drive design standard selection.

The plan for the ultimate corridor is a 6-lane typical section. **Due to available funds, however, Peoria anticipates a phased solution to provide operational relief and regional connectivity within the currently allocated budget.** Craig Bolze, Peoria project manager, indicated that the current vision for the corridor is a transportation-focused solution with minimal aesthetic enhancements. Peoria does not currently envision EMR being a scenic corridor or the McMicken Wash (Wash) crossing being a signature structure.

Between SR 303L and HVR, EMR will span the Wash and Dam Outfall, both managed by FCDMC. The EMR corridor will also trailblaze through ASLD property. Immediately south of Jomax Road (Jomax), EMR will pass over the Beardsley Canal (Canal) managed by the Maricopa Water District (MWD).

While the proposed EMR alignment will bifurcate undeveloped ASLD property, the area is utility dense. APS, WAPA and the Department of Energy all have electrical facilities in the project area. EPCOR, Southwest Gas, Cox, CenturyLink, and others have water, gas and telecom facilities in the corridor, respectively.

FIGURE A. STUDY PROCESS



Continuous Agency/Public Input and Engagement | Coordination with Adjacent Projects and Developments

Our team has unique experience with ADOT, Peoria, MCDOT and FCDMC. B&N and subconsultant AZTEC prepared scoping documents and environmental assessments for over seven miles of Northern Parkway. Northern Parkway is a multi-jurisdictional, federally funded program administered by MCDOT for the cities of Peoria, Glendale and El Mirage. Consensus was required for all design decisions. B&N’s roadway segments were primarily for Peoria, including improvements to ADOT facilities at the SR 101L and US 60 and FCDMC facilities at New River.

We will build upon the **MAG Feasibility Study knowledge, and leverage our Northern Parkway partnerships, to carry forward the recommended alternative and evaluate it along with other alternatives developed during this ADOT DCR and EA project.**

Special Issues

Our due diligence included record requests, research, site visits, preliminary engineering and environmental analysis, project area experience and **15+ meetings with ADOT staff and project stakeholders from Peoria, MCDOT, FCDMC, ASLD and MAG.**

We will follow the framework shown in **Figure A.** to resolve the tasks and issues unique to this project. This study process framework will:

- *Create and maintain consensus with local agencies.*
- *Ensure Draft EA submittal is concurrent with Initial DCR.*
- *Enhance traffic operations in interim & ultimate conditions.*
- *Optimize the alignment of the preferred alternative to balance trade-offs and eliminate unnecessary impacts.*

The issues, our approach and our teams’ unique value are depicted in **Figure B.** on the following page and discussed in the Approach section.

Major Tasks, Technical Elements & Institutional Elements

The objectives of this project are to select and develop a consensus-driven preferred alternative; identify the initial phased implementation; establish final design scope; simplify the ROW, utility and environmental clearance processes during final design; and to establish a framework for future IGAs.

Technical elements include:

- BUILDING** consensus with local agencies
- DEVELOPING** and evaluating alternatives
- CONDUCTING** a traffic analysis, collaborating with MAG to validate the model and preparing an Initial Traffic Report, similar to services provided for the SR 303L DCR
- LEADING** public outreach efforts by Avenue Consultants, who have extensive experience guiding major projects through the ADOT PIP process

Institutional Elements include:

- PREPARING** Initial Bridge Study
- PREPARING** Initial and Final Materials Design Report and Pavement Design Summary
- PREPARING** drainage analysis and design compliant with ADOT, FCDMC and Peoria standards
- COMPLETING** public outreach efforts
- PREPARING** draft and final environmental documentation, associated reports and 404 Jurisdictional Delineation
- PREPARING** ADA Compliance and Feasibility Report

UNIQUELY QUALIFIED FOR EL MIRAGE ROAD

We have built foundational relationships with each of the major project partners. We are actively providing on-call services to ADOT, Peoria and MCDOT. **The trust we have built will streamline our ability to foster consensus from project onset.**

B&N, AZTEC and Jacobs have partnered together multiple times, notably as ADOT’s Regional Freeway Program Management Consultant. B&N, AZTEC and Ethos have partnered on the joint MCDOT-Peoria Northern Pkwy Program, all in identical roles. **This collaborative team knows ADOT’s processes & expectations.**

Jacobs authored the MAG EMR study and are exclusive to the B&N team. **This team has the first-hand knowledge of the project history required to deliver a quality product in a timely manner.**

PROJECT APPROACH

Features, issues and approach strategies are identified in the *Figure B. Features and Issues Map*. Our approach to resolving major tasks and issues is discussed below and on the following pages.

Consensus Building

Challenge: Building and maintaining consensus among the entities that have jurisdictional control over unique corridor segments.

Approach & Benefit: There are many decision points that require multiple agency concurrence. For Northern Parkway, we utilized a combination of one-on-one agency meetings and recurring subject-specific meetings to advance topics with multiple agency requirements. We will utilize a similar strategy to obtain agreement on the following:

- **Traffic Demand Projections:** Validate land use and development assumptions. Consult with ADOT, Peoria, MCDOT, ASLD, Maricopa County Planning and Development (PND), MAG and Surprise.
- **Roadway Design Criteria:** Identify ultimate agency O&M responsibilities to simplify design criteria conversations. Facilitate agreement among ADOT, Peoria and MCDOT to establish the framework for future IGAs for roadway and signals and select the appropriate design criteria.
- **Wash Crossing Design Criteria:** Establish anticipated design flows for the new crossing. Facilitate agreement among ADOT, FCDMC, Peoria and MCDOT to determine hydraulic design and maintenance access requirements to aid in structure selection.
- **Canal Crossing Design Criteria:** Establish design, maintenance and construction schedule constraints for new canal crossing. Facilitate agreement among ADOT, Peoria and MWD.
- **Evaluation Criteria Development:** Determine criteria and trade-offs between competing needs. Facilitate agreement among ADOT, Peoria, MCDOT, ASLD, FCDMC and MWD.
- **Alignment Selection:** Establish constraints and parameters for horizontal and vertical alignment development. Facilitate agreement among ADOT, Peoria, MCDOT, ASLD, MWD and multiple utilities.
- **Access Control Understanding:** Plan for how future development will access the corridor. Facilitate agreement among ADOT, Peoria, MCDOT, ASLD and PND.

On the Northern Parkway Program, B&N built consensus among ADOT, Peoria, MCDOT, FCDMC, PND and private utility companies to establish design and evaluation criteria, establish design parameters for a structure over an FCDMC facility, determine alignment selection, develop access control understanding and validate traffic demand projections.

Stakeholder Involvement

Challenge: Additional stakeholders will need to be engaged during the scoping process.

Approach & Benefit: We will consult with Peoria to determine the need for stakeholder meetings with HOAs and the Trilogy Bike Club. We will have individual meetings with first responders such as North County Fire and Medical District to understand the service area, access needs and emergency routing.

Corridor and Intersection Sizing

Challenge: The prior MAG study found that 2040 volumes would be accommodated with a four-lane section. We will validate this understanding utilizing the 2050 design year and the current MAG conformity model. **Our initial review of the model identified several issues that will need correction so that accurate forecasts can be developed.** The current model identifies unrealistic growth in the residential areas south of the SR 303L freeway. Additionally, the model includes unrealistic connections to the SR 303L freeway to the west of the EMR TI, effectively suppressing forecasted volumes for EMR in the current MAG model. The area surrounding the EMR corridor is projected to experience a doubling in population and a three-fold increase in jobs.

Approach & Benefit: B&N will review the MAG socioeconomic data with Peoria, Surprise and the County to confirm that all anticipated development is included in the MAG model. **We will work with MAG to incorporate updated land use information and model coding corrections to improve traffic forecasting.** B&N implemented the same approach for Northern Parkway which was accepted by MCDOT and Peoria. These forecasts will be used, in combination with collected traffic count data, to validate corridor sizing needs, complete operational sensitivity analyses, and develop projected turning movement counts at the HVR and Jomax intersections to properly size the intersection turn lanes.

The B&N team's experience in updating MAG socioeconomic data includes the nearby TSMC site which was conducted in partnership with team members Jacobs and AZTEC.

Peoria standards require a wider cross-section than MCDOT's. The ROW necessary for EMR is dependent on the agency standard applied to the facility. We will define the ROW requirements early in the DCR process so that ASLD and PND can reserve the needed ROW for future development.

Vertical and Horizontal Alignment Selection

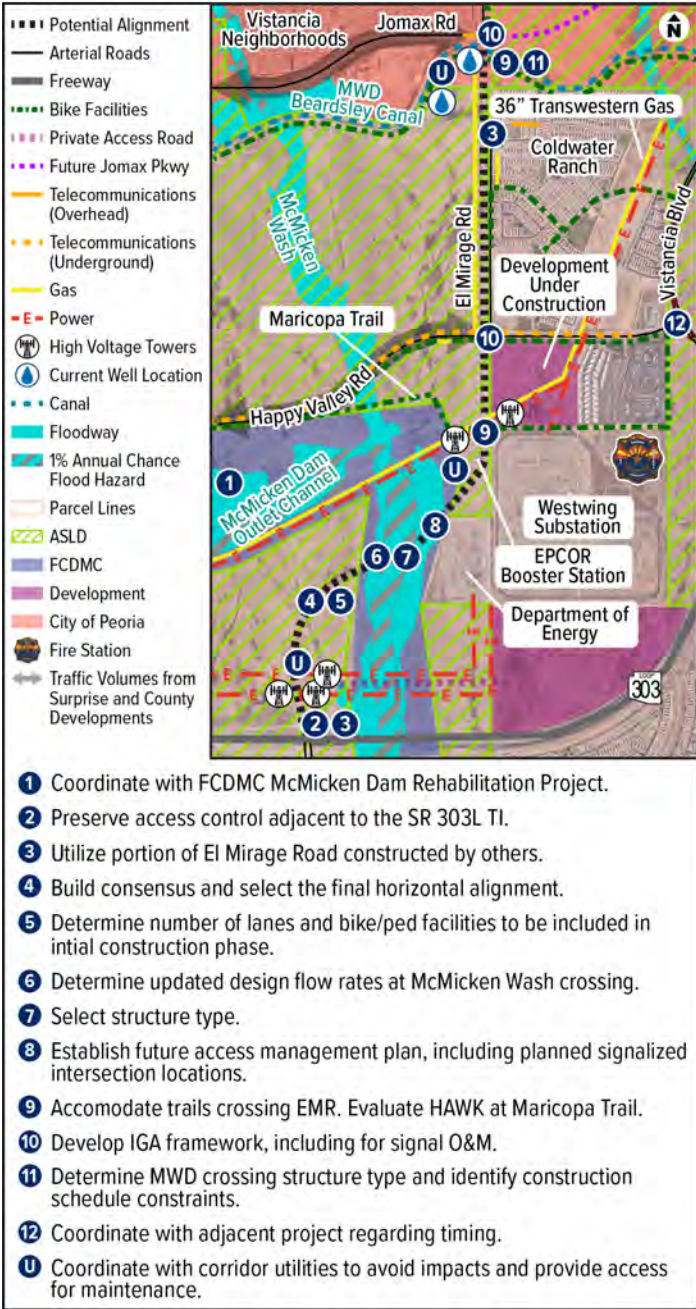
Challenge: The horizontal and vertical alignments will need to balance the needs of multiple stakeholders.

Approach & Benefit: We will develop and evaluate additional alignments with the MAG study recommended alternative.

MAJOR CONSIDERATIONS FOR THE HORIZONTAL ALIGNMENT:

- Align** with developer improvements north of the TI.
- Align** with previously secured corridor ROW.
- Minimize/eliminate** remnant parcels on ASLD land.
- Avoid** conflicts with OH high voltage towers.
- Permit** a financially and hydraulically efficient crossing of the Wash.

FIGURE B. FEATURES AND ISSUES MAP



*Features and issues are identified in the *Features and Issues Map (Figure B)*. Our approach to resolving major tasks and issues is discussed to the left and on the following pages.*

- Complete** a reverse curve alignment appropriate for design speeds and superelevation requirements.
- Parallel** existing easements for underground utilities via ASLD land.
- Provide** site lines to driveways, maintenance access points and trail crossings.
- Avoid** well sites and minimize impacts to other utilities.
- Complete** half-street improvements north of HVR.

MAJOR CONSIDERATIONS FOR THE VERTICAL ALIGNMENT:

- Match** grade/elevation at the TI, Maricopa Trail, HVR and Jomax.
- Achieve** needed vertical clearance at Wash crossing.
- Provide** sufficient site lines to driveways, maintenance access points and trail crossings.
- Provide** PROWAG-compliant crosswalk cross slopes at planned and future crossings.
- Achieve** freeboard requirements at the Canal crossing.

The proximity of the Jomax intersection to the canal is especially challenging from a vertical tie-in perspective. We will consider structural options that minimize structure depth to reduce impacts north and west of the intersection.

Identifying a Phased Solution

- Challenge:** It is unlikely that the City will have enough funds to initially construct the ultimate roadway section.
- Approach & Benefit:** If the construction cost estimate exceeds the anticipated available construction funding, we will evaluate opportunities for a reduced cost initial phase. Potential reductions include fewer lanes, segmenting the corridor into mile-long sections, or both. We understand that the initial phase needs to fit within the construction budget, provide independent utility and address regional connectivity issues for Peoria and Surprise. **On Northern Parkway, we partnered with Peoria and MCDOT to optimize the final design elements to improve corridor operations and safety while remaining within the program budget.**

Adjacent Projects

- Challenge:** Coordinate alternatives with adjacent projects: There are several projects occurring within and near the project area including:
- **FCDMC; McMicken Dam Outlet Channel Improvement:** An active project that includes the preparation of a LOMR for Wash within the proposed EMR corridor. The improvements will impact the design criteria for the EMR/Wash crossing.
- **Peoria; HVR & Vistancia Blvd Intersection Improvements:** Peoria scoping project expected to commence in FY24. It will reconfigure the intersection to better accommodate traffic flows. The project does not have construction funding. Peoria expects to construct the improvements after the EMR corridor is constructed because EMR will serve as a key detour route. The

- projects will have overlapping scoping schedules and Peoria does not want to conduct concurrent public outreach meetings.
- **Peoria; Jomax Loop 303 to Vistancia Boulevard:** A future, developer-driven project would construct the east leg of the EMR/Jomax intersection. Peoria expects the Jomax project to occur after EMR improvements are constructed.
- **Private Developer; Westwing Expansion Project:** An active development project will construct a portion of EMR from the EMR TI north to their access road. The planned improvements will need to be incorporated into the EMR corridor. The development has already secured approvals from ASLD, PND and ADOT.
- **Surprise; HVR & El Granada Intersection Improvements:** A Surprise project approximately one mile west of the EMR/HVR intersection. The planned improvements may impact traffic along HVR during construction.

Approach & Benefit: We will leverage our best practices when coordinating with adjacent projects including file-sharing protocols, horizontal and vertical datum verification and communication process. The best practices were successfully used on the Northern Parkway Program where we collaborated with adjacent public and private projects.

Planning Access Control for Future Development

- Challenge:** Developments are currently coordinating with ASLD and PND to identify access along the corridor while Peoria will likely be responsible for O&M. Two planned access roads were identified in the MAG study. These access roads are planned to serve future development and minimize frontage access to EMR.
- Approach & Benefit:** B&N will leverage subconsultant Jacobs' experience with the MAG study to build upon the initial access control discussions to establish an understanding among ADOT, Peoria, MCDOT, ASLD and PND to identify common-sense locations for future access. Considerations will include: ADOT access control requirements, drive and intersection spacing and signal O&M, locations of access points relative to the curvature of the horizontal and vertical alignments and site lines from roadside barriers, maintenance access needs for FCDMC at the Wash and MWD at the Canal, trail crossings and a potential HAWK and access maintenance needs for APS, WAPA and other utilities.

Identification of future signal locations will receive special attention. ADOT requirements for signal spacing will prohibit signalization within 0.5 miles of the TI. The planned northern access road will likely be signalized in the future; maximizing the spacing from HVR is preferable.

The segment north of HVR is unlikely to require traffic signals in the near-term pending development on ALSD land west of EMR. The eventual development of that parcel may result in the signalization of the EMR and Coldwater Ranch intersection. The construction of EMR will allow for the installation of ITS infrastructure that will promote traffic signal and coordination technologies.

B&N is an on-call firm for both MCDOT and Peoria and is very experienced with their signal and ITS standards. Similar to Northern Parkway, we will incorporate their traffic control requirements into this ADOT-led project.

Environmental

Process and Deliverables: An Environmental Assessment (EA) is the applicable level of NEPA document required. **B&N team member AZTEC has developed multiple EA documents, including an EA Re-evaluation effort for Peoria and MCDOT for the Northern Parkway Program.** Technical studies will be conducted in advance of the EA including identification of jurisdictional waters of the US subject to Clean Water Act Section 404 permitting, a Phase I Environmental Site Assessment to identify hazardous materials, a biological site visit and air quality analyses.

Key focus areas include noise impacts to existing residences and surveying for cultural resources:

- **Noise Impacts to existing residences:** Because the project will widen EMR adjacent to existing residences, it is expected that noise issues will need to be addressed and documented as part of the NEPA process. Recently, the B&N-AZTEC team evaluated roadway improvements adjacent to existing residences on Northern Parkway. We evaluated a variety of mitigation techniques such as barriers and pavement types including rubberized asphalt and diamond ground concrete to attenuate noise impact to residents.
- **Cultural Resources:** Approximately 75% of the study area has previously been surveyed and multiple cultural resources have been located. Our team has a full suite of cultural resource professionals who will survey the remaining area early in the process to identify sites of issue.

Public Outreach

- Challenge:** We anticipate common public and stakeholder issues (noise, aesthetics, lighting, active transportation) and concerns regarding impacts to local communities and phased roadway implementation that constructs a temporary, interim condition.
- Approach & Benefit:** With significant growth in the project area, we will need to balance residential understanding of the project needs with their expectations through visual storytelling/visualization of alternatives. Following the NEPA process for community engagement, we will provide multiple opportunities (e.g., in-person and virtual meetings, online alternatives review and commenting, etc.) for audiences to be fully educated and involved. We will develop email updates and run a social media campaign in English and Spanish linked to project information. Similar to Northern Parkway, we will prepare collateral for City staff to provide to the Mayor and Council, ensuring they are apprised of project progress and prepped for any questions or complaints. Additionally, we will conduct multiple working group sessions to provide updates.

New City Leadership

Challenge: We recognize that many of Peoria’s elected officials and city staff are new and may have limited institutional knowledge about the MAG feasibility study, this DCR/EA and potential future projects.

Approach & Benefit: While developing the project Public Involvement Plan (PIP), we will align our Public Involvement strategies with the ADOT PIP and Civil Rights Office requirements and conduct an inter-departmental working group to reach consensus on our outreach methods with ADOT, Peoria staff and elected officials. We will use strategies like posters at local community centers, door hangers and flyers at local businesses and churches to increase public participation. During Northern Parkway, B&N supported Peoria technical staff with requested graphics, analysis and figures to allow them to keep leadership informed and the project on schedule.

Team member Avenue Consultants will prepare the PIP in alignment with the 2023 ADOT PIP to streamline approvals, especially by the Civil Rights Group. They will leverage their experience preparing 30+ PIPs for prompt approval.

YOU SHOULD KNOW!

The Peoria City Council member for the Mesquite district is up for re-election in 2024. On past projects, Peoria has delayed public outreach for projects until after elections are complete. We will proactively manage Peoria's public outreach timing expectations to ensure that the ADOT PIP and NEPA processes are followed.

FCDMC Coordination

Challenge: FCDMC is currently constructing the McMicken Dam Outlet Channel Improvements. No CLOMR was prepared and the LOMR will not be ready in time to inform the scoping design criteria.

Approach & Benefit: Early coordination is required with the FCDMC Hydrology and Hydraulic branch staff to confirm design flows to inform the structure design. Proactive coordination will ease the final design tasks of obtaining the Floodplain-Use Permit and the FEMA submittal of the CLOMR.

DRAINAGE MAP



The B&N team will initiate project coordination with FCDMC to confirm hydraulic design parameters prior to them completing their LOMR.

A dapped-end beam bearing on cantilevers structure was implemented at the 48th Street/Grand Canal crossing.

Utility Coordination

Existing utilities along the future corridor include large OH power transmission lines, underground electric, gas lines, telecommunications and others. There are large facilities within the project area including 3 Peoria well sites, an EPCOR booster station and an APS substation. B&N has extensive experience coordinating utilities for existing and new roadways and has strong relationships with the utility companies in the project area. The utilities and their potential impacts are shown in **Figure C**. B&N will leverage our relationships to begin coordination during the scoping process, document correspondence and decisions in a utility log and develop a utility conflicts table to be included in the DCR.

B&N team member AZTEC will complete the utility designating and locating. Our approach includes developing a utility pothole list and strategically identifying locations within the areas to streamline environmental clearance and minimize the need for rights of entry.

YOU SHOULD KNOW!

New Peoria bonding requirements for field work are impacting permit issuance schedules, especially for smaller utility locating companies. B&N team member AZTEC will complete the utility locating efforts; they are able to meet the requirements and mitigate the schedule risk.

FIGURE C. POTENTIAL PROJECT UTILITY IMPACTS

UTILITY OWNER	UTILITY TYPE	POTENTIAL IMPACTS AND CHALLENGES
ADOT	Culverts, Electric, Fiber Optic (FO), Gas, Irrigation, Sewer, Storm Drains, Telephone, Traffic Signals, Water	Impacts to underground facilities at TI
APS	Electric	WestWing electrical substation and expansion project, 500kV transmission lines
Peoria	FO, Reclaimed Water, Sewer, Storm Drains, Traffic Signals, Water	Underground facilities; avoid wells with EMR alignment; accommodate maintenance access for wells
Surprise	Irrigation, Reclaimed Water, Sewer, Storm Drains, Water	No facilities found
Cox, Century Link, Pauley Construction, Verizon, Wyyerd	Cable TV (CATV), FO, Coaxial, Communications, Telephone	Conduit and cell site
EPCOR	Sewer, Water	Design EMR alignment to avoid impacts to booster station
MCDOT	FO, Traffic Signals	Existing and future facilities
MWD	Irrigation	Canal crossing
Southwest Gas	Gas	Underground facilities west of potential EMR alignment
Transwestern	Gas, High-Pressure Gas	36" gas transmission pipeline along Jomax

Intergovernmental Agreements (IGAs)

IGAs will be required to finalize the design plans and for post-construction operations and maintenance. The framework of these agreements will be developed during the scoping process. IGAs will primarily be among Peoria, MCDOT and FCDMC. **B&N has successfully developed the framework for Northern Parkway IGAs among Peoria, MCDOT, FCDMC and ADOT.**

MOT/Constructability

Construction of the new alignment will only impact traffic at the connection points between SR 303L TI and the intersection at HVR. To the north, EMR serves as a tertiary entrance to the Coldwater Ranch development which may allow for a full closure of this north leg as residents would maintain access via Vistancia Blvd and HVR. Traffic on HVR will be maintained at all times.

The intersection improvements at Jomax may necessitate a full closure. The close proximity of the canal may require a raising of the intersections, with improvements extending both north and west. Access through the Trilogy development is sufficient to allow for closure of the intersection. Special considerations will be given to maintaining trail connectivity during construction.

Geotechnical

Our team will research existing data and conduct a site visit and field work to inform the structural and pavement design. ROEs, environmental clearance and an FCDMC floodplain use permit will be required for field activities. We will also evaluate the pavement condition of the existing EMR north of HVR. The section has block cracking and does not appear to be sealed. Depending on the maintenance schedule, the existing pavement may need to be replaced as part of the EMR corridor improvements.

Aerial Mapping and Data Collection

Our team will review available ADOT photogrammetry, survey, mapping and digital terrain modeling to identify data needed to complete the DCR and EA. Additional surveying and mapping will be collected and meet ADOT requirements.

Active Transportation

The new infrastructure will be designed to facilitate safe travel for all users. We will conduct a field inventory and document non-compliant sidewalk and curb ramps including strategies to upgrade the infrastructure to the new PROWAG standard. The field inventory and identified strategies will be documented in the ADA Compliance and Feasibility Report. **The Trilogy Bike Club is a vocal stakeholder group; we will coordinate with Peoria's Neighborhood Services Department to develop a targeted engagement strategy.** The MAG study also identified a need for two trail crossings: one at the Canal and one with a HAWK at the Maricopa Trail.

Preferred Alternative Visualization/Simulation

The B&N team will develop visualizations of the preferred alternative for use in public outreach and to educate/inform Peoria leadership. B&N, Jacobs, AZTEC and Avenue Consultants all have extensive experience creating engaging visuals to communicate the design to the public.

PROJECT SCHEDULE

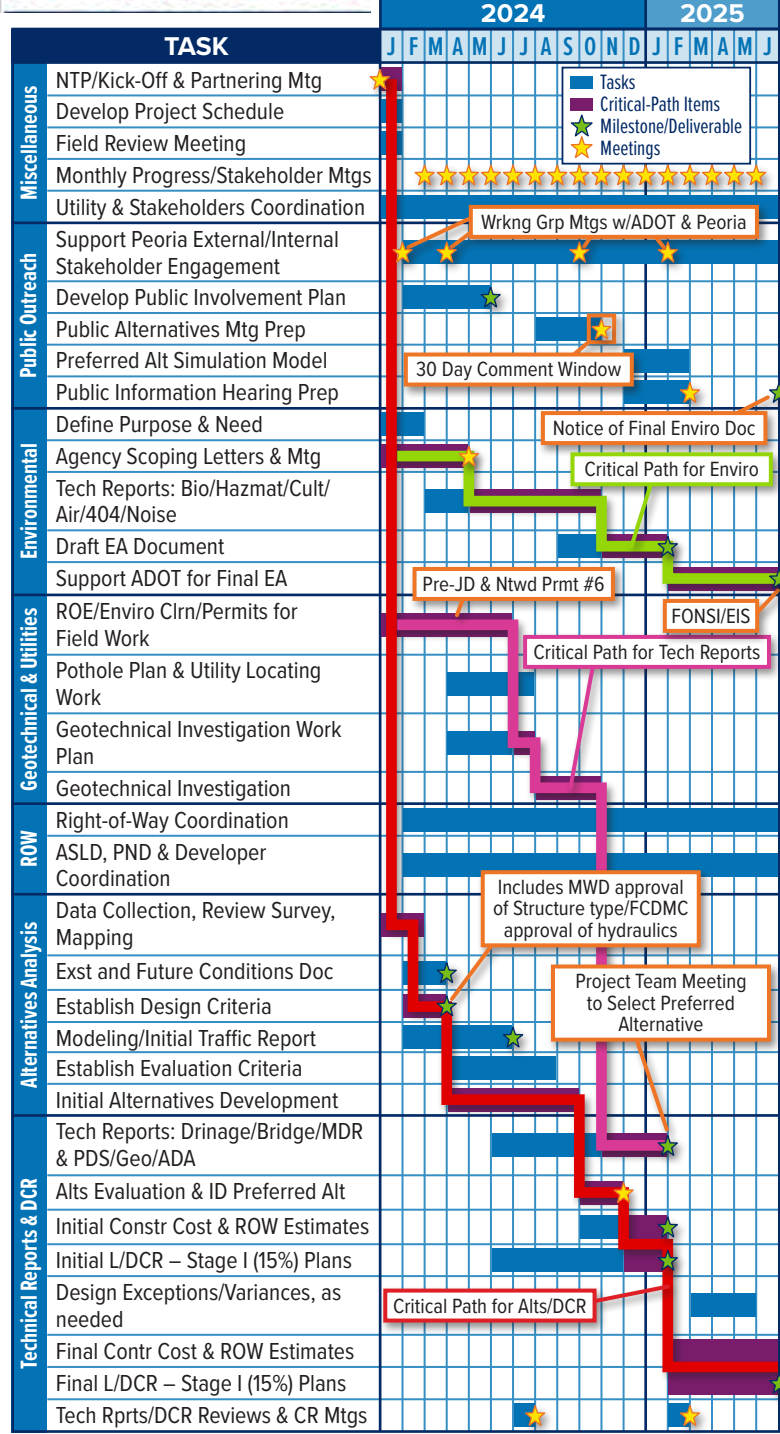
Our proposed 550-day schedule **Figure D.** shows the durations and dependency relationships for each of the major tasks including formal reviews and critical paths for key deliverables. We will focus on the following essential activities as part of the critical path to maintain schedule: 1) Building consensus among local agencies and stakeholders early to establish design criteria and begin alternatives development within three months of project start; 2) Continuously collaborate with local agencies and stakeholders to establish evaluation criteria used to identify the preferred alternative; and 3) Strategically locate geotechnical and utility-locating activities to areas previously surveyed and cleared for cultural resources to streamline the environmental clearance process.

AVERTING SCHEDULE SLIPPAGE

B&N will proactively monitor critical tasks for on-schedule project delivery. David will identify tasks at risk of falling behind schedule and employ the following strategies to avoid or correct any schedule slippage:

- **COORDINATE** proactively with agencies and stakeholders to establish/maintain professional relationships to set study expectations, capture project partner issues and craft solutions.
- **DELIVER** project plans, documents and schedules via Workfront to centralize & streamline the review.
- **MONITOR** the CPM-based schedule we provide to ADOT through WorkFront, mitigating critical path items and averting risks to the schedule prior to alternatives development.
- **IDENTIFY** environmental issues early to determine minimization efforts or mitigation requirements.
- **DEVELOP**, update and act to mitigate risks via a comprehensive risk management plan.
- **MAINTAIN** proactive communications throughout the agency and public scoping with a comprehensive communications plan.
- **ADDRESS** stakeholder coordination items early with agency over-the-shoulder reviews to avoid surprises and keep the deliverables on schedule.
- **BUILD** float contingency in the development of reports, DCR and environmental document submittals.
- **UTILIZE** local and/or corporate staffing resources to meet schedule demands.
- **CONDUCT** staged Quality Assurance (QA)/Quality Control (QC) checks throughout the project.

FIGURE D. PROJECT SCHEDULE



PROJECT RISKS

Our team has identified and evaluated a comprehensive list of project specific risks. Due to the page constraints of the SOQ, the risk register (below) includes the risks that have the greatest impact on project schedule and cost; these risks are ordered by severity.

FIGURE E. RISK REGISTER

Explanation of Risk	Risk Type			Initial Risk	Mitigation Strategies	Final Risk
	Scope	Sched	Budget			
Demand on interim facility will exceed capacity shortly after construction.	✓	✓	✓	H	B&N will review land use assumptions with MAG, Peoria, Surprise and PND; B&N will then complete a traffic forecasting sensitivity analysis to project the utility of the interim solution. Peoria, MCDOT and Surprise can use the data to inform CIP decisions for alternate routes (e.g. expedite HVR/Vistancia int improvements).	M
Addressing stakeholder issues including noise abatement, the inclusion/type/phasing of aesthetics, lighting, and active transportation uses (Trilogy Bicycle Club, Maricopa Trail).		✓	✓	H	Actively listen and memorialize the mitigation measures in the EA document that will carry through to construction. Maximize visual storytelling. Prepare talking points for designated news media contact.	M
<i>Design Standard Selection:</i> 1. Lack of consensus between Peoria and MCDOT on design standard selection. 2. Determining MWD crossing requirements. 3. Establishing Wash hydraulic requirements since FCDMC dam project is altering the hydrology and floodplain.		✓		H	1. Conduct multi-agency meetings early to establish framework of future O&M IGA to determine logical standards selection. 2. Establish MWD parameters for design (e.g. freeboard, lining) and timing (e.g. dry-up periods). 3. Communicate frequently and proactively with multiple departments of FCDMC to agree on design parameters.	L
ASLD opposes corridor impacts to developable land.	✓	✓		H	Continue collaboration begun by Jacobs during MAG study to develop corridor to enhance development opportunities to gain ASLD support, including planning future access locations.	L
Canal freeboard requirements and proximity of Jomax intersection result in unanticipated work along the N and W legs of the intersection.	✓	✓	✓	H	Obtain early consensus from MWD for freeboard; Use innovative dapped-end cast in place cantilever at abutment and place precast/prestressed girder to reduce structure depth while accelerating construction, similar to the 48th Street crossing of the Grand Canal.	L
Peoria Council/leadership staff are new and might not have institutional knowledge, leading to confusion and misalignment with constituents and lack of support for the project.	✓	✓	✓	H	Conduct inter-departmental working groups meetings both pre- and post-PIP. Develop internal staff/elected official alignment to identify engagement strategies, tools and messaging.	L
MWD dry-up period requirements limit structure type due lack of constructability.	✓	✓		H	Use precast elements such as walls beyond lining or precast prestressed beams which eliminate dependence on dry-up period. Coordinate with MWD early and clearly show impacts and benefits of structure types.	L
If LOMR is required for improvements in Wash, the design schedule is increased by 1 year.	✓	✓		M	A LOMR is currently underway for McMicken; coordinate with FCDMC often to ensure appropriate values are used. Obtain criteria early with stakeholder meeting including maintenance and access needs.	L
<i>Cultural Sites:</i> 1. New Cultural Sites are discovered in the Study Area. 2. Geotech/utility location field work in area not previously culturally surveyed, prolonging clearance process.	✓	✓	✓	M	1. Review previous survey information and develop initial alternative to avoid known sites. Perform early cultural resource surveys on any unsurveyed areas and avoid wherever possible. 2. Approximately 75% of the project area has been previously surveyed; we will locate earth disturbing activities to cleared areas.	L
<i>Noise:</i> 1. Issues in Coldwater Ranch about increased noise. 2. Development that is in the permitting process may be considered eligible receivers.	✓	✓	✓	M	1. Targeted outreach to county neighborhood and local elected representative. 2. Work with the local agencies to identify areas where development is pending, determine development status and incorporate the information into noise analysis.	L
Transmission Lines may cause APS/WAPA delays in design approval over issues with proximity of construction equipment.	✓	✓		M	Place McMicken structure south beyond OH power lateral clearance requirements to avoid conflict with any construction booms.	L

PROJECT (CONTRACT) MANAGER



David Lenzer, PE
Existing/Corporate Responsibility: Senior Project Manager
Existing/Corporate Title: Transportation Scoping & Design Section Director
Availability: 75% | **Commitment:** 70%

David has over 18 years of experience successfully delivering all phases of ADOT project development processes including planning, scoping, final design and post design services. He has served in leadership roles for ADOT LPA projects, large federally funded Peoria projects and experience within the project area.

David's Experience:

- David has built consensus with ADOT, Peoria, MCDOT and FCDMC on federally-funded projects.
- David led the technically similar MCDOT/Peoria Northern Pkwy scoping and design projects.
- David's technical strengths combine geometric design and traffic operations.

Relevant Project Experience: Project Manager for ADOT, MCDOT and Peoria On-Calls | MCDOT Northern Parkway, Agua Fria to 99th Ave Scoping | MCDOT Northern Parkway, 99th Ave to US 60 Scoping | ADOT SR101L, 67th and 59th TIs Scoping | ADOT SR303L, Lake Pleasant Parkway to I-17 DCR.

Current Commitments: David has sufficient time and will be committed to this project for the duration of the contract. His current commitments are:

- ADOT I-10/SR 101L TI Final Design (5%)
- MCDOT SR 101L/Northern Pkwy TI Final Design (10%)
- MCDOT Northern Parkway, Agua Fria River to 99th Avenue Final Design (10%)

KEY PERSONNEL

B&N has assembled a highly qualified team of professionals with diverse expertise and substantial history working on similar projects (see next page) for ADOT, Peoria and MCDOT. Our organizational chart is provided in *Figure F*. (right), key personnel qualifications are provided below. Company responsibilities and corporate titles are included on the resumes at the end of this submittal.



Jerika Nickell, PE
Roadway Lead | AZ PE #73211 | A: 75% | BSCE | 14 Years | B&N

- Experience with ADOT, Peoria and MCDOT standards.
- Collaborated with ADOT, MCDOT, Peoria to create unified construction specifications on federally-funded projects.
- Served as lead roadway engineer on Peoria municipal projects.

Jerika leads roadway design for high-profile ADOT and LPA projects.



Matt Wilson, PE, PTOE
Traffic Lead/ASLD Liaison | AZ PE #64030, PTOE #4770 | A: 45% | MSCE | 11 Years | B&N

- Knows ADOT, Peoria and MCDOT traffic engineering needs.
- Liaison experience with ADOT, MAG, ASLD and MCDOT.
- Experience negotiating development agreements and working to resolve challenging issues with ASLD.

Matt's traffic engineering studies and design expertise includes forecasting, analysis, signals, ITS, signing and pavement marking.



Justin Hoppmann
Environmental Lead | A: 50% | MSEPE | 23 Years | AZTEC

- Environmental expert on multiple ADOT projects.
 - Strategic & tactical project support for compliance.
- Justin has direct environmental experience with CE's, EA's, EO's, visual impact analysis and socioeconomic analysis.



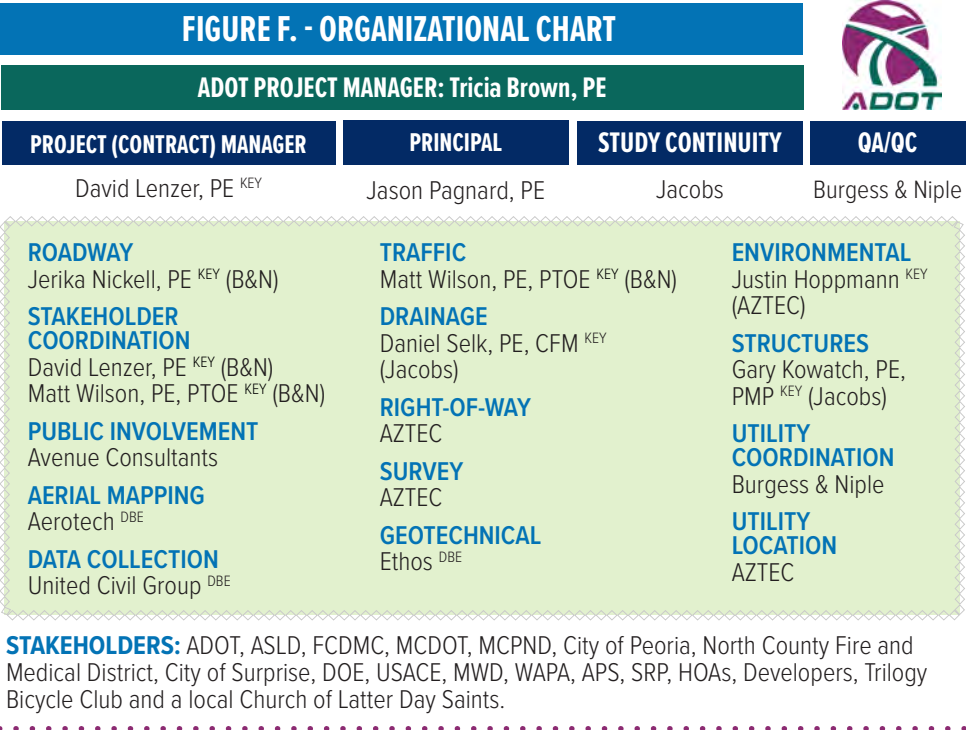
Daniel Selk, PE, CFM
Drainage Lead | AZ PE #61514, CFM #US-12-06405 | A: 65% | BSCE | 12 Years | Jacobs

- Performs services for ADOT DCR and final design projects.
 - Developed ADOT Hydraulics Manual Update.
- Daniel has tackled hydrologic/hydraulic challenges & provided drainage solutions for a multitude of transportation projects.



Gary Kowatch, PE, PMP
Structures Lead | AZ PE #48984, PMP #1293592 | A: 70% | MSCE | 36 Years | Jacobs

- Experience overseeing design, installation & operation.
 - Optimizes bridge concepts to reduce risks and costs.
- Gary's experience includes design and construction of transportation improvements with an emphasis on structures.



SUBCONSULTANTS

Jacobs is a civil engineering firm, with over 112 local transportation professionals, serving ADOT, MCDOT and local agencies since 1968. Jacobs completed the 2022 MAG El Mirage Road Study and is familiar with the project issues and stakeholders.

AZTEC Engineering is a Phoenix-based engineering and environmental services consulting firm that has prepared environmental documentation for ADOT. AZTEC performed these services for B&N's MCDOT/Peoria Northern Parkway projects.

Avenue Consultants are public involvement experts familiar with ADOT's expectations and processes with extensive DCR and EA public outreach experience. The firm has completed ADOT projects that included local agency coordination and NEPA documentation.

Ethos Engineering (DBE) provides geotechnical and structural engineering consulting services, primarily to the transportation market. The team has completed multiple DCRs for ADOT and supports B&N's MCDOT/Peoria Northern Parkway projects.

United Civil Group (DBE) are experts in agency coordination and any/all necessary traffic volume counts who have managed numerous high-profile projects ranging from research to ITS design to transportation and safety studies.

Aerotech Mapping (DBE) provides aerial mapping services. Having worked with ADOT since 2010, they have completed over 60 projects. The firm supports B&N with their experience in transportation-related photogrammetric projects.

FIGURE G. PROJECT TEAM EXPERIENCE

PROJECT INFORMATION: PROJECT NAME, ADOT VALUE, DESCRIPTION, SIMILAR FEATURES		KEY STAFF AND SUBS	DESIGN \$ / CONST. \$
	MCDOT, Northern Parkway, Agua Fria to 99th Ave (Scoping & Final Design)	<i>ADOT VALUE: Federalized arterial street project for Peoria with new bridge</i>	
	B&N (Prime) led the scoping and NEPA documents for a high-profile, federally funded, multi-agency project for the reconstruction of three miles of major arterial street improvements, including four major signalized intersections. The project spanned multiple jurisdictional agencies, including MCDOT and Peoria and partnered with FCDMC for a new bridge over New River. B&N was then selected for final design. Similar Features: Same stakeholders, alternatives analysis, roadway design, bridge design, traffic analysis, traffic and ITS design, environmental analysis, drainage system design, utilities coordination, and stakeholder and public involvement.	David Lenzer Jerika Nickell Matt Wilson Justin Hoppmann AZTEC Ethos	\$2.0M / \$70M
	MCDOT, Northern Parkway, SR 101L to US 60 (Scoping & Final Design)	<i>ADOT VALUE: Federalized arterial street project for Peoria connecting to ADOT TI</i>	
	B&N (Prime) led the scoping and NEPA documents for a high-profile, federally funded, multi-agency project to reconstruct the SR 101L TI, US 60 TI and 4 miles of arterial street and 10 signalized intersections. B&N built consensus with ADOT, MAG, MCDOT, Peoria, Glendale and El Mirage. B&N was then selected for final design as a subconsultant. This project is a 2021 ACEC Engineering Excellence Award Winner. Similar Features: Same stakeholders, alternatives analysis, roadway design, bridge design, traffic analysis, traffic and ITS design, environmental analysis, drainage system design, utilities coordination, and stakeholder and public involvement.	David Lenzer Jerika Nickell Matt Wilson Justin Hoppmann AZTEC Ethos	\$1.3M / \$225M
	ADOT, SR 101L, 67th Avenue to 59th Avenue TIs (Scoping)	<i>ADOT VALUE: ADOT DCR by same Consulting Team with same Stakeholders</i>	
	B&N (Subconsultant to Jacobs) was tasked to lead the scoping and 15% plans for improvements for two TIs and nearby arterial streets under the ADOT MC contract. Partner agencies included ADOT, MAG, Peoria and Glendale. Improvements include reconfiguring the TI intersections, ramps and arterial streets leading up to the TIs while minimizing impacts to the existing overpass bridges. Similar Features: Similar stakeholders, alternatives analysis, roadway design, bridge design, traffic analysis, traffic and ITS design, environmental analysis, drainage system design, utilities coordination, and stakeholder involvement.	David Lenzer Jerika Nickell Matt Wilson Jacobs (Prime) AZTEC	\$195k / \$85M
	ADOT, I-10/SR 101L System TI DCR and Environmental Document	<i>ADOT VALUE: ADOT DCR and Environmental Document by same Consulting Team</i>	
	B&N (Subconsultant) and Jacobs (Prime) led the scoping and environmental analysis for improvements to the I-10/SR 101L system TI, the I-10 service TIs at Avondale Blvd, 107th Ave, 99th Ave, 91st Ave and 83rd Ave, the SR 101L service TIs at McDowell Rd, Thomas Rd and Indian School Rd, and the McDowell Road intersections at 99th Ave and 91st Ave. Similar Features: Stakeholder consensus building, alternatives analysis, roadway design, bridge design, traffic analysis, traffic and ITS design, environmental analysis, drainage system design, utilities coordination, and public involvement.	David Lenzer Jerika Nickell Matt Wilson Jacobs (Prime)	\$575k / \$500M
	ADOT, SR 303L, Lake Pleasant Parkway to I-17 (Scoping & Final Design)	<i>ADOT VALUE: ADOT DCR by same Consulting Team with same Stakeholders</i>	
	B&N (Subconsultant) and Jacobs (Prime) led the scoping and environmental analysis for improvements to the SR 303L for the widening of the SR 303L freeway and new TIs at 67th Ave, 51st Ave and 43rd Ave. B&N coordinated closely with ADOT, Peoria, Phoenix, ASLD and TSMC representatives to assess traffic growth implications along the freeway corridor as well as the broader area transportation network. Similar Features: Similar stakeholders, similar project area, alternatives analysis, roadway design, bridge design, traffic analysis, traffic and ITS design, environmental analysis, drainage system design, utilities coordination and stakeholder engagement including ASLD.	David Lenzer Jerika Nickell Matt Wilson Jacobs (Prime) AZTEC	\$526k / \$500M

YOU SHOULD KNOW!

Jacobs recently completed the **2022 MAG El Mirage Road Feasibility Study** for this project area collaborating with Peoria and MCDOT and providing our team with: Unique insights and risk mitigation strategies to overcome the project issues; leverage relationships with the impacted stakeholders to improve coordination and deliver on the goals, such as making sure we are coordinating with ASLD, taking into account the active development in the area and; coordinating with FCDMC due to the direct and indirect impacts to floodplain and maintenance access and working with ADOT on the access control guidelines north of the SR 303L.

PERSONNEL INFORMATION

Years with the Firm: 18
Total Years Experience: 18
Existing/Corporate Responsibility:
Senior Project Manager
Existing/Corporate Title:
Transportation Scoping & Design
Section Director
Education:
BSE, Civil Engineering - Case
Western Reserve University
Licenses: AZ PE #61197

WHY DAVID?

- ✓ Led 5 federally funded Peoria projects for 8+ miles of major arterial street improvements
- ✓ Project area experience with ADOT, Peoria, MCDOT, FCDMC, MAG and ASLD
- ✓ Skilled in building partner consensus
- ✓ Knows ADOT's processes and technical groups



David Lenzer, PE
Project (Contract) Manager

Availability: 75% | Commitment: 70%

"I enjoy collaborating with ADOT and its partners to build consensus for strong technical solutions."

BURGESS & NIPLE

Background

David has over 18 years of experience successfully delivering on all phases of ADOT project development process deliverables including planning, scoping, final design and post design services. He has served in leadership roles for ADOT LPA projects, large federally funded Peoria projects and projects within the area of the El Mirage Road DCR and EA project area. From this experience, he is extremely familiar with local agency interests and is adept in navigating ADOT's partners through the required processes. David will leverage his relationships with ADOT, Peoria, MCDOT, FCDMC and others to build consensus around strong technical solutions.

David is skilled with leading multi-disciplined teams for ADOT, Peoria and MCDOT. For the Northern Parkway projects, which consists of 8+ miles of federally funded urban arterial street reconstruction, he and his team partnered with AZTEC to complete scoping process and prepare environmental documentation. David also serves in key roles for the ADOT MAG Region Freeway Lifecycle Program Management Consultant contract, where he often collaborates with Jacobs and Aztec to provide scoping services for projects around the Valley. David knows the ADOT process, understands the interests of Peoria, MCDOT and other stakeholders, and has a proven track record on similar projects.

Relevant Experience

- **MCDOT, Northern Pkwy, Agua Fria River to 99th Avenue Scoping**
Role: Deputy Project Manager
David led the scoping and environmental documentation for a high-profile, federally funded, multi-agency project to design the reconstruction and widening of three miles of major arterial street improvements, including four major signalized intersections. The project spanned multiple jurisdictional agencies (MCDOT, Peoria, Glendale and El Mirage) with different design standards. The project included partnering with FCDMC to reconfigure the existing bridge over New River and design a new parallel bridge. Project design elements included alternatives analysis, roadway design, bridge design, traffic analysis, crash and safety analysis, traffic design, environmental analysis, drainage system design, utilities coordination and stakeholder and public involvement.
- **MCDOT, Northern Pkwy, Agua Fria River to 99th Ave Final Design**
Role: Deputy Project Manager
Building off of B&N's scoping project success, David led the federally funded final design to reconstruct and widen three miles of major arterial street improvements, including four major signalized intersections and a new bridge over New River. The project incorporated design standards from MCDOT, Peoria, Glendale, El Mirage and FCDMC.
- **MCDOT, Northern Pkwy, SR 101L to US 60 (Grand Ave) Scoping**
Role: Deputy Project Manager and Design Manager
David led the scoping and environmental documentation for a high-profile, federally funded, multi-agency project to design the reconstruction of the SR 101L TI, US 60 TI and four miles of arterial street improvements. B&N built consensus with the project partners of ADOT, MCDOT, Peoria, Glendale, El Mirage and engaged major stakeholders MAG, FCDMC and others. The successful collaboration earned the project an additional \$10M in regional funding. The SR 101L TI will become a DDI to accommodate high traffic volumes and minimize impacts to the SR 101L overpass bridge. Project challenges included nearby major arterial intersections, private property access, nearby active development, drainage channel and river. Complex traffic analysis, including microsimulation, was used to evaluate alternatives.
- **MCDOT, Northern Pkwy, SR 101L TI Final Design**
Role: B&N Project Manager
David led the federally funded final design for the SR 101L/Northern Pkwy TI reconstruction. The scope includes converting the existing diamond TI into a DDI. Design elements are closely coordinated with ADOT, MCDOT, Peoria, Glendale, El Mirage, MAG and FCDMC. Consensus is needed since the project is jointly funded by multiple agencies and spans multiple jurisdictions. Northern Avenue is being widened from a four-lane arterial to an eight-lane arterial within the vicinity of the TI to handle a future traffic volume of over 70k daily vehicles.
- **ADOT, SR101L/I-10 System Interchange DCR and Environmental Document**
Role: Project Manager
David served in a leading role for the team that evaluated the I-10/ SR 101L system TI; the I-10 service TIs at Avondale Blvd, 107th Ave, 99th Ave, 91st Ave and 83rd Ave; the SR 101L service TIs at McDowell Rd, Thomas Rd and Indian School Rd; and the McDowell Road intersections at 99th Ave and 91st Ave. The study was conducted in partnership with MAG, ADOT, FHWA, Phoenix and Tolleson to evaluate traffic operations and recommend geometric improvements. B&N developed alternatives to accommodate a new DHOV ramp at the system TI connecting I-10 to/from the east and SR 101L to/from the north. The project developed a new connection between SR 101L and 91st Avenue. Additional improvements were developed at each TI, the McDowell Rd intersections and arterial streets within the vicinity of the system TI. Complex traffic analysis, including microsimulation, was used to evaluate TI alternatives. The foundation of this successful project was established by a MAG feasibility study prepared by David and B&N.

■ **ADOT, Management Consultant for the MAG RTP Freeway Program**

Role: B&N Project Manager

David is assisting ADOT and MAG in the management of the RTP Freeway Program. Among many services, David has provided project management for scoping projects, cost estimating, programming support, value engineering and project coordination activities.

■ **ADOT, SR 101L, 67th Ave and 59th Ave TIs Scoping**

Role: B&N Project Manager and Senior Engineer

Under the ADOT MC for the MAG RTP Freeway Program contract, David led the scoping for proposed improvements to two TIs on SR 101L, as well as the nearby arterial streets. The urban TIs provide critical freeway access to Glendale and Phoenix. They are located in developed areas with closely spaced intersections and property access. The project was coordinated closely with the local cities and an active SR 101L add GPL project that was in final design. The project included alternatives development and analysis, geometric design, traffic analysis, safety analysis, environmental documentation, public outreach, stakeholder engagement and more. B&N developed complex microsimulation models to evaluate the alternatives, which considered mainline traffic, frontage road system, nearby arterial intersections and property access.

■ **ADOT, SR 303L, Lake Pleasant Parkway to I-17 Scoping**

Role: Senior Engineer

Under the ADOT MC for the MAG RTP Freeway Program contract, David led the corridor traffic forecast and TI alternatives development for the 67th Ave TI scoping and environmental documentation. He assisted with the alternative development and analysis of the 51st Ave and 43rd Ave TIs. B&N coordinated closely with ADOT, Phoenix, ASLD and Taiwan Semiconductor Manufacturing Company (TSMC) fabrication plant representatives to assess regional growth and traffic implications.

■ **ADOT, SR 303L, 43rd Ave and 51st Ave TIs Final Design**

Role: Traffic Design Manager

David oversaw the signing, pavement marking and traffic control for the new 43rd Avenue and 51st Avenue TIs. He was responsible for the maintenance of traffic and construction sequencing plans, specifications and quantities to align with the accelerated construction schedule that is coordinated with the opening of the adjacent TSMC fabrication plant and Phoenix Road improvements.

■ **ADOT, SR 202L, I-10 to Val Vista Dr GPL Scoping**

Role: Senior Engineer

David oversaw the traffic analysis and assisted with the development and evaluation of corridor and TI alternatives for the scoping and environmental documentation of GPL additions for over 12 miles of urban freeway and nine TIs. Improvements were closely coordinated with local agencies and additional planned major freeway improvements to SR 101L and South Mountain SR 202L. B&N coordinated with MAG, ADOT, Chandler and Gilbert to prepare traffic forecasts. B&N developed complex microsimulation models to evaluate mainline and TI performance.

■ **ADOT, SR 202L, SR 101L to Val Vista Dr GPL Final Design**

Role: Design Manager

David led final design improvements to the McQueen Rd and Cooper Rd TIs and all crossroads for roadway improvements, traffic signal upgrades and ADA improvements along 11 miles of the Santan SR 202L. B&N updated the detailed traffic analysis to account for the newly opened South Mountain SR 202L freeway and the new Lindsay Rd TI. He coordinated with ADOT and local agencies for compliance with local requirements.

■ **ADOT, Performance Based Practical Design Guidelines and Implementation**

Role: Senior Engineer & Contributing Author

David leveraged his local and national PBPD expertise to support the development and implementation of ADOT's PBPD Guidelines as a technical expert on roadway design. David collaborated with ADOT senior staff to help author the guidelines that are furthering ADOT's PBPD initiative. The guidelines provide ADOT staff and others with processes and procedures to evaluate the performance of existing facilities and proposed alternatives.

■ **MAG, I-10, Tunnel to I-17 Split Preliminary Scoping**

Role: Project Manager and Senior Engineer

David is leading a team that is evaluating I-10, from the Deck Park Tunnel to the I-17 Split, including the SR 51/SR 202L Ministack system TI and numerous service TIs. He is closely coordinating with ADOT, MAG, FHWA, Phoenix and Sky Harbor for his team to develop and evaluate geometric alternatives, complete a complex microsimulation traffic analysis and prepare preliminary environmental documentation. B&N is leveraging complex urban environment expertise for mainline freeway, system and service TI operations, airport operations, municipal transportation needs, and building stakeholder consensus.

■ **ADOT LPA, Southern Avenue, Delaware Dr to Ironwood Dr**

Role: Project Manager

David led the scoping, final design and post design to reconstruct and widen 1/2 mile of Southern Avenue as part of the ADOT Project Development On-Call. B&N partnered with the local agency (Apache Junction) to define the project, resolve utility conflicts, address right-of-way needs, and more. The project included widening Southern Avenue to a five-lane section, with a two-way left-turn lane and bicycle lanes. B&N performed utility coordination with SRP and Southwest Gas and utility relocation with AZ Water Company and CenturyLink.

■ **City of Peoria, Lake Pleasant Parkway at Remuda Drive Median Improvements**

Role: Project Manager

David led design for improvements to Lake Pleasant Parkway to provide access to Remuda Drive. B&N prepared final design plans and provided post-design services for median improvements. The design included converting an existing right-in right-out to allow full access to a neighborhood. Additional project elements included signing and pavement markings, landscaping and irrigation, an assessment of the existing drainage infrastructure and utility coordination. B&N completed the project design in three months to accommodate an accelerated schedule per the City's request.



PERSONNEL INFORMATION

Years with the Firm: 2.5
Total Years Experience: 14
Existing/Corporate Responsibility:
Roadway Engineer
Existing/Corporate Title:
Transportation Engineer
Education:
BS, Civil Engineering - University of California-Irvine
Licenses: AZ PE #73211



Jerika Nickell, PE
Roadway Lead
Availability: 75% | Commitment: 55%

BURGESS & NIPLE

Background

Jerika has over 14 years of experience in transportation engineering with an emphasis on roadway design. Her experience in recent years has focused on delivering ADOT, Peoria and MCDOT projects, where she is skilled with incorporating design standards of multiple agencies. Her expertise includes all aspects of project development including the scoping, design and construction phases of urban and rural streets and highways, intersections and TIs and active transportation facilities. Jerika is detail oriented and focused on how projects are constructed. She has expertise in determining feasibility, crafting implementation plans and developing accurate project cost estimates.

Relevant Experience

- **MCDOT, Northern Parkway, Agua Fria River to 99th Avenue**
Role: Roadway Engineer
Jerika is the lead roadway engineer for the design of a high-profile, federally funded, multi-agency project for the reconstruction and widening of three miles of major arterial street improvements, including four major signalized intersections. The project spanned multiple jurisdictional agencies (MCDOT, Peoria, Glendale and El Mirage) with different design standards. The project included partnering with FCDMC to reconfigure the existing bridge over New River and design a new parallel bridge. Project design elements included roadway design, bridge design, traffic design, drainage system design, utilities coordination, active transportation design and stakeholder and public involvement.
- **MCDOT, Northern Pkwy, SR 101L TI**
Role: Roadway Engineer
Jerika is the lead roadway engineer for the federally funded design for the SR 101L/Northern Pkwy TI reconstruction. The scope includes widening Northern Avenue and converting the existing diamond TI into a DDI. Design elements are closely coordinated with ADOT, MCDOT, Peoria, Glendale, El Mirage, MAG and FCDMC. Consensus is needed since the project is jointly funded by multiple agencies and spans multiple jurisdictions. Northern Avenue is being widened from a four-lane arterial to an eight-lane arterial within the vicinity of the TI to handle a future traffic volume of over 70k daily vehicles.
- **ADOT, SR101L/I-10 System Interchange DCR and Environmental Document**
Role: Roadway Engineer
Jerika served as roadway engineer for a DCR that evaluated the I-10/SR 101L system TI, the I-10 service TIs at Avondale Blvd, 107th Ave, 99th Ave, 91st Ave and 83rd Ave, the SR 101L service TIs at McDowell Rd, Thomas Rd and Indian School Rd, and the McDowell Road intersections at 99th Ave and 91st Ave. B&N developed: 1) Alternatives to accommodate a new DHOV ramp at the system TI, 2) Developed improvements for the I-10 TIs at Avondale Boulevard, 107th Avenue and 99th Avenue, 3) Development street improvements for 91st Avenue, 83rd Avenue and McDowell Road.

- **ADOT, SR 303L, 43rd Avenue and 51st Avenue Improvements**
Role: Constructability/MOT Traffic Engineer
As the Constructability/MOT Traffic Engineer, Jerika led the signing, pavement marking and traffic control for the new 43rd Avenue and 51st Avenue TIs in Phoenix, Arizona. She was responsible for the maintenance of traffic and construction sequencing plans, specifications and quantities to align with the accelerated construction schedule that is coordinated with the opening of the adjacent TSMC fabrication plant and Phoenix Road improvements.
- **ADOT, SR 202L, SR 101L to Val Vista Drive GPL**
Role: Roadway Engineer
As the Roadway Engineer, Jerika provided roadway design support for the improvements to the McQueen Rd and Cooper Rd TIs and all crossroad roadway improvements, traffic signal upgrades and ADA improvements along 11 miles of the San Tan SR 202L in Chandler and Gilbert, Arizona.
- **MCDOT/City of Surprise, Peoria Avenue, Citrus Road to SR 303L**
Role: Roadway Engineer
As the Roadway Engineer, Jerika provides her engineering services on this detailed scoping study to define intersection and roadway improvements Peoria Avenue in Surprise, Arizona. B&N is partnering as a subconsultant and is responsible for producing an alternatives analysis technical memorandum, a traffic analysis technical memorandum, signing plans, pavement marking plans and ITS plans.
- **City of Peoria, Lake Pleasant Parkway at Remuda Drive Median Improvements**
Role: Roadway Engineer
Jerika was responsible for the overall design of all civil improvements on this project in Peoria, Arizona. B&N prepared final design plans and provided post-design services for median improvements to Lake Pleasant Parkway at Remuda Drive. The design included converting an existing right-in right-out to allow full access to a neighborhood. Additional project elements included signing and pavement markings, landscaping and irrigation, an assessment of the existing drainage infrastructure and utility coordination. B&N completed the project design in three months to accommodate an accelerated schedule per the City's request.
- **ADOT, Management Consultant for the MAG RTP Freeway Program**
Role: Roadway Engineer
Jerika is assisting ADOT and MAG in the management of the RTP Freeway Program. Among many services, Jerika has provided roadway concept development and cost estimating for scoping projects and programming support.

- WHY JERIKA?
- ✓ Project area roadway experience partnering with ADOT, Peoria, MCDOT, FCDMC, MAG and others
 - ✓ Roadway lead for Northern Parkway, which has similar project challenges
 - ✓ Significant ADOT and local agency experience and relationships

PERSONNEL INFORMATION

Years with the Firm: 1
Total Years Experience: 11
Existing/Corporate Responsibility:
Senior Traffic Engineer
Existing/Corporate Title: Traffic
Section Director
Education:
MS, Civil Engineering - Arizona
State University
BS, Civil Engineering - Sacramento
State University
Licenses: AZ PE #64030, PTOE
#4770

WHY MATT?

- ✓ Extensive experience in traffic analysis and operations
- ✓ Public agency leadership and stakeholder understanding
- ✓ Strong relationships and experience with ADOT, Peoria, MCDOT and ASLD



Matt Wilson, PE, PTOE
Traffic Lead
Availability: 45% | Commitment: 40%

BURGESS & NIPLE

Background

Matt’s engineering expertise consists of traffic studies and design including large-scale simulation modeling, traffic forecasting and capacity analyses, ITS design, traffic signal timing and design, signing and pavement marking design, maintenance of traffic and utility coordination. Matt has demonstrated leadership in complex projects and understands the challenges facing a rapidly growing city from planning and programming infrastructure investments to developing coordination, management of operations and various maintenance functions.

Matt joined B&N in April 2022 and previously served as Deputy Street Transportation Director for the City of Phoenix’s Traffic Services Division. He excels at innovative problem-solving and promoting collaboration between stakeholders. He has experience negotiating development agreements and working to resolve challenging issues between multiple agencies, including the Arizona State Land Department (ASLD). Matt has led traffic engineering study and design and served as liaison, for ADOT, Peoria, MCDOT and MAG projects.

Relevant Experience

- **MCDOT, Northern Pkwy, SR 101L TI Final Design**
Role: Senior Traffic Engineer
Matt is the lead traffic engineer for the final design for the SR 101L/ Northern Pkwy TI reconstruction. The scope includes converting the existing diamond TI into a diverging diamond interchange and developing maintenance of traffic plans, traffic control quantities and multi-phase traffic control plans, advance warning signs and trailblazing signage. Construction sequencing was coordinated with ADOT, MCDOT, MAG, Tohono O’odham and cities of Peoria and Glendale. Northern Avenue is being widened from a four-lane arterial to an eight-lane arterial within the vicinity of the TI.
- **MCDOT, Northern Pkwy, Agua Fria River to 99th Avenue**
Role: Senior Traffic Engineer
Matt is the lead traffic engineer for the design of a high-profile, federally funded, multi-agency project for the reconstruction and widening of three miles of major arterial street improvements, including four major signalized intersections. The project spanned multiple jurisdictional agencies (MCDOT, Peoria, Glendale and El Mirage) with different design standards. The project included partnering with FCDMC to reconfigure the existing bridge over New River and design a new parallel bridge. Project design elements included roadway design, bridge design, traffic design, drainage system design, utilities coordination, active transportation design and stakeholder and public involvement.
- **ADOT, SR303L, Lake Pleasant Parkway to 51st Ave Final Design**
Role: Senior Traffic Engineer
Matt is leading the pavement marking and signage design for the final design phase of the SR 303L freeway GPL addition. This project includes conceptual pavement marking and signage design for the future 67th Avenue TI. The project will widen SR 303L by expanding the shoulders and completing mainline improvements, including the bridge at the 67th Avenue future TI in coordination.
- **ADOT, SR 101L, 67th Avenue to 59th Avenue TIs DCR**
Role: Senior Traffic Engineer
Matt was a senior traffic engineer for the scoping and 15% plans for improvements for two TIs and nearby arterial street improvements. Improvements include reconfiguring the TI intersections, ramps and arterial streets leading up to the TIs while minimizing impacts to the existing overpass bridges. Coordination was conducted with ADOT, MAG, Glendale, Peoria and Phoenix. Project features included alternatives development and analysis, complex traffic analysis and microsimulation, traffic and ITS design, bridges and walls design, drainage design and utility coordination.
- **ADOT, SR 303L, 43rd Ave and 51st Ave TIs Final Design**
Role: Traffic Engineer
For the City of Phoenix, Matt was a primary reviewer of the accelerated DCR and final design plans as an extension of his role as off-site improvement coordinator for the TSMC fabrication plant. Upon joining B&N, Matt led technical oversight of the traffic plans and inter-agency coordination.
- **ADOT, SR101L/I-10 System Interchange DCR and Environmental Document**
Role: Senior Traffic Engineer
Matt served as traffic engineer for a DCR that evaluated the I-10/ SR 101L system TI, the I-10 service TIs at Avondale Blvd, 107th Ave, 99th Ave, 91st Ave and 83rd Ave, the SR 101L service TIs at McDowell Rd, Thomas Rd and Indian School Rd, and the McDowell Road intersections at 99th Ave and 91st Ave. B&N developed: 1) Alternatives to accommodate a new DHOV ramp at the system TI, 2) Developed improvements for the I-10 TIs at Avondale Boulevard, 107th Avenue and 99th Avenue, 3) Development street improvements for 91st Avenue, 83rd Avenue and McDowell Road.

PERSONNEL INFORMATION

Years with the Firm: 21
Total Years Experience: 23
Existing/Corporate Responsibility:
Senior Environmental Engineer
Existing/Corporate Title: Senior
Environmental Engineer
Education:
BS, Environmental Planning -
Arizona State University

BS, Forest Resources and
Conservation

WHY JUSTIN?

- ✓ Environmental expert on multiple ADOT projects
- ✓ Team Chemistry with Burgess & Niple’s key team members on recent projects in the Valley
- ✓ Strategic and tactical support for environmental compliance throughout design development



Justin Hoppmann
Environmental Lead
Availability: 50% | Commitment: 40%



Background

Justin has 23 years of experience preparing a variety of environmental studies including categorical exclusions (CE), environmental assessments (EA), environmental overviews (EO), visual impact analyses, socioeconomic analyses, land use studies, recreation master plans and other environmental documents. The breadth of experience has been as an environmental lead or planner for ADOT and MCDOT projects, providing the assurance of a PM who can navigate through local, state and federal agencies to secure timely permits for environmental compliance and keep projects on schedule.

Relevant Experience

- **ADOT, Environmental Planning On-Call**
Role: Environmental Planner
Justin completed documentation, performed coordination and provided technical input pursuant to compliance with NEPA, FHWA regulations and state and local environmental regulations for transportation and maintenance projects including transportation enhancements in urban settings. This contract also included the preparation of over 150 hazardous materials investigations including several Phase I Environmental Site Assessments performed to ASTM 1527.13 standards.
- **MCDOT, Environmental Planning Support Services On-Call**
Role: Environmental Manager
AZTEC has held multiple on-call contracts with the Maricopa County Department of Transportation (MCDOT) for environmental services. Justin is the manager for the current contract and also manages the preparation and completion of environmental clearances. These have included environmental overviews as well as CEs to comply with NEPA. Many projects have required technical studies for biological, cultural, hazmat, air quality, traffic noise and water quality.
- **MCDOT, Northern Parkway, 99th Ave to US 60 (Grand Ave)**
Role: Environmental Planner/Project Manager
AZTEC assisted Burgess & Niple on this study to evaluate corridor alternatives for the extension of Northern Parkway to it terminus at US 60 (Grand Avenue). AZTEC completed an Environmental Identification Memorandum which identified environmental issues and additional studies, permitting and clearances needed to complete the project.
- **MCDOT, Northern Parkway, 99th Ave to 87th Ave**
Role: Environmental Planner
AZTEC assisted with the completion of an Environmental Assessment Re-evaluation for this federally-funded segment of Northern Parkway. This project also included technical studies for biology, noise, air quality, cultural resources and Clean Water Act Section 404 permitting.
- **MCDOT, Northern Parkway, Agua Fria River to 99th Ave**
Role: Environmental Planner
AZTEC assisted Burgess & Niple on the completion of an Environmental Assessment Re-evaluation for this federally-funded segment of Northern Parkway. This project also included technical studies for biology, air quality, cultural resources, Clean Water Act Section 404 permitting, as well as noise modeling and reporting.
- **ADOT, US 60 (Grand Ave) Widening**
Role: Environmental Planner
Justin Prepared a Categorical Exclusion and associated environmental documentation for this ADOT project which widened US 60 (Grand Avenue) from four lanes to six lanes between the Loop 101 and Loop 303. Specific analyses performed for the project included evaluations of potential impacts to endangered species, native plants, water quality, USCOE jurisdictional waters, visual resources and cultural resources.
- **MCDOT ,Wild Rose Pkwy & Camelback Pkwy Feasibility Studies**
Role: Environmental Planner
As a subconsultant to Burgess & Niple, AZTEC prepared Environmental Overviews (EO) for these two proposed roadway corridors. Both parkways are located in western Maricopa County in an area that is expected to experience development in the future. The EO documents were used to assist in the development and evaluation of alignment alternatives. The EO described the socioeconomic, physical and natural environment of the study area to provide a baseline overview of environmental issues.
- **ADOT, SR 303L, Happy Valley Road to Lake Pleasant Parkway**
Role: Environmental Planner
This project included the construction of a new 7.3-mile, four-lane interim freeway (SR303L) in a rugged, undeveloped corridor northwest of Phoenix and won numerous awards for its environmental sensitivity. As an environmental planner, Mr. Hoppmann ensured environmental compliance during final design with all laws and regulations as well as compliance with mitigation measures established in an Environmental Assessment for the project. This project required extensive archaeological excavations, biological resource evaluation and water quality analyses and permitting. Section 404 permitting included obtaining permits for a new bridge over the Agua Fria River. Additional work included native plant inventory and assisting in the documentation of NEPA adequacy (DNA) for the acquisition of right-of-way from the BLM.

PERSONNEL INFORMATION

Years with the Firm: 1
Total Years Experience: 12
Existing/Corporate Responsibility:
Senior Drainage Engineer
Existing/Corporate Title: Senior
Drainage Engineer
Education:
BS, Civil Engineering - University of
Kentucky
Licenses: AZ PE #61514, CFM #US-
12-06405

WHY DANIEL?

- ✓ Drainage-forward solutions developer with future considerations in mind
- ✓ Developed ADOT's Hydraulics Manual Update
- ✓ Expert in local hydrology and hydraulics methods
- ✓ Experienced navigating complex floodplain issues and permitting



Daniel Selk
Drainage Lead
Availability: 65% | Commitment: 50%

Jacobs

Background

For over 12 years, Daniel has been eager to tackle hydrologic and hydraulic challenges and provide drainage solutions for a multitude of transportation projects which span all four corners of Arizona. His experience includes drainage design, rainfall-runoff analysis using simple and complex methods, complex hydraulic analysis, expert witness services, contributions to ADOT guidance manuals and coordination with most major stakeholders and municipalities within the state of Arizona. Daniel brings expertise in hydrologic and hydraulic methods used in the arid southwest and has presented at multiple statewide and national conferences on the subjects of rainfall analysis, complex storm drain modeling and 2-Dimensional H&H modeling. Daniel's expertise in analysis is grounded by earlier experience as an intern in surveying, CAD drafting and GIS.

Relevant Experience

- **ADOT, I-10 Broadway Curve**
Role: Drainage Engineer
This project includes widening I-10 to provide six GPLs and two HOV lanes in each direction from 24th St. to US60 and four GPLs and one HOV lane from US60 to Ray Rd. The team coordinated with ADOT Major Projects Group, ADOT Technical Groups, GEC technical leads and project stakeholders to gather input for the schematic design concept and associated design criteria. Daniel developed dynamic on-site drainage system using EPA SWMM for CD-Roads. He also reviewed floodplain impacts and prepared CLOMR documents for both Salt River Bridge widening and I-10/US60 TI. Having completed over 20 FEMA CLOMRs/LOMRs, Daniel leveraged his extensive experience to efficiently navigate FEMA's processes to streamline the floodplain review, eliminating schedule delay risks and saving 3 months on the schedule.
- **ADOT, US60/Meridian Road TI DCR**
Role: Drainage Engineer
The proposed drainage improvements at the US60/Meridian Rd. TI included the design of box culvert crossings and on-site drainage catch basins along US60. The project required coordination with the CAWCD, FCDMC, City of Mesa and City of Apache Junction. Daniel was responsible for on-site and off-site drainage analyses for proposed drainage improvements. Daniel prepared hydrologic (HEC-1) and hydraulic models (HEC-RAS). Daniel's analysis helped to mitigate ROW impacts within the constrained footprint which was critical to developing the comprehensive on-site drainage model.
- **ADOT, I-10, SR 202L to SR 387 DCR & EA**
Role: Drainage Engineer
This 26-mile segment is a major connection between Phoenix and Tucson within the Gila River Indian Community and is the last remaining piece

of ADOT's overall vision for expanding I-10's capacity. The DCR evaluated meeting future travel/freight demand, address design standards and end-of-service-life elements and improve safety. Daniel performed off-site stormwater hydrologic analysis from SR 202L to MP 168.7. He inventoried existing culvert crossings and determined the existing condition hydraulic capacity for the cross culverts from SR 202L to the Gila River. He also developed HEC-1 hydrologic models and performed Rational Method calculations for design peak discharges and incorporated results into culvert calculations using HY-8 and CulvertMaster software. Daniel's working relationship with the Gila River Indian Community streamlined communication and collaboration with this key stakeholder, expediting the data acquisition and analysis process.

- **ADOT, SR347 UPRR Crossing Final Design**
Role: Drainage Engineer
This TIGER grant-assisted project replaced the existing at-grade crossing of SR 347 at UPRR in Maricopa, AZ with an elevated bridge crossing and reconfiguration of local streets in the area. Drainage elements for the project included routing of flows dynamically through a storm drain and storage system as well as a major FEMA floodplain crossing. Daniel performed off-site drainage analysis, development of the associated drainage report and development of the drainage CLOMR packages. Daniel utilized SWMM software to model the dynamic storm drain and retention basin system which allowed for a reduction in construction costs due to reduced drainage facility sizing. Daniel's efforts to reduce the drainage facility size and impacts returned acres back to the local community.
- **ADOT, 52nd Street and Turquoise Avenue Drainage Study**
Role: Drainage Engineer and GIS Specialist
Daniel performed engineering analyses to develop mitigation measures for stormwater flooding. FLO-2D hydrologic modeling was performed for the multiple storm events. Major flooding issues were identified and three flood mitigation alternatives for the three design storms were modeled and evaluated, one of which went on to final design and construction.
- **ADOT, Billy Creek Pedestrian Bridge**
Role: Drainage Engineer
Daniel performed hydraulic analysis of approximately 1 mile of stream with complex bridge and weir geometry as well as floodway delineation. Daniel also prepared the CLOMR and interfaced with FEMA from start to approval of CLOMR. The CLOMR process involved complex floodplain issues and coordination with the Town and individual property owners.

PERSONNEL INFORMATION

Years with the Firm: 4
Total Years Experience: 36
Existing/Corporate Responsibility:
Senior Structural Engineer
Existing/Corporate Title: Senior
Structural Engineer
Education:
MS, Civil Engineering - University of
Pittsburgh
Licenses: AZ PE #48984, PMP
#1293592

WHY GARY?

- ✓ ADOT urban bridge familiarity and expertise
- ✓ Optimizes bridge concepts to reduce risk and cost
- ✓ Evaluates ABC methods versus investments to minimize impacts to the traveling public



Gary Kowatch, PE, PMP
Structures Lead
Availability: 70% | Commitment: 45%

Background

Gary is one of our most senior structural engineers and project managers with a record of successful completion of complex transportation improvement projects utilizing various forms of project delivery, including P3 and Design-Build. Gary has a wide range of experience including bridge construction (working as a construction inspector and a field engineer for a bridge contractor), structure design, design management and project management. This experience has provided Gary with keen insight into both the technical and administrative requirements needed to successfully deliver complex, high-profile projects. His experience includes the oversight and design management of 13 different design consultants on the 24-mile, \$2B Mon/Fayette Expressway PA Route 51 to I-376 project and performing structure reviews for the Pennsylvania Rapid Bridge Replacement Project, a P3 project for the replacement of over 500 structurally deficient bridges over a three-year period. He has also been a member of project teams for large scale projects in Arizona, Utah, Pennsylvania and Florida.

Relevant Experience

- ADOT, SR101L/I-10 System Interchange DCR and Environmental Document
Role: Senior Structures Engineer
Jacobs partnered with ADOT; MAG; cities of Phoenix, Avondale, and Tolleson; and other adjacent stakeholders to improve regional connectivity through improvements at this critically important system interchange. Gary and the team evaluated concepts and provided cost estimates for a Direct High Occupancy Vehicle (DHOV) Ramp from eastbound I-10 to southbound SR101L to and westbound I-10 to northbound SR101L. The scope included the 91st Avenue Connector, which connects southbound SR101L traffic with 91st Avenue through this heavily congested area. The final recommendations were documented in a DCR and CE environmental document. Through our team’s understanding of the DCR process coupled with our direct engagement with stakeholders and the public, we delivered the project within the time-sensitive schedule, while making sure all stakeholder’s needs were identified and met.
- ADOT, SR303L TIs at 51st and 43rd Avenues PA, EA and Final Design
Role: Structures Lead
Jacobs was responsible for the design of two new interchanges to accommodate the Taiwan Semiconductor Manufacturing Company, Inc. (TSMC) campus, which included arterial connections, sidewalks, a new westbound frontage road, MOT/construction sequencing, and public involvement. The aggressive schedule required reducing the 18-month design time frame to 11 months. Jacobs applied a DB methodology to meet the schedule through weekly meetings and proactive coordination and collaboration with ADOT, City of Phoenix, Maricopa Association of Governments, Arizona State Land Department (ASLD), TSMC, FEMA and utility providers. Gary led the structural designs which included the design

of four mainline precast, prestressed concrete I-girder bridges. Gary’s team rose to the challenge of meeting every milestone of the compressed schedule and submitted high-quality work products meeting ADOT criteria. The quality submissions led to expedited reviews during design and no changes during construction, which led to on-time completion of the bridges. During construction, Gary collaborated directly with the contractor and fabricator to resolve low concrete strength issues which resulted in the precast girders being delivered on time.

- ADOT/Peoria, Stadium Trail (Phase 2) Pedestrian Bridge
Role: Project Manager
Stadium Trail is a shared-use path within the City of Peoria (City) and is an important link within the City’s overall trail system as it provides connectivity to other trail segments. It will provide direct access to the Peoria Sports Complex and P83 entertainment district. Gary was selected as the lead bridge engineer and project manager based on his past experience developing award winning pedestrian bridge projects. Gary led a diverse team to overcome project challenges, including extensive coordination with the FCDMC and USACE which was required due to modifications to the existing Arizona Canal Diversion Channel. His proactive coordination eliminated stakeholder-driven schedule impacts and facilitated the consensus building process.
- ADOT, I-10 Deck Park Tunnel
Role: Project Manager/Lead Bridge Engineer
This project was a structure preservation study to evaluate and develop strategies to remediate water leakage occurring at the existing I-10 Deck Park Tunnel. The “Tunnel” is a series of 19 cast-in-place post tensioned box girder bridges which supports the Margaret T. Hance Park in the City of Phoenix. The proposed leak mitigation strategies include installing a new drainage system behind the existing abutments consisting of perforated HDPE pipe and geotextile waterproofing membranes. Site specific details were also proposed at the existing vent rooms and at other existing structures. Gary kept the team focused on developing mitigation strategies that were constructible, met the project goals and were cost effective, resulting in final deliverables that were delivered on time and within the budget.
- Valley Metro, Northwest Light Rail Extension Phase II (NWEII)
Role: Senior Bridge Engineer
Gary performed quality control reviews of the construction documents related to the elevated guideway bridge. The quality reviews led to clear and concise contract plans which ultimately led to successful construction to the guideway bridge.



SOQ PROPOSER'S SOLICITATION CONFIRMATION EMAIL (FROM BECO)

From: ADOT Business Engagement and Compliance Office <AZUTRACS-Support@azdot.gov>
Sent: Thursday, August 17, 2023 10:36 AM
To: Jason Pagnard <jason.pagnard@burgessniple.com>
Cc: ContractorCompliance@azdot.gov
Subject: Bidders List for Burgess & Niple

Burgess & Niple , AZUTRACS Number: [10098](#) has submitted a Bidder/Proposer list for **2024-001** on 08/17/2023 at 10:35 AM MST (UTC - 07:00).

Bidders/Proposers for this firm include:

Firm Name	AZUTRACS #	Expiration Date	Email Address	Phone Number
AeroTech Mapping Inc	21420	06/06/2026	leotorres@atmlv.com	702-228-6277
Avenue Consultants	20882	04/24/2026	marsha@avenueconsultants.com	602-697-9566
AZTEC Engineering Group, Inc.	11419	12/27/2024	MChase@aztec.us	602-454-0402
Ethos Engineering, LLC	10363	04/16/2024	soliden@ethosengineers.com	480-720-7769
HDR Engineering, Inc.	10491	07/20/2026	phxmarketing@hdrinc.com	602-522-7700
Jacobs Engineering Group Inc.	10561	12/15/2024	troy.sieglitz@jacobs.com	602-253-1200
Kimley-Horn & Associates, Inc.	10608	09/13/2025	raj.christian@kimley-horn.com	602-371-4560
T.Y. Lin International	11144	08/14/2026	james.barr@tylin.com	480-968-8814
United Civil Group Corp.	11236	11/04/2024	sarah@unitedcivilgroup.com	602-265-6155

AMENDMENTS - AMENDMENT NUMBER 01



Our True North: *Safely Home*

Engineering Consultants Section

Katie Hobbs, Governor

Jennifer Toth, Director

Greg Byres, Deputy Director for Transportation/State Engineer

Steve Boschen, Division Director

Korina Lopez, Group Manager

Date:

August 1, 2023

TO:

ALL INTERESTED PARTIES

SUBJECT:

AMENDMENT NUMBER 01

REFERENCE:

REQUEST FOR QUALIFICATIONS (RFQ)
CONTRACT NUMBER 2024-001
EL MIRAGE ROAD; SR303 TO JOMAX ROAD DESIGN CONCEPT REPORT AND ENVIRONMENTAL ASSESSMENT

The following revisions are made to the referenced RFQ:

- All references in the RFQ, ECS Consultant Contract Manual, ECS Information Bulletins and the ECS website related to submitting Statement of Qualifications (SOQ) through eCMS are hereby stricken. SOQ submittals will ONLY be accepted via email to the following address: ECSOQ@azdot.gov. SOQs emailed to any other address will NOT be accepted.
- Section 4.20, *Number 4. Professional Liability (Errors and Omissions Liability)*, subsection 4 b of the contract boilerplate, referenced in Section XVII of the RFQ, is changed:

From:

b.

In the event that the professional liability insurance required by this Contract is written on a claims-made basis, the Consultant warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of **three (3) years** beginning at the time work under this Contract is completed.

TO:

b.

In the event that the professional liability insurance required by this Contract is written on a claims-made basis, the Consultant warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of **eight (8) years** beginning at the time work under this Contract is completed.



June A Cross
Contract Specialist
Engineering Consultants Section

AN OFFEROR MUST ACKNOWLEDGE RECEIPT OF THIS AMENDMENT BY SIGNING BELOW AND INCLUDING ALL PAGES OF THIS AMENDMENT IN THE SOQ SUBMITTAL. FAILURE TO DO SO SHALL RESULT IN REJECTION OF THE PROPOSAL.

Burgess & Niple, Inc. | Jason Pagnard, Vice President



CONSULTANT INFORMATION PAGES

CONSULTANT INFORMATION PAGE

CONTRACT NO.: 2024-001

CONTACT PERSON: Jason Pagnard

E-MAIL ADDRESS: jason.pagnard@burgessniple.com

TITLE: Vice President

CONSULTANT FIRM: Burgess & Niple, Inc.

ADDRESS: 1500 N Priest Drive, Suite 102

CITY, STATE ZIP: Tempe, Arizona 85288

TELEPHONE: 602.244.8100 x5332

FAX NUMBER: N/A

DUNS #: 061082707

ADOT CERTIFIED DBE FIRM? (YES/NO)

NO

SUBCONSULTANT(S):	TYPE OF WORK	ADOT CERTIFIED DBE FIRM (YES/NO)
Jacobs	Drainage, Structural	NO
AZTEC Engineering	Environmental, Survey	NO
Avenue Consultants	Public Involvement	NO
Ethos Engineering, LLC.	Geotechnical, Structural	YES
Aerotech Mapping Technologies, LLC.	Aerial Mapping	YES
United Civil Group Corp.	Data Collection, Traffic Counts	YES

NOTE: This page is not evaluated by the Selection Panel, but is used by Engineering Consultants Section for administrative purposes.

Revised 11/23/2021

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	Jacobs Engineering Group, Inc.
CONTACT PERSON:	Troy Sieglitz, PE
E-MAIL ADDRESS:	troy.sieglitz@jacobs.com
TITLE:	Project Principal and Authorized Signatory
ADDRESS:	1501 W Fountainhead Pkwy
	Suite 401
CITY, STATE ZIP:	Tempe, AZ 85282
TELEPHONE:	480.966.8188
FAX NUMBER:	N/A
DUNS #:	809218089

SUBCONSULTANT FIRM NAME:	AZTEC Engineering Group, Inc.
CONTACT PERSON:	Michael Shirley
E-MAIL ADDRESS:	mshirley@aztec.us
TITLE:	Senior Vice President
ADDRESS:	501 N. 44th Street
	Suite 300
CITY, STATE ZIP:	Phoenix, AZ 85008
TELEPHONE:	480-215-0540
FAX NUMBER:	602-454-0403
DUNS #:	827205162

NOTE: Each Subconsultant listed in the SOQ must be included in the Subconsultant Table of the CIP. Add additional Subconsultant Table pages as necessary. The pages are not evaluated by the Selection Panel, but are used by Engineering Consultants Section for administrative purposes.

Revised 11/23/2021

CONSULTANT INFORMATION PAGES

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	Avenue Consultants
CONTACT PERSON:	Marsha Miller Long
E-MAIL ADDRESS:	marsha@avenueconsultants.com
TITLE:	Arizona Market Leader
ADDRESS:	2201 E. Camelback Rd.
	Suite 355
CITY, STATE ZIP:	Phoenix, AZ 85016
TELEPHONE:	602.5429.2287
FAX NUMBER:	N/A
DUNS #:	016573658

SUBCONSULTANT FIRM NAME:	Ethos Engineering, LLC.
CONTACT PERSON:	Keith Dahlen, PE
E-MAIL ADDRESS:	Kdahlen@ethosengineers.com
TITLE:	Geotechnical Engineering Lead
ADDRESS:	9180 S Kyrene Rd
CITY, STATE ZIP:	Tempe, AZ 85284
TELEPHONE:	602.573.0000
FAX NUMBER:	N/A
DUNS #:	030828918

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*Please confirm that each Subconsultant listed is in the eCMS database. If a Subconsultant's name is not in the eCMS database, contact ECS at E2@azdot.gov and allow two (2) business days to have the Subconsultant added to eCMS. Click [Here](#) check the eCMS database or go to ECS Website.

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	Aerotech Mapping Technologies, LLC.
CONTACT PERSON:	Lyle Slater
E-MAIL ADDRESS:	lslater@atmlv.com
TITLE:	General Manager
ADDRESS:	8433 N Black Canyon Hwy
	#120
CITY, STATE ZIP:	Phoenix, AZ 85021
TELEPHONE:	623.242.7656
FAX NUMBER:	623.242.8939
DUNS #:	017261688

SUBCONSULTANT FIRM NAME:	United Civil Group Corp.
CONTACT PERSON:	Sarah Simpson
E-MAIL ADDRESS:	sarah@unitedcivilgroup.com
TITLE:	President
ADDRESS:	2803 N 7th Avenue
CITY, STATE ZIP:	Phoenix, AZ 85007
TELEPHONE:	602.265.6155
FAX NUMBER:	602.265.3171
DUNS #:	807982793

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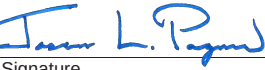
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CONSULTANT INFORMATION PAGES

DBE GOAL ASSURANCE/DECLARATION

This Contract is Race Conscious. The DBE goal percentage is set at 5.05 %

By signing below, and in order to submit an SOQ proposal and be considered to be awarded for this contract, in addition to all other pre-award requirement, the consultant/Proposer certifies that they will meet the established DBE goal or will make good faith efforts to meet the goal for the contract and that arrangements with certified DBEs have been made prior to SOQ and/or Cost Proposal submission. The proposer will meet the established DBE goal or will make good faith efforts to meet the goal on each Task Order assignment associated with the contract and that arrangements with certified DBEs have been made prior to SOQ and/or Task Order proposal submission.



Signature

Jason Pagnard

Printed Name

August 8, 2023

Date

Vice President

Title

SOQ SUBMITTAL CHECKLIST

Place a check mark on the left side of the table indicating compliance with the following:

☒	Required Page Limit Met
☒	One PDF Document no larger than 15 MB
☒	All Amendments Included
☒	Introduction Letter (Including all required elements/statements)
☒	SOQ Proposal Formatted According to Requirements Listed in Part C and any applicable amendments
☒	Correct SOQ Certification List Signed and Dated by a Principal or Officer of the Firm
☒	Completed Consultant Information Page (Including listing DBE firms, if applicable)
☐	Supplemental Services Disclosure Form (REQUIRED for Supplemental Services Contract)
☒	All Subconsultants & Proposed Work Type (Including listing DBE firms, if applicable)
☒	Any Additional Required Documents (Specific Requirements in RFQ such as Resumes, etc.)
☒	Commenting or User Rights Feature Enabled in SOQ PDF Document
☒	DBE Goal Assurance/Goal Declaration completed

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