2025-014 Interstate 10 Study, Deck Park Tunnel to I-10/I-17 Split Maricopa County

ADOT I-10 STUDY: DECK PARK TUNNEL TO I-10/I-17 SPLIT

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

May 29, 2025

Re: 2025-014 Interstate 10 Study, Deck Park Tunnel to I-10/I-17 Split

Dear Members of the Selection Committee,

This I-10 Design Concept Report (DCR) and Environmental Document (ED) is the first major new project from the recently passed Proposition 479 and the new Regional Transportation Plan MOMENTUM. ***This complex project is also the first of its kind in the MAG region: the major reconstruction of the Inner Loop freeway. It requires special technical, process, and engagement skills that only come with similar experience that Burgess & Niple (B&N) possesses.*** B&N and our major subconsultants Jacobs Engineering Group (Jacobs) and AECOM Technical Services (AECOM) provide ADOT:

STAKEHOLDER MOMENTUM

B&N has built a foundation for consensus. We completed the 2025 MAG Interstate 10 Freeway Corridor Study (MAG Study) from the Deck Park Tunnel to the I-10/I-17 Split and will leverage our MOMENTUM with key stakeholders — ADOT, MAG, City of Phoenix including Sky Harbor International Airport, FHWA and FAA — established during the feasibility study for a fast start to make MOMENTUM a reality!

B&N's agency and stakeholder synergy launches this project with a team intimately familiar with their interests. We are set up for a fast start and are in the best position to meet the project schedule and avoid revisiting efforts, risking losing MOMENTUM on a highly visible project.

INNER LOOP URBAN FREEWAY RECONSTRUCTION EXPERIENCE

B&N's project manager and key staff proposed for this I-10 project led the DCR and ED for the $2.2 billion Cleveland Innerbelt and $2.4 billion Columbus Crossroads freeway reconstructions. This experience combined with their leadership in transformative MAG region projects and development of ADOT's Performance-Based Practical Design (PBPD) guidelines, uniquely equips B&N to complete your high-profile project.

Project needs will be addressed proactively through foresight and best practices from similar projects and local experience. Innovative, PBPD solutions will be implemented to address intricate challenges, develop constructable solutions, and integrate the project with Phoenix's urban fabric.

PREEMINENT ADOT SCOPING AND ENVIRONMENTAL TEAM

Our team serves as ADOT's Management Consultant (MC) for the MAG Regional Transportation Plan Freeway Program (RTPFP). We have delivered local freeway projects through the MC and others such as the I-10/SR 101L System TI that is nearing completion. B&N and our partner firms know ADOT's processes and are ready to roll into this I-10 DCR and ED.

Our robust ADOT scoping and environmental expertise in the MAG region equips us to navigate the complexities of the project development process, avoiding missteps and potential delays. We have the availability to hit the ground running for this study phase. With 850 combined local staff, our team has capacity for final design/GEC services.

B&N has a long-standing history with ADOT dating back to 1984. B&N commits the Key Personnel identified in the submittal to the extent necessary to meet ADOT's quality and schedule expectations. B&N is not a certified DBE. B&N is very interested in being selected for this project. We appreciate this opportunity and ask that you select B&N as your consultant for the I-10 Study, Deck Park Tunnel to I-10/I-17 Split project.

Respectfully Submitted,

Ed Muccillo, PE (AZ#47772)
Project Principal and Chairman
p. 602.402.3683 (mobile)
e. ed.muccillo@burgessniple.com

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

MAKING MOMENTUM A REALITY!

Our project approach and team formation are based on input from ADOT and its stakeholders. Reflecting your priorities, we will provide ADOT with:

Strong "Studies PM": B&N Project (Contract) Manager Jason Pagnard, PE, has led numerous freeway studies around the MAG region affecting nearly every ADOT freeway. He also led the DCR and ED for the Cleveland Innerbelt reconstruction and was a key contributor to a similar project in downtown Columbus. He will apply best practices from his robust studies experience to effectively navigate the process, address technical challenges, and build consensus while managing the schedule and budget.

Corridor Experience: B&N has substantial history in the project corridor, completing three MAG I-10 studies, designing I-10 drainage pump stations improvements, performing tunnel and bridge inspections and completing Phoenix's downtown transportation master plan update. We have processes and complex traffic, roadway and drainage models in place for alternative development.

Model Environmental Documentation: With recent federal rule changes and the launch of Proposition 479, ADOT Environmental Planning desires to use this project's documentation as the model for future Proposition 479 projects. Jacobs has the ADOT partnership and recent experience to achieve this high standard.

Targeted Refinements to MAG Study: B&N will leverage PBPD principles to refine the MAG Study recommended alternative to address:

- Southbound SR 51 connection to 7th Street
- Potential right-of-way impacts for the 7th Street TI and 16th Street TI ramp braid
- Sky Harbor west airport access with updated CAMP improvements
- Constructability and maintenance of traffic needs for Mini-Stack TI bridges
- Community connections across I-10

Engineering Consultants Section
SOQ Proposal Certifications Form

Contract #: 2025-014 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 RFQ 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: Jason L. Pagnard Date: 5/9/2025

Revised 2/11/2022

ARIZONA DEPARTMENT OF TRANSPORTATION
ENGINEERING CONSULTANTS SECTION
PARTICIPATION IN BOYCOTT OF ISRAEL - CONSULTANT CERTIFICATION FORM
ADOT ECS Contract No.: 2025-014

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.	Jason L. Pagnard
Company Name	Signature of Person Authorized to Sign
1230 West Washington Street, Suite 511	Jason Pagnard
Address	Printed Name
Tempe AZ 85288	Vice President 5/9/2025
City State Zip	Title Date

Participation in Boycott of Israel – Consultant Certification
Form Revised - 4/28/2020

ADOT Infrastructure Delivery and Operations

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

1230 West Washington Street, Suite 511
Address

Tempe AZ 85288
City State Zip

Jason L. Pagnard
Signature of Person Authorized to Sign

5/9/2025

Jason Pagnard
Printed Name

Vice President
Title

ADOT ECS Contract No: 2025-014

Forced Labor of Ethnic Uyghurs Ban Certification Form *(rev 10-2022)*

BACKGROUND

The I-10, Deck Park Tunnel to I-10/I-17 Split TI DCR and ED is the first major project from Proposition 479 and the Regional Transportation Plan MOMENTUM. Spanning nearly half of Phoenix's Inner Loop freeway, this critical corridor demands innovation.

B&N's recent work—the MAG Interstate 10 Freeway Corridor Study (MAG Study) from the Deck Park Tunnel to the I-10/I-17 Split (January 2025), Phoenix Downtown Transportation Plan Update (2020), and MAG I-10/Papago Freeway Tunnel Study, I-17 Stack to SR 51/SR 202L Mini-Stack (2017)—gives us extensive insight into its needs:

- **Safety and Operations –** Eliminating nine bottlenecks, weaving movements and speed differentials
- **Access and Connections –** Refining the MAG Study alternative to retain freeway access points, pedestrian connections, and future Sky Harbor access plans
- **Implementation –** Preparing for final design, sequencing into construction contract groups, and facilitating long-lead coordination items (e.g. UPRR and Sky Harbor Airport)

In partnership with ADOT and MAG, B&N has built technical and stakeholder MOMENTUM with sophisticated traffic and highway geometric models to assess and develop the complex corridor. **This is the opportunity to leverage B&N's work and make MOMENTUM a reality!**

MAJOR TASKS, TECHNICAL & INSTITUTIONAL ELEMENTS

B&N Project (Contract) Manager Jason Pagnard, PE, will be a close partner with ADOT Project Manager Trent Kelso. He will proactively manage tasks, engage stakeholders, and resolve technical issues. His intent is to have concurrence with Trent while proactively moving the project forward. He will support Trent in tracking the project in Workfront.

B&N and Jacobs serve as ADOT's MC team for the MAG RTPFP, completing projects such as the **SR 303L DCR from Lake Pleasant Parkway to the I-17 System TI**. This same team, along with AECOM, completed the recent **I-10/SR 101L System TI Improvements DCR and ED**. We have a thorough understanding of the required major tasks, technical, and institutional elements needed. The DCR and Environmental process for completing this I-10 project is illustrated in **Figure 1.** to the right.

YOU SHOULD KNOW! The process shown in **Figure 1.** complies with FHWA Major Projects requirements. Should this be designated as a FHWA Mega Project, B&N is experienced in satisfying those requirements including preparing a Financial Plan and Enhanced Risk Management. We have firsthand experience with FHWA Mega and Major Projects.

Figure 1. DCR & Environmental Process Flow Chart

INITIATE PROJECT

- Organize project team with ADOT, MAG, FHWA, FAA, and Phoenix including Sky Harbor
- Define project Purpose and Need (P&N)
- Establish design criteria and prepare AASHTO report
- Review and update MAG Study stakeholders list
- Conduct agency scoping workshops and letters
- Develop Public Involvement Plan and interagency plan

ALTERNATIVE DEVELOPMENT/REFINEMENT AND ANALYSIS

- Perform field reviews and research
- Conduct agency engagement including with FAA and Sky Harbor for airspace impact assessment
- Conduct Alternative Refinement Workshop
- Establish evaluation criteria (safety, traffic, airspace impacts, costs, etc.) and review with stakeholders
- Evaluate refined alternative
- Review evaluation with stakeholders for consensus
- Select alternative for DCR
- Prepare FAA Form 7460-1 for airspace review
- Document Stage I decisions in decision log
- Prepare ADA Compliance and Feasibility Report

DCR AND NEPA DOCUMENTATION

- Confirm appropriate ED (EA) with FHWA and FAA
- Analyze environmental features and prepare technical reports (e.g., noise, hazardous materials)
- Document design decisions (formerly exceptions)
- Prepare Traffic and Bridge Studies reports
- Document refined alternative in Initial DCR and ED
- Prepare 15% roll plot and cost estimates
- Prepare Change of Access Report
- Prepare Implementation Plan
- Submit draft ED to ADOT Environmental Planning
- Secure FHWA and FAA concurrence on draft ED

PUBLIC INVOLVEMENT

- Conduct public involvement activities and share updates via project website, materials and meetings throughout the project
- Hold public hearing to present DCR and ED findings
- Document and address public comments
- Update decision log with stakeholder input

FINAL NEPA AND DCR DOCUMENTATION

- Finalize ED with public hearing responses
- Finalize Implementation Plan
- Submit and obtain FHWA and FAA NEPA and DCR approvals

PROJECT APPROACH FRAMEWORK AND SPECIAL ISSUES

We held over 20 meetings with ADOT and stakeholders since completing the MAG Study to gain further insights. Our approach to the Special Issues reflects this input and is detailed below and on the following pages.

This complex project is the first of its kind in the MAG region: the reconstruction of the Inner Loop freeway. It requires foresight that only comes with similar inner loop experience that balances technical needs, federal requirements, implementation planning, and stakeholder engagement. B&N's Project (Contract) Manager Jason Pagnard led the DCR and ED for the $2.2 billion reconstruction of the Cleveland, Ohio, Innerbelt Freeway, which involved 9 miles of freeways, 4 system TIs, 12 service TIs and arterial improvements. B&N key staff also completed the DCR and ED for the $2.4 billion reconstruction for half of the Columbus, Ohio, inner loop freeway which involved 5 miles of freeways, 3 system TIs, 8 service TIs, and arterial street improvements. **Our complex project expertise, combined with our ADOT and MAG experience, provides foresight to address intricate project challenges and secure stakeholder support.**

This I-10 project faces unique challenges: airspace constraints near Sky Harbor (FAA 14 CFR Part 77), multi-agency coordination (ADOT, MAG, Phoenix, FHWA, FAA), urban right-of-way challenges and the need to maintain traffic during construction. Our approach leverages early FAA and Sky Harbor workshops with Form 7460-1 submission, structured stakeholder engagement, and advanced traffic modeling to address these. Institutionally, we will navigate NEPA and establish an interagency communication plan.

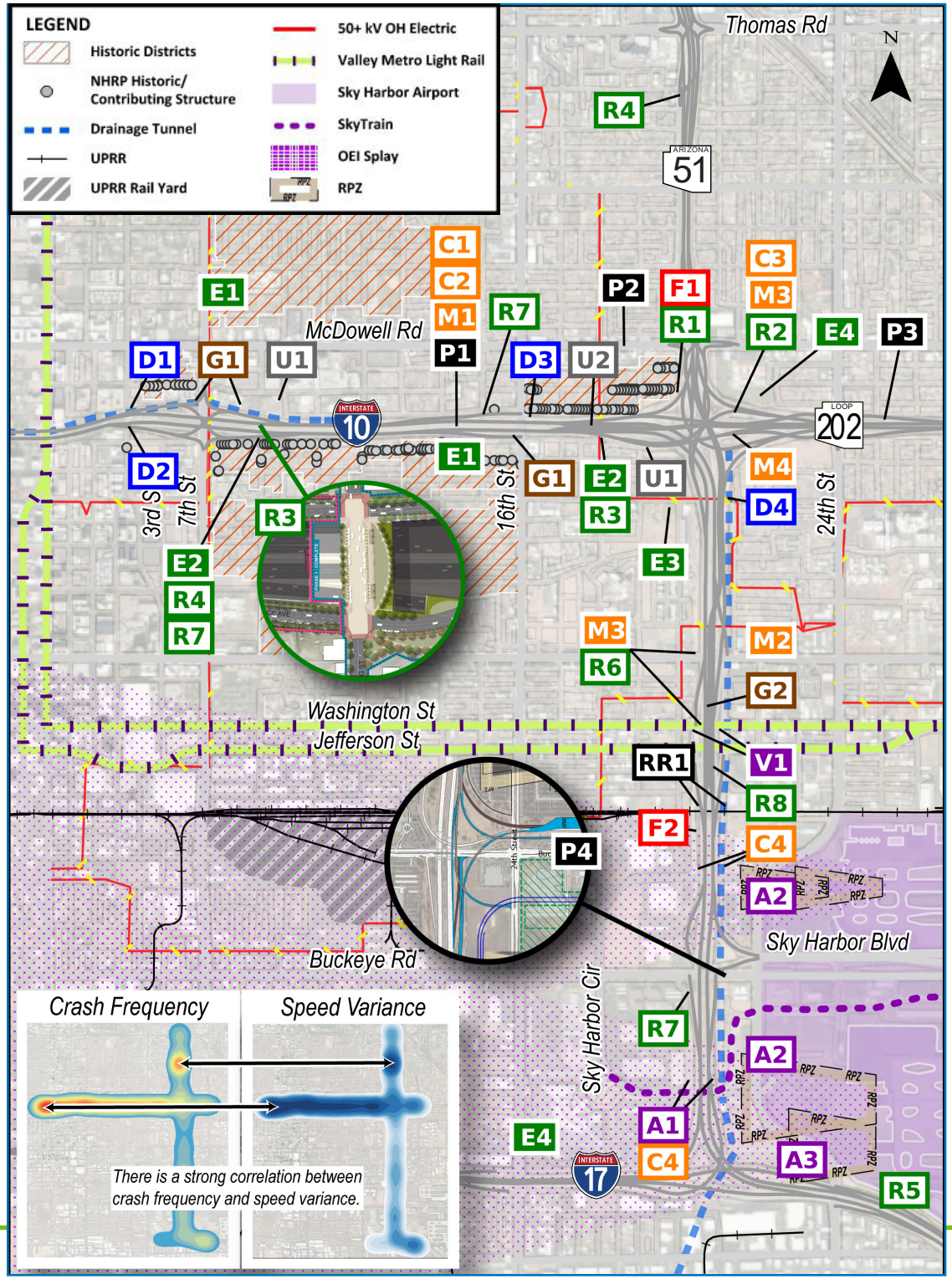
Our approach to alternatives development is rooted in the MAG Study's recommended alternative. **During the study, B&N conducted a robust alternatives process with stakeholders where over 100 concepts were developed and evaluated.** Given the MAG Study scope constraints, optimization is needed. **Using our advanced corridor traffic modeling and early stakeholder input, B&N has identified refinements to the MAG Study alternative.** These PBPD solutions enhance safety, traffic flow, airspace compliance, and urban connectivity. The solutions detailed on the following pages provide technical and community alignment. Strategic engagement will guide refinements, fostering consensus driving MOMENTUM forward. To solidify stakeholder buy-in, we will engage Phoenix Aviation (Sky Harbor) and the FAA in a targeted discussion shortly after NTP to detail airspace-critical elements. Within 45 days of NTP, we will conduct an Alternative Refinement Workshop to finalize refinements. Alternative refinements will be analyzed and evaluated for stakeholder buy-in, safety, operations, constructability, environmental considerations, utility and ROW impacts, MOT, and cost. **This proactive, structured process fosters consensus and maintains MOMENTUM.**

PROJECT ISSUES, CHALLENGES, AND OPPORTUNITIES

From our MAG Study and corridor experience, we know exactly where our coordination and design efforts need to begin. Key project issues and opportunities are shown in **Figure 2.**, discussed in greater detail throughout this section, and within our risk register on page 11. B&N is committed to continue providing ADOT with innovative value engineering, reliable project delivery, and excellent client service.

		ISSUE / CHALLENGE / OPPORTUNITY	B&N TEAM VALUE
ALTERNATIVE REFINEMENTS	R1	Maintain the SR 51 SB to 7th St connection.	B&N has developed and analyzed refinements for R1, R2, and R4. B&N will leverage existing stakeholder contacts and engineering efforts to continue dialogues to resolve R3 and R5-R8.
	R2	Add 24th St as auxiliary lane; widen or replace the SR 202L WB bridge.	
	R3	Re-establish the pedestrian bridge crossings.	
	R4	Refine alignments to eliminate ROW & preserve city streets.	
	R5	Consider extending study limit to resolve new bottleneck.	
	R6	Adjust ramp alignment to avoid tie-in along existing bridge.	
	R7	Optimize braided ramp crossings.	
	R8	Optimize WB C-D Road Bridge.	
CONSTRUCTABILITY & IMPLEMENTATION	C1	Develop implementation plan to provide projects with independent utility.	B&N developed an initial sequencing plan during the MAG study. We will collaborate with stakeholders including ADOT Central District, FAA and Sky Harbor to develop the details to be considered during final design and construction.
	C2	Construct new ped bridges pier foundations with HOV lanes.	
	C3	Evaluate MOT set-ups such as repurposing the DHOV.	
	C4	Coordinate with FAA & Sky Harbor to determine OEI construction crane restrictions.	
AIRPORT	A1	Design new bridges to provide clearances for SkyTrain.	B&N will build upon the MOMENTUM and relationships established during the MAG Study to facilitate collaboration with FAA & Sky Harbor.
	A2	Collaborate with Sky Harbor to mitigate OEI impacts.	
	A3	Collaborate with FAA & Sky Harbor to mitigate RPZ impacts.	
DRAINAGE	D1	Avoid impacts to 3rd St pump station.	B&N is familiar with the pump stations' capacity and configuration from recent design improvements. New bridges over the drainage tunnel may use straddle bent piers to maintain drainage tunnel access.
	D2	Address existing flooding issues along I-10 EB under 3rd St.	
	D3	Mitigate impacts to the 16th St pump station.	
	D4	Avoid impacts to the drainage tunnel.	
ADJACENT PROJECTS	P1	Coordinate with ADOT on I-10 resurfacing project F0836.	B&N will build upon the MOMENTUM and relationships established during the MAG Study to facilitate collaboration across agencies to eliminate surprises from adjacent projects.
	P2	Coordinate with City on potential McDowell Corridor project.	
	P3	Coordinate with ADOT on SR 202L resurfacing project F0835.	
	P4	Coordinate with Sky Harbor on proposed CAMP improvements (landside & airside).	
U&RR	RR1	Coordinate with UPRR to establish agreements for new grade separated crossings.	Coordination with outside stakeholders can be a long lead item. B&N will coordinate activities early through ADOT U&RR.
	U1	Avoid impacts to cell towers within ADOT ROW.	
	U2	Coordinate and mitigate impacts to HV OH electric	
VALLEY METRO	V1	Evaluate need for OCS wire mounts on any new bridges over the Light Rail.	B&N team member Jacobs has strong relationships with Valley Metro and will coordinate to determine needs.
MAINTENANCE	M1	Close median and remove the cable barrier.	B&N collaborated with ADOT Central District during the MAG Study to identify maintenance issues to be resolved. We will expand this list and incorporate the requests as appropriate.
	M2	Facilitate turnback discussions with City & ADOT for 7,166 LF of road. Evaluate ADA features within ADOT ROW.	
	M3	Replace expansion joints when existing bridges are widened.	
	M4	Keep 10' outside shoulders for maintenance truck use.	
ENVIRONMENTAL	E1	Avoid/mitigate impacts to historic districts.	The environmental team and designers will proactively collaborate to identify impacts and develop mitigation strategies. The B&N Team recently coordinated noise mitigation with the communities along I-10 for the I-10/SR 101L project.
	E2	Confirm that existing pedestrian crossings at 10th St and 18th St are not 4(f) resources.	
	E3	Avoid impacts to 6(f) property.	
	E4	Avoid impacts to 4(f) properties.	
	E5	Avoid/mitigate impacts to archaeological sites (throughout).	
	E6	Complete air and noise evaluations (throughout).	
FEDERAL	F1	Collaborate with ADOT & FHWA on mainline Design Decisions when implementing PBPD.	B&N traffic lead Randy Kill has completed 24 Change of Access Reports. He has proven strategies on FHWA partnering.
	F2	Collaborate with ADOT & FHWA to determine COAR need.	
GEOTECH	G1	Develop design that resolves pavement settlement issues adjacent to retaining walls.	B&N team member Ethos has corridor experience partnering with District to develop retrofit solutions.
	G2	Develop solutions to address DHOV ramp settlement issues.	

Figure 2. Issues Map



AGENCY AND STAKEHOLDER ENGAGEMENT

Issue: The MAG Study agency and stakeholder MOMENTUM needs leveraged to achieve consensus and avoid costly, time-consuming setbacks.

Approach: Based on our Phoenix, Cleveland and Columbus project best practices, we will strategically engage our MAG Study working partners—ADOT, MAG, City of Phoenix (with Phoenix Aviation/Sky Harbor), FAA, FHWA—through:

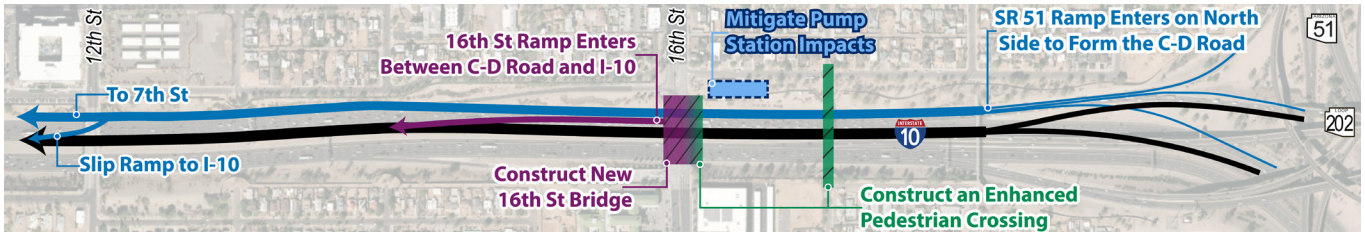
- Conducting strategic one-on-one stakeholder meetings and workshops to dive into details, identify issues and address needs in an inviting atmosphere
- Utilizing large group sessions to formalize and document decisions
- Documenting decisions in a "Decision Log" to avoid revisiting topics and protect MOMENTUM from potential stakeholder staff turnover
- Partnering with FHWA and FAA to aid in completing their review checklists to better navigate an evolving federal workspace
- Expanding outreach efforts to encompass Union Pacific Railroad, Valley Metro, elected leaders, utility owners and others to address location specific needs and avoid last-minute changes

For the FAA and the Phoenix Aviation Department, which owns and operates Sky Harbor International Airport, we will conduct an early workshop to address their need for additional design details (e.g. lighting specifications, design vehicle heights, etc. [A2] [A3] [C4]). We will continue partnering with City Freeway Program Administrator Myesha Harris, the point of contact for all City departments, including Sky Harbor. We also have working relationships with key individuals Jordan Feld (Sky Harbor) and Robin Sobotta and Kyler Erhard (FAA) to facilitate collaboration on regulatory requirements like 14 CFR Part 77 obstruction clearances, runway protection zones (RPZ), one engine inoperative (OEI) splay and Sky Harbor's Comprehensive Asset Management Plan (CAMP). Our approach will promote alignment with the CAMP for I-10 access and facilitate consensus.

ALTERNATIVES DEVELOPMENT, REFINEMENT AND ANALYSIS

The purpose of the MAG Study was to identify issues and needs and establish the framework of an alternative for refinement during ADOT scoping.

Figure 3. SR 51 to 7th Street Connection



The B&N Team has identified refinement opportunities and potential solutions identified within **Figure 2.** on page 6:

[R1]: Maintain SR 51 SB to 7th Street Connection
[R2]: Add 24th St as auxiliary lane
[R3]: Re-establish the pedestrian crossings
[R4]: Eliminate ROW needs along I-10 and SR 51
[R5]: Extend project to meet Broadway Curve project
[R6]: Adjust ramp alignments to optimize bridge work
[R7]: Optimize braided ramp crossings
[R8]: Optimize WB C-D Road Bridge

SR 51 SB TO 7TH STREET [R1] [D3]

Issue: There are 48 freeway access points and the MAG Study preserved 47 of them. The SR 51 SB to 7th Street connection needs reestablished.

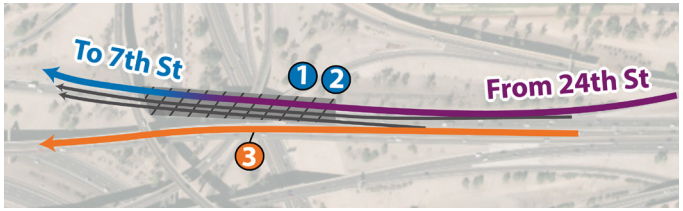
Approach: B&N has refined the proposed alternative to reestablish this connection by converting the proposed exit to 7th Street from I-10 WB to a C-D Road depicted in **Figure 3.** Traffic from SR 51 SB will need to weave across the C-D road, making two lane changes in approximately 6,000 ft. We have conducted traffic analysis to the same rigor as the MAG Study and determined that this connection further improves the design year traffic operations. As an added value, the C-D road provides an alternative route for I-10 mainline traffic during construction and for incident management.

SR 202L WB STRUCTURE WIDENING [R2] [R6] [C3] [M3]

Issue: The MAG Study alternative ramp widening begins mid-span of an existing 4-span bridge, which creates a "sliver" widening.

Approach: We have refined the alternative with two potential options that will be evaluated: 1) Bridge widening and 2) Bridge replacement. By widening the bridge, 24th Street can enter as an auxiliary lane to the new 7th Street exit depicted in **Figure 4.** B&N completed traffic analysis which has shown that this refinement further improves operational performance. The bridge could also be completely replaced to eliminate the longitudinal closure pour and problematic pier widenings. These alternatives will be vetted in a workshop. If the approach to replace the bridge proceeds, the E-W DHOV could be repurposed during construction for general traffic.

Figure 4. Mini-Stack WB Optimization



1. **SR 202L WB bridge cannot be widened mid-span. Therefore, the bridge will be widened the entire length or replaced.**
2. **Use additional bridge width to bring 24th St entrance on as an auxiliary lane.**
3. **Use existing DHOV ramp for MOT.**

YOU SHOULD KNOW! STRUCTURAL RETROFIT

Structural Lead Russ Stuart collaborated with roadway engineers at B&N, Jacobs and AECOM to add a DHOV connection through the I-10/SR 101L system TI—a TI not setup for the new DHOV bridge. The B&N Team will apply those lessons learned to this project.

REESTABLISH PEDESTRIAN BRIDGES [R3] [C2] [E2]

Issue: Improvements impact the existing pedestrian bridges at 10th Street and 18th Street. The City has constructed active transportation facilities that integrate with the existing crossings.

Approach: We have identified several concepts to evaluate with stakeholders. These include: 1) Relocating the crossings from 18th St to 17th St and from 10th St to 11th St, 2) Widening the 16th St crossing to the east with an enhanced pedestrian space, and 3) Widening the 12th St crossing to the west with an enhanced pedestrian space. Key considerations are community input/consensus and tying into the City's active transportation facilities.

YOU SHOULD KNOW! ENHANCED CROSSINGS

B&N developed Award-Winning pedestrian crossings across I-71 for the Columbus Crossroads project to connect a community separated by the freeway decades before. B&N engaged local neighborhood and business stakeholders to identify public art and amenities.

REDUCE RIGHT OF WAY IMPACTS [R4] [F1]

Issue: The proposed improvements encroach into Moreland St south of I-10 between 7th St and 12th St and impinge on 20th St along SR 51.

Approach: B&N has refined the MAG Study alternative horizontal geometry and developed a solution that keeps the same ramp configuration while staying within the ROW. B&N will work with ADOT Roadway and Bridge groups to confirm the refinement and document the resulting Design Decisions for submittal to FHWA.

YOU SHOULD KNOW! **PBPD**
B&N developed ADOT's PBPD Guidelines, introducing the innovative Design Decision Guideline. This process expertise promotes flexible designs that enhance safety and connectivity while minimizing community disruption in complex corridors like I-10.

CONFIRM PROJECT LIMITS [R5]

Issue: Following the completion of the I-10 Broadway Curve project, ADOT Central District identified a new westbound bottleneck between the Gila River and 24th Street.

Approach: During scope development, B&N will collaborate with ADOT PM Trent Kelso, District and Traffic to determine if the project limits should extend to include the bottleneck the District identified.

BRAIDED RAMP STRUCTURES [R7]

Issue: There are three high-skew ramp braids which will require either portal frame structures or straddle bents.

Approach: The B&N Team will evaluate opportunities to realign the ramp crossings to improve the skew angle. Straddle bents will be used where vertical clearance is not an issue. When portal frames are used, alignments will be configured to reduce their length to less than 300 feet to avoid requirements for ventilation and fire suppression.

WB C-D ROAD BRIDGE [R8] [RR1] [V1]

Issue: The MAG Study alternative bridge over the UPRR, Washington St and Jefferson St is long at about 1,700 feet.

Approach: The B&N Team will evaluate a "dirt plug" south of Jefferson Street that is approximately 350 feet long, creating a 550 feet long bridge over Washington and Jefferson Streets, and a separate 800 feet long bridge over the Jefferson Street off ramp and UPRR facility. A "dirt plug" retained by walls is more cost effective and easier to maintain than a bridge structure.

SKY HARBOR CAMP INTEGRATION [P4]

Issue: Sky Harbor provided formal comments to MAG via a letter dated November 5, 2024. Key among them is the incorporation of the 2019 airport master plan (aka the CAMP; updated 2022). The planned landside improvements include the I-10 WB interface with Buckeye Road, Sky Harbor Boulevard, and 24th Street. The planned improvements as shown in the CAMP lacked vertical design considerations and are geometrically infeasible with short horizontal distances between areas that are gaining 20+ feet in elevation depicted in the **Figure 2.** **[P4]** inset.

Approach: B&N, through the MAG Study, developed an alternative that provides constructable airport access. As part of our Sky Harbor/FAA workshop, we will resolve the CAMP's new 24th St connection and security plaza from I-10 to Sky Harbor Blvd and salvage other CAMP concepts.

CONSTRUCTABILITY & IMPLEMENTATION [C1] [C3] [C4] [P2] [P4]

Issue: The design must consider constructability and implementation of the improvements.

Approach: We have reviewed and confirmed that the implementation plan we developed during the MAG Study is appropriate and provides phases that offer independent utility and consider traffic travel patterns and timing of adjacent projects. The sequence allows each subsequent construction phase to leverage the pavement and travel capacity of the prior phase(s). DCR efforts to validate the constructability include early coordination with FAA and Sky Harbor to determine necessary protocols and seasonal OEI construction crane restrictions. Leveraging 118 years of combined valley freeway construction experience, Infrastructure Mavens will provide detailed construction strategies such as MOT routing, production rates, and more.

DRAINAGE – INCLUDING PUMP STATIONS AND TRUNK LINE [D1] [D3] [D4]

Issue: The drainage system is complex and consists of pump stations, tunnels, and basins. The proposed improvements will leverage the existing drainage infrastructure while increasing the impervious area contributing to the drainage system.

Approach: Pump stations are at 3rd St, 16th St and 20th St. Drainage tunnels within the project vicinity include a 14-ft diameter north tunnel and a 21-ft diameter east tunnel. Existing basin complexes are at the Mini-Stack, the Buckeye Rd TI, and the Split. B&N designed the rehab of the 3rd St and 16th St pump stations, understands their layouts and the effects of the roadway improvements on their pumping and drainage capacity. We will analyze the ability of the tunnels and basin complexes to accommodate the additional volumes. We will evaluate basin capacity and augment them as needed. New bridges over the tunnels may use straddle bent piers to maintain tunnel access.

ENVIRONMENTAL [E1] [E2] [E3] [E4] [E5] [E6]

Issue: The environmental complexities focus on the historic and archaeological resources **[E1] [E5]**, air quality, noise **[E6]**, and socioeconomics of the corridor. Thorough, expedited environmental documents need to be developed to maintain project MOMENTUM and to be a go-by for future Prop 479 projects indicated by ADOT EP.

Approach: Our team will leverage our experience working with ADOT EP and knowledge of the process and requirements to provide a smooth, efficient process and defensible documentation. We successfully completed the Virgin River Bridges #6 project EA in 6 months and can similarly meet this project's schedule. We will prepare a concise EA that focuses on relevant issues. Key environmental issues include air quality, noise, cultural resources, Section 4(f)/6(f) resources **[E2] [E3] [E4]**.

MAINTAINING THE MOMENTUM!

Our recent history within the corridor gives us the unique capability to quickly initiate and complete traffic analysis, safety analysis, and survey to maintain Study MOMENTUM!

TRAFFIC ANALYSIS

Refinements to the proposed MAG Study alternatives will require the same diligent level of traffic analysis performed during the original study. Refinements will need stakeholder acceptance, which risks schedule delays.

B&N developed finely calibrated, complex traffic analysis models and analysis strategies during the MAG Study. Also, B&N has processes in place to convert the MAG travel demand model into updated microsimulation trip tables for the new design year. Updated model runs and alternative refinements will be completed much more quickly to expedite the schedule and maintain MAG and stakeholder acceptance of the traffic analysis.

SAFETY

There are more than five crashes a day in the project area and the resulting bottlenecks often lead to more crashes. This correlation is depicted in the insets on the bottom left of **Figure 2.** on page 6.

During the MAG Study, B&N identified a strong correlation between crashes and speed differentials. The tight weaving sections often lead to a shear effect where vehicles within the weave lanes travel at slow speeds and through vehicles in adjacent lanes maintain high speeds leading to more severe side swipe and rear end crashes. B&N's proposed alternative and refinements are tailored to reduce these interactions. B&N pioneered speed differential analysis during the MAG Study and will continue to apply these analytics to ensure alternatives promote safety. B&N will also apply PBPD methods and document ADOT's recommended and preferred Crash Modification Factors to assess the improvements.

SURVEY AND AERIAL MAPPING

Conducting aerial survey around Sky Harbor requires additional coordination to ensure safe flight operations.

B&N team member AeroTech Mapping has extensive experience collaborating with FAA and Sky Harbor to safely navigate the airways. AeroTech has completed flights for 10 projects around Sky Harbor and will utilize their contacts and best practices.

Air Quality: A PM10 hot spot questionnaire will be completed (both CO conformity and PM2.5 analysis are not applicable). We will coordinate with MAG to request an updated regional conformity run that includes the proposed project.

Noise: We will model noise to assess impacts and mitigation needs in compliance with ADOT and FHWA policies. Depending on timing, ADOT project F0835 and F0836 **[P1] [P3]** may reset the baseline for noise analysis.

Cultural Resources: A Class I update will be undertaken. It is anticipated that an architectural history survey, NRHP evaluations of buildings and districts now over 50 years old, archaeological impacts, and Section 106 consultation will be required. Outreach to the Four Southern Tribes at working group meetings is highly recommended.

Section 4(f)/6(f): Recreational and historical resources occur in or adjacent to the project corridor and Edison Park is a Section 6(f) resource. We will identify the nature of impacts to these resources and coordinate with officials with jurisdiction (OWJ). We will determine if there are IGAs for the pedestrian bridges affecting their Section 4(f) status. We will leverage our experience coordinating with each OWJ to prepare Individual Section 4(f) evaluations to support ADOT through this project.

PUBLIC INVOLVEMENT AND VISUALIZATION

Issue: Effective engagement is needed with the general public and stakeholders for consensus on this high-profile project.

Approach: Building on MOMENTUM from the feasibility study, our team will work collaboratively with ADOT Communications to effectively engage stakeholders. Debi Bohnet will lead the development of a comprehensive PIP focused on engaging agencies, businesses, communities adjacent to the project, and regional travelers. To effectively reach this diverse group of stakeholders, we anticipate the need for public information meetings/hearings, business owner meetings, issue specific and targeted stakeholder (including elected leaders) meetings, alternative review meetings, and technical/environmental content support. Marketing materials like mailers, newspaper advertisements, and geotargeted ads will drive attendance at meetings. Surveys, neighborhood input, and compelling visualizations will drive understanding and participation. To reach a wider audience, we are ready to conduct public meetings/hearings in person and virtually, with other languages/ADA accommodations incorporated as needed. Coordination with MAG, Phoenix, Sky Harbor, FAA, and FHWA will be critical to the project's success.

ADDITIONAL CONSIDERATIONS

Adjacent Projects: We will proactively engage the partners to identify how adjacent project efforts impact the implementation of this I-10 project. Adjacent project coordination will be a standing topic during Cooperating Agency and Progress Meetings. ADOT has planned pavement rehabilitation projects on I-10 from the Stack to the Mini-Stack **[P1]** and on SR 202L from the Mini-Stack to the east **[P3]**. These improvements will convert the wearing surface to diamond grind and may complete ADA upgrades. We will collaborate with ADOT PM Sal Salahuddin to prevent duplication of efforts. Phoenix is considering improvements along the McDowell Road corridor **[P2]** that would reduce its capacity as a detour route. Sky Harbor has airside and landside proposed improvements identified in the aforementioned CAMP Study **[P4]**.

ADA Turnbacks: ADOT has identified 7,166 linear feet of road to abandon within the project limits [M2]. These roadways and accompanying ADA features will need to be evaluated and upgraded to current standards prior to abandonment. B&N will implement the approach we recently used with enhanced local agency coordination for the turnbacks of seven roadways along SR 202L in Chandler and Gilbert.

Geotechnical: The I-10/SR 51 DHOV ramps have settlement issues [G1] [G2]. B&N team member Ethos has recently partnered with District to complete short-term fixes at locations within the study area and is intimately familiar with site conditions and challenges. The cause of the settlement will be determined through visual assessment and historic soil data per the RFQ scope.

Cost Estimate: ADOT and MAG rely on B&N through the MC for RTPFP contract for precise costs to manage the program. B&N regularly collaborates with ADOT C&S and suppliers to maintain unit costs. We will leverage our unique vantage point to prepare accurate cost estimates for implementation programming and potential sequencing for this I-10 project.

Utilities & RR: Multiple utilities cross the corridor and ADOT leases space to several towers within the corridor [U1]. Additionally, the proposed configuration requires new structures over UPRR [RR1]. B&N will consider the high kV OH lines when evaluating constructability [U2]. B&N will work with the ADOT coordinator to prioritize long-lead items. Utility owners include ADOT, FCDMC, Phoenix, Valley Metro, APS, SRP, SW Gas, Swissport Fueling, and multiple communication companies. Due to the size of the corridor and the potential amount of SUE needs, B&N has T2 UES on the team to provide ADOT with additional capacity as needed.

Maintenance Needs: From our prior corridor experience and subsequent dialogs with ADOT Central District, we are familiar with corridor maintenance needs. We will address appropriate maintenance issues such as pump station needs [D1] [D3], flooding along I-10 EB [D2], median cable barrier removal [M1], bridge joint replacement preferences [M3], shoulder widths that permit safe access for maintenance activities [M4], and other miscellaneous items.

ITS & FMS: Leveraging our ITS/FMS experience with the adaptive ramp metering and wrong-way detection systems on SR 101L and SR 303L, respectively, we will develop improvements that align with the 2024 Statewide ITS Architecture to improve safety and enhance traffic operations and management. The ADOT system also includes the TI traffic signals, with the exception of the Washington/Jefferson Street signals which are owned and maintained by Phoenix. B&N is familiar with the City's signal systems, including those with Light Rail crossings, and will apply this knowledge to address their intersection needs.

Valley Metro: The Light Rail travels along the Washington/Jefferson Street corridor and the City manages those TI signals and timings. Any bridge widenings or new structures over the Light Rail may need to have connections to mount OCS wire to the underside of the bridge deck [V1]. We will collaborate with Valley Metro, City and ADOT to incorporate Light Rail needs.

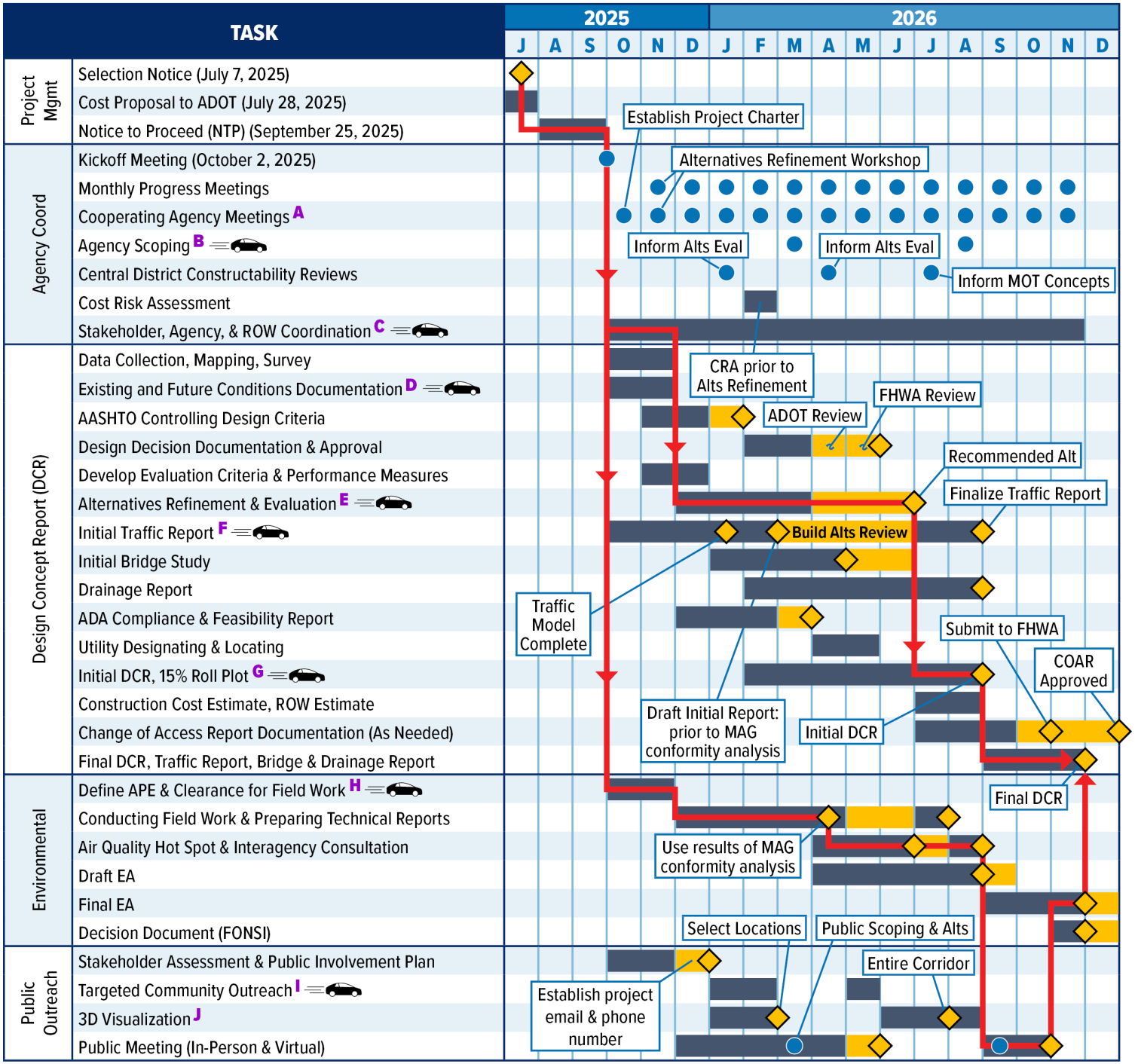
YOU SHOULD KNOW! **PHOENIX TRUSTED ADVISOR**

We have unique traffic engineering and Valley Metro experience with Phoenix. B&N was trusted with completing the Phoenix Downtown Transportation Master Plan Update, where in addition to developing their infrastructure plan, we coordinated system needs with Valley Metro (Capitol and South Central LRT extensions). Phoenix tasked B&N with the first LRT traffic signal retiming since the system was constructed. B&N also reviews major development impacts on behalf of the City. This demonstrates the City's trust in B&N.

QUALITY

B&N's approach to quality combines proactive management of staff and established procedures. Our Quality Control Plan (QCP), including quality expectations and accountability, is discussed at the kickoff meeting. The QCP, which will conform to B&N's Quality Management Program, includes an independent Project Quality Assurance Manager (Chris Lemka) to verify the QC process is followed. B&N's quality control process includes:

- Expectations communicated and emphasized at internal team meetings
- Use of checklists and our color-coded review system
- Recurring internal team meetings to monitor team progress and deliverables
- Formal independent reviews by seasoned professionals at least two weeks prior to submittal
- Review of all subconsultant deliverables prior to ADOT submittal
- Constructability Reviews by industry leader Infrastructure Mavens
- Incorporate agency review time for public facing deliverables



SCHEDULE OVERVIEW

A 14-month schedule was prepared to deliver the Final DCR and ED by December 2026 as shown in **Figure 5.** This gives ADOT ample time to initiate the next steps in FY27 aligning with Proposition 479 funding availability. **This provides ADOT and MAG the opportunity to strengthen public goodwill delivering a high-profile Proposition 479 project early! By leveraging B&N's MOMENTUM, we can accelerate it to a 12-month schedule by fast-tracking major tasks from our MAG Study efforts.** B&N's advantages include:

A. Existing relationships with MAG, Phoenix/Sky Harbor, FHWA, FAA and EPA
B. Quick start to agency scoping
C. Streamlined stakeholder coordination
D. Prior corridor conditions research and documentation
E. Targeted alternative refinements
F. Existing complex traffic models and analysis processes
G. Easier transition to 15% roll plot development
H. Reduce size of Area of Potential Effects (APE)
I. Existing public trust and transparency
J. Targeted locations for visualizations

The schedule captures durations and functional relationships of each major task and critical path. Upon NTP, Jason will finalize the schedule and upload it to Workfront. He will use these strategies to keep the project on track:

- Hold partnering session and develop a project charter with key stakeholders to promote consensus
- Conduct recurring cooperating agency meetings (1-on-1 and groups)
- Use Decision Log to avoid revisiting topics
- Prioritize information sharing and engaging key decision makers
- Host early alternative refinement workshop to refine and finalize alternative
- Maintain risk register management plan and track progress
- Monitor critical path-based schedule to track progress vs milestones
- Implement B&N's QA/QC process to avoid rework
- Deliver project plans, documents and schedule via Workfront to centralize & streamline the review
- Assign additional resources to meet schedule demands

Our team has identified and evaluated a comprehensive list of project-specific risks. Due to the SOQ's page constraints, the risk register (**Figure 6.** below) includes the risks that have the greatest impact on project schedule and cost. These risks have been identified and prioritized based on our corridor history and conversations with PMG (Trent Kelso, Bharat Kandel), EP (Katie Rodriguez), Bridge Group (David Benton), Roadway (Mike DenBleyker, Hiren Shah), Communications (Daina Mann), Central District administrators (Randy Everett, Sara Howard, Raul Amavisca, Priscilla Hernandez), FAA (Robin Sobotta), FHWA (Tom Deitering and Jennifer Acuna), MAG (Velvet Mathew), and Phoenix (Myesha Harris, Jordan Feld, Simon Ramos).

Risk Category = H High | M Medium | L Low

FIGURE 6. RISK REGISTER - GREATEST IMPACTS TO PROJECT SCHEDULE

Risk	Risk Type			Initial Risk	Mitigation Strategies	Final Risk
	Scope	Sched	Budget			
Stakeholder Consensus: Failure to maintain project MOMENTUM and gaining consensus with support for a recommended alternative from a large key stakeholder group: ADOT, MAG, FHWA, FAA, City of Phoenix including Sky Harbor Airport.	✓	✓	✓	H	B&N will engage stakeholders—ADOT, MAG, FHWA, FAA, and Phoenix (including Sky Harbor)—from inception, using our I-10 MAG Study insights to shape the Purpose & Need. Targeted, issue specific one-on-one meetings will encourage open dialogue, while recurring Cooperating Agency Meetings will solidify consensus. Jason Pagnard's major project experience, corridor expertise and relationships will drive transparent, decisions, providing stakeholder alignment, *MOMENTUM*, and support for the recommended alternative.	L
Airport Engagement: Sky Harbor and FAA need detailed design to approve alternatives. A lack of ongoing coordination could create major delays and change orders during construction resulting in major cost increases. Failure to resolve Sky Harbor CAMP I-10 access plans with Sky Harbor and FAA support could stop the project. Several of the on- and off-ramp improvements within the CAMP are geometrically infeasible.	✓	✓	✓	H	Sky Harbor and FAA will require advanced design details upfront to support an alternative. B&N will conduct an early workshop with them to identify design elements to advance. B&N will create a registry of potential conflicts with the Runway Protection Zone (RPZ) and One Engine Inoperable (OEI) imaginary surface. Potential RPZ conflicts include ramp widening and potential OEI conflicts include overhead signs, lighting, and construction cranes. During the workshop, B&N will work with Sky Harbor to identify landside CAMP elements to incorporate within the freeway project including reconfigured connections to Sky Harbor Blvd and a potential new connection from 24th St.	L
Alternative Refinement: MAG Study did not identify SR 51 SB to 7th St connection. DCR must update the concept to maintain this access. Refinement of other MAG Study horizontal alignments will simplify implementation and reduce construction costs.	✓	✓	✓	H	Within 45 days of NTP, B&N will conduct a workshop to discuss alternative refinements. B&N has begun refining alternatives to reestablish the SR 51 SB connection and eliminate a high-skew bridge. B&N conducted traffic performance analysis and determined the refinement provides the connection without any loss in operational performance.	L
Environmental: MAG Study alternative impacts both pedestrian I-10 bridges. The connections must be reestablished and pedestrian routes should be maintained during construction. Schedule will be adversely impacted if ROW needs affect historic districts, buildings or archaeological sites. Current MAG Study alternative exits the ADOT ROW south of I-10 east of 7th St.	✓	✓	✓	H	Determine if the pedestrian bridges are transportation resources or 4(f) resources. Collaborate with Phoenix and ADOT to evaluate opportunities for new, enhanced pedestrian bridges. B&N designed award winning pedestrian enhancements to street crossings over I-71 in downtown Columbus. Collaborate with Phoenix and ADOT to engage local community stakeholders to increase public acceptance. The B&N Team will work closely to identify and evaluate impacts. Impacts will be addressed early in design to develop strategies for avoidance and minimize impacts if unavoidable. B&N has refined the alternative to eliminate the ROW needs east of 7th St.	L
Federal Agency Approvals: Recent federal governmental changes have resulted in evolving requirements, staff turnover and general uncertainty with agencies such as FHWA, FAA and EPA. Completing Interagency Coordination (IAC) can impact schedule, particularly if EPA is short handed.	✓	✓		H	Develop an engagement strategy with multiple points of contact per agency for redundancy. Conduct recurring meetings to monitor policy and personnel changes. Maintain transparency with federal stakeholders and establish flexibility in the process. Facilitate federal completion of federal tasks.	L
UPRR Railroad: Existing prior rights and/or agreements limit design alternatives. Coordination with UPRR is a long-lead task.	✓	✓	✓	H	Partner with ADOT Utilities and RR group early to determine existing agreement needs for new bridge structures over the UPRR spur. Review MAG Study alternative for compliance or refinement. Hold workshop if necessary for refinements.	L
Structures and Drainage: There are locations where proposed structures may conflict with existing drainage infrastructure, including the 16th Street pump station and the drainage tunnel trunk line.	✓		✓	H	Refine MAG Study alternative avoid/minimize impacts to pump station and design straddle bent piers in locations where substructure conflicts with the drainage tunnel. B&N completed the most recent rehabilitation design efforts to the 3rd Street and 16th Street pump stations and will leverage our familiarity to optimize the design.	L

Jason Pagnard, PE | *Project Manager*
Burgess & Niple
Years: 25 | PE #: 47958
Avail: 75% | Commit: 75%

Existing/Corporate Responsibility: Arizona Director and Corporate Secretary
Existing/Corporate Title: Vice President
Education: BSCE - University of Toledo

Jason's Value: Jason, with his 25+ years of urban freeway studies and design experience for over $5 billion worth of highway investments in Arizona and elsewhere, provides ADOT the unique combination of technical capabilities, corridor knowledge and stakeholder relationships needed to make I-10 MOMENTUM a reality!

Jason knows the challenges that come with a major freeway project through Phoenix's urban core. Combined with his local experience, he will apply best practices from his role leading the $2.2 billion Cleveland Innerbelt Modernization Plan (DCR and ED). He will implement innovative, performance-based solutions to address intricate project challenges in a constrained corridor, develop constructable solutions, and integrate the highway with Phoenix's urban fabric. Jason and his team developed the ADOT PBPD guidelines with roots based on Jason's urban projects.

Jason will be a strong partner to ADOT PM Trent Kelso. He will proactively attack the project, driving tasks with Trent's input and concurrence. Jason will leverage his experience-based foresight to monitor and address risks. **As a senior project manager within B&N, he has a long track record of performance driving innovation, meeting schedules, and adhering to budgets on some of the firm's most complex projects.**

Jason's Commitments: Jason's assignments have been limited to make him available for this project. He is committed to the MCDOT Transportation System Plan 2050 (20%) and B&N Principal functions (5%).

Jason's Experience: Jason has significant recent, relevant experience with projects of comparable character, size, budget and complexity. **He has led six projects for ADOT, MAG and Phoenix in the I-10 project area and more throughout the region as shown in Figure 7.** He knows ADOT'S process, has relationships with key stakeholders, and knows the project corridor. Jason is familiar with leading similarly complex projects from experiences including B&N's Cleveland Innerbelt Modernization Plan, a complete reconstruction of I-71, I-77, I-90 and SR 2 through city's urban core. Jason partnered closely with Ohio DOT PM Craig Hebebrand to address similar challenges such as improving safety and capacity through trenched and elevated freeway sections, providing access and reconnecting the community across the freeway, completing environmental documentation and building stakeholder consensus.

Figure 7. Jason's MAG Urban Freeway Experience Map

Region-Wide
1. MC for RTPFP
2. MAG MOMENTUM RTP
3. PBPD Guidelines

Preliminary Studies
4. I-10, I-17 to SR 51 Study
5. I-10, Tunnel To I-17 Study
6. I-10 SE Corridor MIS
7. I-10/Baseline Rd TI Study
8. SR 101L, Thunderbird Rd to 67th Ave Study
9. SR 101L/75th Ave TI Study
10. US 60, SR 303L to McDowell Rd Study

Cost Risk & Value Engineering
11. I-17/Indian School Rd VE
12. SR 202L, I-10 to I-10 VE

DCR & Final Design
13. I-10/SR 101L TI DCR, ED, FD
14. I-10, Drainage Pump Stations PA, FD
15. SR 101L/N Pkwy TI DCR, EA, FD
16. SR 101L, 67th/59th Aves TIs PA
17. SR 101L, 75th Ave to I-17 DCR
18. SR 101L, I-10 to I-17 ITS PA, FD
19. SR 202L, Val Vista to I-10 DCR, EA, FD
20. SR 202L, I-10 to I-10 GEC
21. SR 303L, Lake Pleasant Pkwy to I-17 DCR, ED
22. SR 303L, Lake Pleasant Pkwy to 51st Ave FD
23. SR 303L, 51st/43rd Aves TIs FD
24. SR 303L, I-10 to N Pkwy ITS PA & FD
25. US 60/N Pkwy TI DCR & EA

City projects (e.g., Downtown Transportation Master Plan Update, 7th Street and 7th Avenue Reversible Lane Study) are not shown.

CONSENSUS BUILDER!

Jason thrives on resolving complex technical needs through strategic stakeholder meetings. MAG, ADOT and others engage him to leverage his 25+ years of urban freeway expertise to deliver tailored, performance-based solutions, with stakeholder support.

B&N's dedicated team depicted in **Figure 8.**, with proven expertise in urban freeway DCRs and stakeholder coordination, is ready to Make MOMENTUM a Reality for I-10, delivering innovative, collaborative solutions.

Figure 8. Organizational Chart

ADOT PM
Trent Kelso, PE

KEY STAKEHOLDERS
MAG, Phoenix, Sky Harbor, FAA, FHWA, EPA

PRINCIPAL
Ed Muccillo, PE

- **ROADWAY** — **David Lenzer, PE**
- **TRAFFIC** — **Randy Kill, PE, PTOE**
- **BRIDGE/STRUCTURES** — **Russ Stuart, PE** AECOM
- **DRAINAGE** — **Billie Denetdale, PE** AECOM
- **IMPLEMENTATION** — **Brian Toombs, PE**

PROJECT MANAGER
Jason Pagnard, PE

- **ENVIRONMENTAL** — **Nancy Shelton** JACOBS
- **PUBLIC INVOLVEMENT** — **Debi Bohnet** JACOBS
- **SAFETY** — **Dana Biscan, PE, RSP$_{2B}$**
- **COST ESTIMATING** — **Wesley Scatena, PE**
- **QUALITY** — **Chris Lemka, PE**

SUPPORT SERVICES

- **GEOTECHNICAL** — Ethos*
- **UTILITY LOCATING (SUE)** — T2
- **UTILITY/RR COORDINATION** — Burgess & Niple
- **LANDSCAPE & AESTHETICS** — Corral Design Group*
- **CONSTRUCTABILITY REVIEW** — Infrastructure Mavens
- **SURVEY** — AECOM
- **MAPPING** — Aerotech Mapping*
- **ROW MAPPING** — AECOM
- **VALLEY METRO LIAISON** — Jacobs
- **AIRPORT LIAISON** — **David Lenzer, PE** AECOM

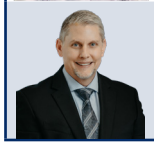
LEGEND **Key Personnel (bold)** * DBE Firm

Additional Key Staff QUALIFICATIONS

Jason and his B&N colleagues have worked together to deliver complex urban freeway projects that exceed $5 billion worth of urban freeway infrastructure. This includes all five contracts listed on the next page for firm experience, which includes completing the DCR and ED for two other city's inner loop freeway projects. **All have been actively engaged in the I-10 MAG Study and understand the corridor technical challenges and stakeholders interests.** This team is skilled, efficient, and brings ADOT and its stakeholders a wealth of unique local and industry experience, making them uniquely qualified for your I-10 Deck Park Tunnel to I-10/I-17 Split DCR and ED project.

Our cohesive team includes key staff of Nancy Shelton and Debi Bohnet from Jacobs and Russ Stuart and Billie Denetdale from AECOM. These skilled professionals, along with B&N's key staff, recently completed the ADOT I-10/SR 101L System TI Improvements DCR and EA. **With processes honed from the recently completed I-10/SR 101L System TI Improvements DCR and ED, our team is ready to launch the I-10 Deck Park Tunnel to I-10/I-17 Split DCR and ED, driving MOMENTUM forward.**

As ADOT's MC team for the RTPFP, we provide strategic oversight, ensuring alignment with ADOT's project development framework and federal requirements. Our deep familiarity with ADOT processes, including Scoping and NEPA compliance, provides seamless execution of the DCR and ED.

KEY PERSONNEL MEMBER *Years' Exp / Reg # / Availability*	RELEVANT EXPERIENCE *Owner, Project Name*	VALUE TO ADOT AND STAKEHOLDERS *Key Personnel Value-Add*
 **David Lenzer, PE** | *Roadway Lead* *Burgess & Niple* Years: 20 | PE #: 61197 Avail: 75% | Commit: 70%	- MAG I-10/I-17 Split Corridor Study - ADOT I-10/SR 101L DCR/EA/FD - Ohio DOT Cleveland Innerbelt - Ohio DOT Columbus Crossroads	→ Led I-10 MAG Study, mastering corridor details → Extensive ADOT urban freeway experience → Major urban inner loop freeway experience
 **Randy Kill, PE, PTOE** | *Traffic Lead* *Burgess & Niple* Years: 28 | PE #: 49490 Avail: 70% | Commit: 65%	- MAG I-10/I-17 Split Corridor Study - Ohio DOT Cleveland Innerbelt - Ohio DOT Columbus Crossroads - ADOT MC for RTPFP	→ Directed I-10 MAG Study traffic modeling → Authored 24+ federal Change of Access Reports → Major urban inner loop freeway experience
 **Russ Stuart, PE** | *Structures Lead* *AECOM* Years: 31 | PE #: 32342 Avail: 65% | Commit: 60%	- ADOT I-10/SR 101L DCR/EA/FD - ADOT US 60/35th DCR/EA - ADOT I-10/Ina Road DCR	→ Led structures for 30+ ADOT projects → Expert in system TI fly-over ramp design → Skilled in phased construction, maintaining traffic
 **Billie Denetdale, PE** | *Drainage Lead* *AECOM* Years: 23 | PE #: 48264 Avail: 70% | Commit: 55%	- ADOT I-10/SR 101L DCR/EA/FD - ADOT US 60/35th DCR/EA - ADOT US 93, Cane Springs	→ Skilled in ADOT drainage design → Hydrology and hydraulics expertise → Versatile design experience
 **Brian Toombs, PE** | *Implementation* *Burgess & Niple* Years: 27 | PE #: 53419 Avail: 50% | Commit: 25%	- MAG I-10/I-17 Split Corridor Study - Ohio DOT Cleveland Innerbelt - Ohio DOT Columbus Crossroads - MAG/ADOT SR 202L South Mountain Review	→ Implementation Plans $10B freeway projects → I-10 MAG Study corridor knowledge → Major urban inner loop freeway experience
 **Nancy Shelton** | *Environmental Lead* *Jacobs* Years: 25 Avail: 60% | Commit: 55%	- ADOT I-10/SR 101L DCR/EA/FD - ADOT SR 303L GPL DCR/EA - ADOT SR 303L TIs PA/FD	→ 20+ years with ADOT EP, I-10/SR 101L cleared → Environmental compliance expert → Effectively manages urban ADOT projects
 **Debi Bohnet** | *Public Involvement Lead* *Jacobs* Years: 25 Avail: 60% | Commit: 40%	- ADOT SR 101L/I-10 DCR/EA/FD - ADOT SR 303L GPL DCR/EA - ADOT SR 303L TIs	→ ADOT I-10 public/stakeholder experience → Translates technical details for public clarity → Effectively manages urban ADOT projects
 **Dana Biscan, PE, RSP$_{2B}$** | *Safety Lead* *Burgess & Niple* Years: 22 | PE #: 47853 Avail: 45% | Commit: 40%	- MAG I-10/I-17 Split Corridor Study - ADOT MC for RTPFP - ADOT PBPD - MAG I-10/SR 101L System TI Study	→ Led I-10 safety analysis; knows corridor needs → National and regional safety expert → Enhances safety via PBPD designs
 **Wes Scatena, PE** | *Cost Estimating* *Burgess & Niple* Years: 10 | PE #: 73019 Avail: 65% | Commit: 60%	- MAG I-10/I-17 Split Corridor Study - ADOT MC for RTPFP - ADOT I-10/SR 101L DCR/EA/FD - ADOT SR 303L DCR/EA	→ Maintains ADOT MC cost estimating process → Skilled with ADOT urban freeways → Applies PBPD for budget optimization
 **Chris Lemka, PE** | *Quality Manager* *Burgess & Niple* Years: 27 | PE #: 37302 Avail: 50% | Commit: 20%	- MAG I-10/I-17 Split Corridor Study - ADOT I-10/SR 101L FD - ADOT MC for RTPFP - ADOT SR 303L GPL FD	→ Nearly 30 years of industry experience → Drives B&N's quality for ADOT projects → Provides owner's perspective to quality reviews

MAG I-10 FREEWAY CORRIDOR STUDY (MAG STUDY) FROM THE DECK PARK TUNNEL TO THE I-10/I-17 SPLIT

RELEVANT FEATURES:
- Same Location
- Airport Coordination
- Alternatives Dev
- Traffic Analysis
- Environment Overview

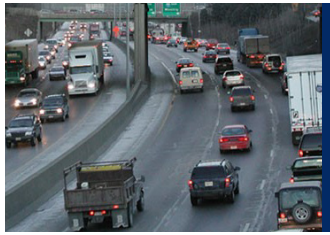
B&N completed the study of I-10 to address safety, capacity and access needs. This project is the foundation of the I-10 DCR and ED project. In partnership with ADOT, MAG, FHWA, FAA, and Phoenix including Sky Harbor International Airport, B&N developed and evaluated alternatives, conducted complex microsimulation traffic analyses, and prepared preliminary environmental documentation. B&N leveraged complex urban environment expertise to build stakeholder MOMENTUM. **B&N Role:** Prime | **Engineering Cost:** $495K | **Key Staff:** Jason Pagnard, David Lenzer, Randy Kill, Brian Toombs, Dana Biscan, Wes Scatena

OHIO DOT CLEVELAND INNERBELT MODERNIZATION PLAN (I-71, I-77, I-90, SR 2 AND SR 179) DCR AND ED

RELEVANT FEATURES:
- Urban Freeway
- Alternatives Dev
- Traffic Analysis
- NEPA Documents
- Implementation Plan

B&N completed the Ohio equivalent of an ADOT DCR and ED for the $2.2 billion reconstruction of the Cleveland Innerbelt Freeway. The project, similar in scale, complexity and urban environment to this I-10 project, traversed the city's urban core and included 9 miles of urban freeways, 4 system TIs, and 12 service TIs. An implementation plan was prepared segmenting the project into seven construction groups to facilitate maintaining traffic through the constrained corridor. B&N was selected for subsequent final design services. **B&N Role:** Prime | **Engineering Cost:** $13.2M | **Key Staff:** Jason Pagnard, David Lenzer, Randy Kill, Brian Toombs

OHIO DOT COLUMBUS CROSSROADS (I-70, I-71 AND SR 315) DCR AND ED



RELEVANT FEATURES:
- Urban Freeway
- Alternatives Dev
- Traffic Analysis
- NEPA Documents
- Implementation Plan

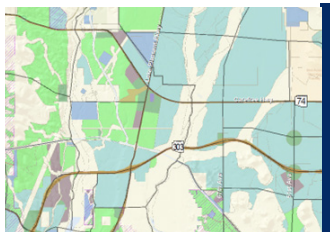
B&N completed the Ohio equivalent of an ADOT DCR and ED update for the $2.4 billion reconstruction of nearly half of the Columbus inner loop freeway around the city's urban core. The project, similar in scale, complexity and urban environment to this I-10 project, included the reconstruction of over 5 miles of urban freeways, 3 system TIs, and 8 services TIs along with arterial street grid access changes. B&N partnered with ODOT, FHWA, city and stakeholders to identify PBPD savings of nearly $400 million. B&N was selected for subsequent final design services. **B&N Role:** Prime | **Engineering Cost:** $4.8M | **Key Staff:** Jason Pagnard, David Lenzer, Randy Kill, Brian Toombs

ADOT I-10/SR 101L SYSTEM TI IMPROVEMENTS DCR AND ED

RELEVANT FEATURES:
- Same Freeway
- Similar Stakeholders
- Alternatives Dev
- Traffic Analysis
- NEPA Documents

B&N, Jacobs (prime) and AECOM completed the DCR, ED and Final Design to improve the I-10 urban system TI in Phoenix and Tolleson. Leveraging stakeholder MOMENTUM created by B&N's preliminary engineering work for MAG, the team quickly refined, assessed and developed improvements for safety and operations with a new I-10/SR 101L DHOV connection, additional mainline lanes, and enhancements to service TIs and the arterial street grid. **B&N Role:** Subconsultant to Jacobs | **Engineering Cost:** $1M (B&N fee) | **Key Staff:** Jason Pagnard, David Lenzer, Randy Kill, Brian Toombs, Wes Scatena, Nancy Shelton, Russ Stuart, Debi Bohnet, Billie Denetdale

ADOT MANAGEMENT CONSULTANT (MC) FOR RTPFP



RELEVANT FEATURES:
- Similar Stakeholders
- Urban Freeways
- Alternatives Dev
- Traffic Analysis
- NEPA Documents

B&N and Jacobs (prime) partnered with ADOT, MAG, federal and local agencies to manage the program and conduct studies. Efforts include: SR 303L, Lake Pleasant Parkway to I-17, DCR update; SR 101L TIs at 67th Avenue and 59th Avenue PA; SR 24 extension at Ironwood TI PA; Cost Risk Assessments; and cost estimating for all freeway projects. Keys to success include interagency coordination, stakeholder partnering, and complex urban freeway concept development and analysis. **B&N Role:** Subconsultant to Jacobs | **Engineering Cost:** $1.4M (B&N fee) | **Key Staff:** Jason Pagnard, David Lenzer, Randy Kill, Brian Toombs, Dana Biscan, Wes Scatena, Nancy Shelton, Debi Bohnet

SUBCONSULTANTS

B&N has a strong partnership with major subconsultants Jacobs, AECOM and the rest of our subconsultant team. B&N, Jacobs and AECOM recently completed the I-10/SR 101L System TI Improvement DCR and ED and are nearly complete with final design services. Jacobs and B&N provide urban freeway scoping and environmental services for ADOT and MAG regionwide through the MC for RTPFP contract.

Together, our team provides ADOT with the skills, resources and capacity needed for the I-10 DCR and ED phase and subsequent final design or GEC phase. We have a combined staff of 850 local professionals. In four of the five projects listed to the left, B&N and its partners were contracted to complete final design services. Our team is ready to make it five out of five by successfully completing this I-10 DCR and ED and perform final design or GEC services.

AECOM has 193 local staff and brings DCR and EA experience, and understanding of ADOT process, procedure, and expectations, and a depth of staff with ADOT experience in structures, drainage and survey to meet the project schedule.

Jacobs has 511 local staff and brings extensive ADOT experience, complex DCR expertise, and ample resources to the team for environmental and public engagement.

Aerotech Mapping has 25 local staff and brings ADOT mapping experience since 2010.

Corral Design Group has 8 local staff and brings ADOT urban freeway landscape architecture experience since 2001.

Ethos has 22 local staff and brings geotechnical experience on over 300 ADOT projects.

Infrastructure Mavens has 3 local staff bringing 118 combined years of ADOT experience.

T2 has 50 local staff and brings SUE experience on over 3,500 projects since 1998.

PERSONNEL INFORMATION

Years with the Firm: 25

Total Years Experience: 25

Existing/Corporate Responsibility:

Arizona Director and Corporate Secretary

Existing/Corporate Title:

Vice President

Education:

BS, Civil Engineering - University of Toledo

Licenses: AZ PE #47958

WHY JASON?

- ✓ **Expert "Studies Project Manager" skilled with stakeholder coordination and building consensus**
- ✓ **Completed projects for ADOT, MAG and Phoenix in the I-10 DCR and ED project limits and has established stakeholder relationships and corridor familiarity**
- ✓ **Led and participated in reconstruction projects of the same scale in similar complex, urban core environment**
- ✓ **Key PBPD Contributor**

Jason Pagnard

Project (Contract) Manager

Availability: 75% | **Commitment:** 75%

BURGESS & NIPLE

Background

Jason, with his 25+ years of urban freeway studies and design experience for over $5 billion worth of highway investments in Arizona and elsewhere, provides ADOT the unique combination of technical capabilities, corridor knowledge and stakeholder relationships needed to make I-10 MOMENTUM a reality!

Jason knows the challenges that come with a major freeway project through Phoenix's urban core. He has recent corridor experience, existing stakeholder relationships, and significant experience with major projects through a city urban core. He will implement innovative, performance-based solutions to address intricate project challenges in a constrained corridor, maintain traffic during construction, and integrate the highway with Phoenix's urban fabric. Jason and his team developed the ADOT PBPD guidelines with roots based on Jason's urban projects.

Relevant Experience

- **MAG I-10 Freeway Corridor Study from the Deck Park Tunnel to the I-10/I-17 Split**
  Role: Project Principal
  B&N completed the study of I-10 to address safety, capacity and access needs. This project is the foundation of the I-10 DCR and ED project. In partnership with ADOT, MAG, FHWA, FAA, and Phoenix including Sky Harbor International Airport, B&N developed and evaluated alternatives, conducted complex microsimulation traffic analyses, and prepared preliminary environmental documentation. B&N leveraged complex urban environment expertise to build stakeholder MOMENTUM.

- **MAG I-10/Papago Freeway Tunnel, I-17 Stack to SR 51/SR 202L Mini-Stack, Traffic and Conceptual Alternatives Study**
  Role: Project Manager
  B&N completed the study of I-10 to identify needs and recommend potential improvements strategies. This project is the foundation for the subsequent MAG I-10 Study that set the foundation for this I-10 DCR and ED project. B&N partnered with ADOT, MAG, and Phoenix including Sky Harbor International Airport to identify project needs, opportunities and constraints and prepare a strategy for further investigation, which included revising the project limits. B&N leveraged existing relationships and complex urban environment expertise to begin stakeholder MOMENTUM.

- **Ohio DOT Cleveland Innerbelt Modernization Plan (I-71, I-77, I-90, SR 2 and SR 179) DCR and ED**
  Role: Deputy Project Manager
  B&N completed the Ohio equivalent of an ADOT DCR and ED for the $2.2 billion reconstruction of the Cleveland Innerbelt Freeway. The project, similar in scale, complexity and urban environment to this I-10 project, traversed the city's urban core and included 9 miles of urban freeways, 4 system TIs, and 12 service TIs. An implementation plan was prepared segmenting the project into seven construction groups to facilitate maintaining traffic through the constrained corridor. B&N was selected for subsequent final design services.

- **Ohio DOT Columbus Crossroads (I-70, I-71 and SR 315) DCR & ED**
  Role: Senior Engineer
  B&N completed the Ohio DOT equivalent of an ADOT DCR and ED update for the $2.4 billion reconstruction of nearly half of the Columbus inner loop freeway around the city's urban core. The project, similar in scale, complexity and urban environment to this I-10 project, included the reconstruction of over 5 miles of urban freeways, 3 system TIs, and 8 services TIs along with arterial street grid access changes. B&N partnered with ODOT, FHWA, city and stakeholders to identify PBPD savings of nearly $400 million. B&N was selected for subsequent final design services.

- **ADOT I-10/SR 101L System TI Improvements DCR, ED and FD**
  Role: Senior Engineer
  B&N, Jacobs (prime), and AECOM completed the DCR, ED and Final Design to improve the I-10 urban system TI in Phoenix and Tolleson. Leveraging stakeholder MOMENTUM created by B&N's preliminary engineering work for a MAG study, the team quickly refined, assessed and developed improvements for safety and operations with a new I-10/SR 101L DHOV connection, additional mainline lanes, and enhancements to service TIs and the arterial street grid.

- **MAG I-10/SR 101L System TI Improvements Conceptual Alternatives Study**
  Role: Project Manager
  B&N completed a study in partnership with ADOT, MAG, FHWA, Phoenix and Tolleson to evaluate traffic operations and recommend improvements to the I-10/SR 101L system TI and vicinity. Alternatives were developed and assessed. Recommendations included a new DHOV ramp and improvements to nearby TIs on I-10 at Avondale Boulevard, 107th Avenue, 99th Avenue, 91st Avenue, and 83rd Avenue, as well as the TIs on SR 101L at McDowell Road, Thomas Road, and Indian School Road, and area arterial streets.

- **ADOT Management Consultant for RTPFP**
  Role: Senior Engineer and Construction Cost Estimator
  B&N and Jacobs (prime) partnered with ADOT, MAG, federal and local agencies to manage the program and conduct studies. Efforts include: SR 303L, Lake Pleasant Parkway to I-17, DCR update; SR 101L TIs at 67th Avenue and 59th Avenue PA; SR 24 extension at Ironwood TI PA; Cost Risk Assessments; and cost estimating for all freeway projects. Keys to success include interagency coordination, stakeholder partnering, and complex urban freeway concept development and analysis.

- **MAG RTP MOMENTUM**
  Role: Project Manager
  B&N supported MAG on the development of the new RTP. B&N's role was to provide programmatic and implementation elements of the freeway program. B&N assessed project feasibility, completed the project needs list, assessed project performance with established performance metrics, developed four scenarios for different funding constraints and regional investment priorities, cross referenced modes of travel (i.e., freeways with transit access needs), facilitated travel demand model development, developed programming cost estimates, evaluated project phasing and sequencing.

- **ADOT Performance Based Practical Design Guidelines**
  Role: Project Principal and Senior Engineer
  B&N partnered with ADOT to develop and implement a unified approach to PBPD and Value Engineering (VE) principles. The PBPD Guidelines and the Design Decisions Documentation now guide project managers, design reviewers, and consultants through an approach that relies on quantitative analyses to ground decision-making throughout the project development process resulting in a better system performance.

- **City of Phoenix Downtown Transportation Plan Update**
  Role: Project Manager
  B&N completed a comprehensive study aimed at improving accessibility, circulation, and safety within the downtown area, inclusive of I-10 access. It considered all modes of travel including autos, LRT, bus service, bicyclists, and pedestrians. B&N coordinated with Phoenix, MAG and Valley Metro to incorporate LRT expansion efforts. Public and stakeholder outreach efforts were integral to the process, along with technical analyses to identify opportunity corridors. The project also included the development of complex simulation models to analyze traffic patterns.

- **ADOT I-10 Pump Stations at 3rd Avenue, 3rd Street and 16th Street PA and Design**
  Role: Project Manager
  B&N completed the scoping and final design for the rehabilitation and modernization of three pump stations on I-10 in downtown Phoenix. Mechanical, electrical and communication improvements were designed for each site. Work was closely coordinated with the City of Phoenix and scheduled around monsoon season.

- **ADOT SR 303L, Lake Pleasant Parkway to I-17 DCR and EA**
  Role: Senior Engineer
  B&N and Jacobs (prime) partnered with ADOT, MAG, Phoenix and ASLD to update the DCR to add a third GPL, improve the I-17 system TI, and account for new TIs at 51st Avenue and 43rd Avenue to support the new TSMC facility in the City of Phoenix. B&N performed geometric alternatives development and analysis, travel demand analysis, and stakeholder coordination.

- **ADOT SR 303L, 51st Avenue TI and 43rd Avenue TI**
  Role: Senior Engineer
  B&N was a subconsultant for traffic design for the new SR 303L TIs at 51st Avenue and 43rd Avenue to support the new TSMC facility in the City of Phoenix. B&N designed and completed signing plans, pavement marking plans, and traffic control plans under an expedited schedule.

- **ADOT SR 101L, 67th Avenue TI and 59th Avenue TI Project Assessment**
  Role: Senior Engineer
  Under the MC for RTPFP, B&N (lead) and Jacobs completed a PA for improvements to the 67th Avenue and 59th Avenue TIs in partnership with Phoenix, Glendale and Peoria.

- **MAG SR 101L, Thunderbird Road to 67th Avenue Study**
  Role: Project Manager
  B&N led a traffic operations and safety assessment study in partnership with ADOT, MAG, Glendale and Peoria. The SR 101L TIs at Thunderbird Road, 83rd Avenue (new access), Bell Road, Union Hills Drive, 75th Avenue, and 67th Avenue were evaluated, needs identified, alternatives developed and assessed, and recommendations were made.

- **ADOT SR 202L, Gilbert to I-10 General Purpose Lane (GPL) DCR and ED**
  Role: Senior Engineer
  B&N, as a subconsultant, completed the traffic analysis and assisted with the development and evaluation of corridor and TI alternatives for the DCR and ED 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. The team was selected for final design and B&N led the design of the McQueen Road and Cooper Road TIs as well as all crossroad improvements.

- **ADOT SR 202L South Mountain Freeway General Engineering Consultant**
  Role: Senior Engineer
  B&N, as a subconsultant, oversaw the design and construction of the 22-mile urban freeway, a recent mega-project. B&N was the corridor-wide geometrics reviewer and was the I-10 Papago Segment D lead, providing design oversight and conducting technical discipline reviews.

- **MAG SR 202L South Mountain Freeway Design Review**
  Role: Project Manager
  B&N completed a cost risk assessment and value engineering study of the 22-mile South Mountain Freeway SR 202L connection between the I-10 Maricopa and I-10 Papago freeways. Recommendations included reconfiguring the I-10 Maricopa Freeway system TI, revising roadway design criteria to match site constraints, and minimizing the project footprint (right-of-way).

- **MAG I-10 Southeast Corridor Major Investment Study**
  Role: Project Manager and Senior Engineer
  As a subconsultant, B&N conducted a study to identify multi-modal transportation enhancements in the heavily traveled Southeast Corridor, bounded by I-10, SR 202L, SR 101L, the Gila River Indian Community, I-17, and 23rd Avenue, with projected traffic volumes nearing 400,000 vehicles daily. Through a two-day charette with stakeholders, B&N developed alternatives, including a braided ramp solution for the Broadway Curve (SR 143 to US 60), priced managed lanes along I-10, and new DHOV interchanges providing access to these lanes. These recommendations informed the I-10/I-17 Spine Corridor Master Plan and spurred ADOT's near-team I-10 improvements, enhancing regional connectivity and mobility.

PERSONNEL INFORMATION

Years with the Firm: 20

Total Years Experience: 20

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?

- Knows the I-10, Deck Park Tunnel to I-10/I-17 corridor from leading the MAG Study
- Extensive ADOT urban freeway experience including designs on I-10, SR 101L, SR 202L and SR 303L. He is experienced with ADOT's processes
- David provides major inner loop urban reconstruction project experience of the same scale and scope
- Key PBPD Contributor

David Lenzer, PE

Roadway Lead

Availability: 75% | **Commitment:** 70%

BURGESS & NIPLE

Background

David is a seasoned roadway engineer who intimately knows the I-10, Deck Park Tunnel to the I-10/I-17 Split TI from leading the MAG Study. He has an extensive successful record performing on major urban freeway projects. He is very familiar with ADOT's system and expectations from projects such as I-10/SR 101L system TI, the SR 202L Santan and South Mountain Freeways. His extensive knowledge of inner loop freeways comes from his similar roles with the $2.2 billion reconstruction of the Cleveland innerbelt freeway and $2.4 billion reconstruction of the Columbus inner loop freeway. David's innovative solutions, such as cost-effective HOV/managed lane designs, enhance project efficiency. As a key contributor to ADOT's PBPD Guidelines, he aligns designs with safety and functionality goals. **His experience with complex inner loop freeway reconstruction projects and coordinating with FAA and Phoenix Aviation, makes him ideal to lead roadway design for this critical corridor.**

Relevant Experience

- **MAG I-10 Freeway Corridor Study from the Deck Park Tunnel to the I-10/I-17 Split**
  Role: Project Manager
  B&N completed the study of I-10 to address safety, capacity and access needs. This project is the foundation of the I-10 DCR and ED project. In partnership with ADOT, MAG, FHWA, FAA, and Phoenix including Sky Harbor International Airport, B&N developed and evaluated alternatives, conducted complex microsimulation traffic analyses, and prepared preliminary environmental documentation. B&N leveraged complex urban environment expertise to build stakeholder MOMENTUM.

- **MAG I-10/Papago Freeway Tunnel, I-17 Stack to SR 51/SR 202L Mini-Stack, Traffic and Conceptual Alternatives Study**
  Role: Roadway Lead
  B&N completed the study of I-10 to identify needs and recommend potential improvements strategies. This project is the foundation for the subsequent MAG I-10 Study that set the foundation for this I-10 DCR and ED project. B&N partnered with ADOT, MAG, and Phoenix identify project needs, opportunities and constraints and prepare a strategy for further investigation, which included revising the project limits. B&N leveraged existing relationships and complex urban environment expertise to begin stakeholder MOMENTUM.

- **Ohio DOT Cleveland Innerbelt Modernization Plan (I-71, I-77, I-90, SR 2 and SR 179) DCR and ED**
  Role: Roadway Engineer
  B&N completed the Ohio equivalent of an ADOT DCR and ED for the $2.2 billion reconstruction of the Cleveland Innerbelt Freeway. The project, similar in scale, complexity and urban environment to this I-10 project, traversed the city's urban core and included 9 miles of urban freeways, 4 system TIs, and 12 service TIs. An implementation plan was prepared segmenting the project into seven construction groups to facilitate maintaining traffic through the constrained corridor. B&N was selected for subsequent final design services.

- **Ohio DOT Columbus Crossroads (I-70, I-71 and SR 315) DCR and ED**
  Role: Deputy Project Manager and Roadway Lead
  B&N completed the Ohio DOT equivalent of an ADOT DCR and ED update for the $2.4 billion reconstruction of nearly half of the Columbus inner loop freeway around the city's urban core. The project, similar in scale, complexity and urban environment to this I-10 project, included the reconstruction of over 5 miles of urban freeways, 3 system TIs, and 8 services TIs along with arterial street grid access changes. B&N partnered with ODOT, FHWA, city and stakeholders to identify PBPD savings of nearly $400 million. B&N was selected for subsequent final design services.

- **ADOT I-10/SR 101L System TI Improvements DCR, ED and Final Design**
  Role: Senior Engineer
  B&N, Jacobs (prime), and AECOM completed the DCR, ED and Final Design to improve the I-10 urban system TI in Phoenix and Tolleson. Leveraging stakeholder MOMENTUM created by B&N's preliminary engineering work for a MAG study, the team quickly refined, assessed and developed improvements for safety and operations with a new I-10/SR 101L DHOV connection, additional mainline lanes, and enhancements to service TIs and the arterial street grid.

- **MAG I-10/SR 101L System TI Improvements Conceptual Alternatives Study**
  Role: Roadway Lead
  B&N completed a study in partnership with ADOT, MAG, FHWA, Phoenix and Tolleson to evaluate traffic operations and recommend improvements to the I-10/SR 101L system TI and vicinity. Alternatives were developed and assessed. Recommendations included a new DHOV ramp and improvements to nearby TIs on I-10 at Avondale Boulevard, 107th Avenue, 99th Avenue, 91st Avenue, and 83rd Avenue, as well as the TIs on SR 101L at McDowell Road, Thomas Road, and Indian School Road, and area arterial streets.

- **ADOT Management Consultant for RTPFP**
  Role: Senior Engineer and Task Order Project Manager
  B&N and Jacobs (prime) partnered with ADOT, MAG, federal and local agencies to manage the program and conduct studies. Efforts include: SR 303L, Lake Pleasant Parkway to I-17, DCR update; SR 101L TIs at 67th Avenue and 59th Avenue PA; SR 24 extension at Ironwood TI PA; Cost Risk Assessments; and cost estimating for all freeway projects. Keys to success include interagency coordination, stakeholder partnering, and complex urban freeway concept development and analysis.

- **MAG RTP MOMENTUM**
  Role: Roadway Lead
  B&N supported MAG on the development of the new RTP. B&N's role was to provide programmatic and implementation elements of the freeway program. B&N assessed project feasibility, completed the project needs list, assessed project performance with established performance metrics, developed four scenarios for different funding constraints and regional investment priorities, cross referenced modes of travel (i.e., freeways with transit access needs), facilitated travel demand model development, developed programming cost estimates, evaluated project phasing and sequencing.

- **ADOT Performance Based Practical Design Guidelines**
  Role: Senior Engineer
  B&N partnered with ADOT to develop and implement a unified approach to PBPD and Value Engineering (VE) principles. The PBPD Guidelines and the Design Decisions Documentation now serve as process project managers, design reviewers, and consultants to apply an approach that relies on quantitative analyses to guide decision-making throughout the project development process resulting in a better system performance.

- **City of Phoenix Downtown Transportation Plan Update**
  Role: Roadway Engineer
  B&N completed a comprehensive study aimed at improving accessibility, circulation, and safety within the downtown area, inclusive of I-10 access. It considered all modes of travel including autos, LRT, bus service, bicyclists, and pedestrians. B&N coordinated with Phoenix, MAG and Valley Metro to incorporate LRT expansion efforts. Public and stakeholder outreach efforts were integral to the process, along with technical analyses to identify opportunity corridors. The project also included the development of complex simulation models to analyze traffic patterns.

- **ADOT I-10 Pump Stations at 3rd Avenue, 3rd Street and 16th Street PA and Design**
  Role: Quality Manager
  B&N completed the scoping and final design for the rehabilitation and modernization of three pump stations on I-10 in downtown Phoenix. Mechanical, electrical and communication improvements were designed for each site. Work was closely coordinated with the City of Phoenix and scheduled around monsoon season.

- **ADOT SR 303L, Lake Pleasant Parkway to I-17 DCR and EA**
  Role: Roadway Engineer
  B&N and Jacobs (prime) partnered with ADOT, MAG, Phoenix and ASLD to update the DCR to add a third GPL, improve the I-17 system TI, and account for new TIs at 51st Avenue and 43rd Avenue to support the new TSMC facility in the City of Phoenix. B&N performed geometric alternatives development and analysis, travel demand analysis, and stakeholder coordination.

- **ADOT SR 303L, 51st Avenue TI and 43rd Avenue TI, Senior Engineer**
  Role: Senior Engineer
  B&N was subconsultant for traffic design for the new SR 303L TIs at 51st Avenue and 43rd Avenue to support the new TSMC facility in the City of Phoenix. B&N designed and completed signing plans, pavement marking plans, and traffic control plans under an expedited schedule.

- **ADOT SR 101L, 67th Avenue TI and 59th Avenue TI Project Assessment**
  Role: Task Order Project Manager
  Under the MC for RTPFP, B&N (lead) and Jacobs completed a PA for improvements to the 67th Avenue and 59th Avenue TIs in partnership with Phoenix, Glendale and Peoria.

- **MAG SR 101L, Thunderbird Road to 67th Avenue Study**
  Role: Roadway Lead
  B&N led a traffic operations and safety assessment study in partnership with ADOT, MAG, Glendale and Peoria. The SR 101L TIs at Thunderbird Road, 83rd Avenue (new access), Bell Road, Union Hills Drive, 75th Avenue, and 67th Avenue were evaluated, needs identified, alternatives developed and assessed, and recommendations were made.

- **ADOT SR 202L, Gilbert to I-10 General Purpose Lane (GPL) DCR and ED**
  Role: Roadway Engineer
  B&N, as a subconsultant, completed the traffic analysis and assisted with the development and evaluation of corridor and TI alternatives for the DCR and ED 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. The team was selected for final design and B&N led the design of the McQueen Road and Cooper Road TIs as well as all crossroad improvements.

- **ADOT SR 202L South Mountain Freeway General Engineering Consultant**
  Role: Roadway Engineer
  B&N, as a subconsultant, oversaw the design and construction of the 22-mile urban freeway, a recent mega-project. B&N was the corridor-wide geometrics reviewer and was the I-10 Papago Segment D lead, providing design oversight and conducting technical discipline reviews.

- **MAG SR 202L South Mountain Freeway Design Review**
  Role: Roadway Engineer
  B&N completed a cost risk assessment and value engineering study of the 22-mile South Mountain Freeway SR 202L connection between the I-10 Maricopa and I-10 Papago freeways. Recommendations included reconfiguring the I-10 Papago Freeway system TI; revising roadway design criteria to match site constraints; and minimizing the project footprint (right-of-way).

- **MAG I-10 Southeast Corridor Major Investment Study**
  Role: Roadway Engineer
  As a subconsultant, B&N conducted a study to identify multi-modal transportation enhancements in the heavily traveled Southeast Corridor, bounded by I-10, SR 202L, SR 101L, the Gila River Indian Community, I-17, and 23rd Avenue, with projected traffic volumes nearing 400,000 vehicles daily. B&N developed alternatives, including a braided ramp solution for the Broadway Curve (SR 143 to US-60) and a new direct high-occupancy vehicle (DHOV) interchanges providing access to these lanes.

PERSONNEL INFORMATION

Years with the Firm: 28

Total Years Experience: 28

Existing/Corporate Responsibility: Senior Traffic Engineer

Existing/Corporate Title: Senior Traffic Project Manager

Education:
BS, Civil Engineering - Ohio State University

Licenses: AZ PE #49490
PTOE# 1399

WHY RANDY?

- Oversaw the I-10 MAG Study innovative traffic modeling and analysis
- Experienced in multiple regions as lead traffic engineer for major inner loop freeway reconstructions
- Randy has authored over 24 change of access reports and knows the federal requirements
- Contributed to ADOT ITS FMS standards

Randy Kill, PE, PTOE

Traffic Lead

Availability: 70% | **Commitment:** 65%

BURGESS & NIPLE

Background

Randy is one of B&N's most accomplished traffic engineers with nearly three decades of urban freeway reconstruction experience. His background includes complex traffic studies and traffic and ITS design. Randy oversaw the development of the complex traffic analysis of the I-10, Deck Park Tunnel to I-10/I-17 Split MAG Study. Given the complexity and importance of the project, MAG placed more rigorous standards on the evaluation. Randy and the team developed and implemented a first-of-its kind process for the complex simulation models and analysis in Arizona. He has authored over 24 change of access reports for federal system projects. Randy is familiar with ADOT's process and expectation. He has completed designs for adaptive ramp system on SR 101L and the SR 303L and was a contributor to ADOT ITS FMS standards.

Relevant Experience

- **MAG I-10 Freeway Corridor Study from the Deck Park Tunnel to the I-10/I-17 Split,**
  Role: Senior Traffic Lead
  B&N completed the study of I-10 to address safety, capacity and access needs. This project is the foundation of the I-10 DCR and ED project. In partnership with ADOT, MAG, FHWA, FAA, and Phoenix including Aviation/Sky Harbor International Airport, B&N developed and evaluated alternatives, conducted complex microsimulation traffic analyses, and prepared preliminary environmental documentation. B&N leveraged complex urban environment expertise to build stakeholder MOMENTUM. Randy provided technical guidance for the development of the modeling process and procedures used to develop traffic forecasting and capacity analysis for the study. He performed quality review for the analysis results throughout the study.

- **Ohio DOT Cleveland Innerbelt Modernization Plan (I-71, I-77, I-90, SR 2 and SR 179) DCR and ED**
  Role: Traffic Lead
  B&N completed the Ohio equivalent of an ADOT DCR and ED for the $2.2 billion reconstruction of the Cleveland Innerbelt Freeway. The project, similar in scale, complexity and urban environment to this I-10 project, traversed the city's urban core and included 9 miles of urban freeways, 4 system TIs, and 12 service TIs. Randy assessed more than 70 different TI configurations and completed the Interchange Modification Study for the recommended alternative. B&N was selected for subsequent final design services.

- **Ohio DOT Columbus Crossroads (I-70, I-71 and SR 315) DCR & ED**
  Role: Traffic Lead
  B&N completed the Ohio DOT equivalent of an ADOT DCR and ED update for the $2.4 billion reconstruction of nearly half of the Columbus inner loop freeway around the city's urban core. The project, similar in scale, complexity and urban environment to this I-10 project, included the reconstruction of over 5 miles of urban freeways, 3 system TIs, and 8 services TIs along with arterial street grid access changes. B&N partnered with ODOT, FHWA, city and stakeholders to identify PBPD savings of nearly $400 million. B&N was selected for subsequent final design services.

- **ADOT Management Consultant for RTPFP**
  Role: Traffic Engineer
  B&N and Jacobs (prime) partnered with ADOT, MAG, federal and local agencies to manage the program and conduct studies. Efforts include: SR 303L, Lake Pleasant Parkway to I-17, DCR update; SR 101L TIs at 67th Avenue and 59th Avenue PA; SR 24 extension at Ironwood TI PA; Cost Risk Assessments; and cost estimating for all freeway projects. Keys to success include interagency coordination, stakeholder partnering, and complex urban freeway concept development and analysis.

- **MAG SR 101L/75th Avenue TI Study**
  Role: Traffic Engineer
  B&N completed traffic operations and safety study that developed and assessed alternatives to improve the TI's functionality, incorporating design solutions to enhance the SR 101L freeway. The study involved detailed operational simulations and microsimulation models to assess how these solutions would integrate with the proposed improvements. The project was conducted in collaboration with MAG, ADOT, and local city governments, ensuring that the planned improvements aligned with regional transportation needs.

- **ADOT SR 303L Freeway Management System and Wrong Way Vehicle Detection Warning System**
  Role: Traffic Lead
  B&N completed the scoping study and final design for this freeway management system ITS project along SR 303L, from I-10 to Northern Avenue. The improvements included the installation of dynamic message signs, CCTV, ramp meters, and mainline detection loops to reduce traffic congestion and improve motorist safety.

PERSONNEL INFORMATION

Years with the Firm: 27

Total Years Experience: 31

Existing/Corporate Responsibility:
Arizona Structures Design Leader

Existing/Corporate Title: Senior Structural Engineer

Education:
MS, Civil Engineering - Iowa State University

Licenses: AZ PE #32342

WHY RUSS?

- Structures Lead for 30+ ADOT projects
- Skilled with designing complex flyover bridges
- Experienced with designing bridges over the Union Pacific Railroad
- Experienced with phased bridge construction and using precast elements to keep traffic moving

Russ Stuart, PE

Structures Lead

Availability: 65% | **Commitment:** 60%

AECOM

Background

Russ has 30 years of experience as a structures engineer, task manager, team manager, and project manager for structures-related projects. He specializes in the design of urban and rural highway bridges, pedestrian bridges, various types of retaining and noise barrier walls, various types of non-standard drainage structures, and other miscellaneous structures associated with transportation improvements. His expertise encompasses the full spectrum of project design, including concept, preliminary, final, and post-design services. He has served as lead bridge engineer on numerous ADOT predesign and final design projects.

Relevant Experience

- **ADOT I-10/SR 101L System TI Improvements DCR, ED and Final Design**
  Role: Structures Lead
  On a team with B&N and Jacobs (prime), AECOM performed structural engineering, traffic engineering, roadway, drainage, and maintenance of traffic (MOT) engineering services. This DCR evaluated possible alternatives to enhance regional travel and mitigate existing weaving and safety issues to improve connectivity at the I-10/SR 101L system interchange. Russ performed alternatives design and evaluation for the proposed DHOV bridge structures and the McDowell Road Ramp C over Thomas Road bridge structure. The team was selected for subsequent final design services.

- **ADOT Grand Avenue (US 60)/35th Avenue/Indian School Road DCR and EA**
  Role: Structures Lead
  AECOM prepared a DCR (with 15% roll plot) and an EA and related studies to define a preferred improvement alternative at the 35th Avenue/ Indian School Road intersection at US 60. The study evaluated numerous alternatives to improve intersection operations and safety and reduce vehicle/train conflicts, including grade-separating 35th Avenue from the BNSF Railway. The project included significant stakeholder coordination regarding multimodal improvements. During conceptual design, Russ advised the design team of feasible bridge types to span the Grand Avenue/UPRR corridor and suitable retaining wall types around the project site.

- **ADOT I-10/Ina Road to Ruthrauff Road DCR**
  Role: Structures Lead
  This segment of I-10 was programmed for improvements to increase roadway capacity by adding additional lanes. Operational efficiencies with the nearby UPRR facilities were also improved at Ina Road and Ruthrauff Road by lifting the crossroad over the railroad ROW. Russ was responsible for evaluating three structures on Ina Road needed to accommodate the proposed improvements and contributing to the structure selection report.

- **ADOT I-10/Fairway Drive TI**
  Role: Structures Lead
  This project included a new two-span bridge over I-10, more than 41,000 square feet of retaining walls, new auxiliary lanes on I-10, 900 linear feet of arterial roadway and associated drainage, signal, FMS, and lighting improvements. The new TI improved commercial truck access to I-10 for warehouses south of I-10. Russ guided the Structures Team through preliminary design, final design, and post-design of a new two-span bridge over I-10 and six new retaining walls that support the freeway entrance/exit ramps.

- **ADOT I-10 (Papago Freeway) Median Widening, Sarival Avenue to SR 101L**
  Role: Structures Lead
  The Structures Team was responsible for widening six existing post-tensioned box girder bridges toward the median. Russ oversaw the design calculations and the production of structural drawings and coordinated with other project disciplines. ADOT also awarded a change order to widen I-10 toward the outside from Sarival Road to Dysart Road. The team designed widenings for five bridges as part of this change order.

- **ADOT SR 101L Widening, Shea Boulevard to SR 202L**
  Role: Structures Lead
  General-purpose lanes were added to the outside of a 10.8-mile segment of SR 101L. The widening included 11 bridge sites and numerous retaining walls. Design of the bridge widenings was performed by ADOT, AECOM, and two subconsultants. Russ coordinated the efforts of the various bridge designers and provided QA/QC oversight for the two bridge designs prepared by AECOM, including a cast-high-and-lower construction technique used at the 90th Street Bridge. He also provided post-design services during construction.

PERSONNEL INFORMATION

Years with the Firm: 6

Total Years Experience: 23

Existing/Corporate Responsibility: Senior Drainage Engineer

Existing/Corporate Title: Senior Drainage Engineer

Education:

BS, Civil Engineering - Northern Arizona University

Licenses: AZ PE #48264

WHY BILLIE?

- Has provided drainage analysis and design on over a dozen major ADOT projects
- Experienced in drainage analysis and design for highways, river channelization, regional flood control, and bridge crossings
- Well-rounded hydrology and hydraulics background in all types of drainage and flood control facilities

Billie Denetdale, PE

Drainage Lead

Availability: 70% | **Commitment:** 55%

AECOM

Background

Billie is a highway drainage engineer in the Phoenix office. She is experienced in drainage projects for storm drains, water, sewer, roadways, detention basins, culvert and channel design, and cost estimating. Her experience also includes drainage design, hydrology & hydraulics, freeway storm drain systems and analysis of bridge crossings of major waterways, and detailed water main design.

Relevant Experience

- **ADOT I-10/SR 101L System TI Improvements DCR, ED and Final Design**
  Role: Drainage Engineer
  This DCR addressed traffic congestion at the SR 101L and I-10 system TI. Billie was responsible for the drainage systems on I-10, associated ramps, and the DHOV, including quantities, estimates, and drainage report. She served as drainage lead for the final design project, responsible for the drainage systems on SR 101L, associated ramps, and the DHOV, including drainage plans and profile.

- **ADOT Grand Avenue (US 60)/35th Avenue/Indian School Road DCR and EA**
  Role: Drainage Engineer
  AECOM prepared a DCR (with 15% roll plot) and an EA and related studies to define a preferred improvement alternative at the 35th Avenue/ Indian School Road intersection at US 60. The study evaluated numerous alternatives to improve intersection operations and safety and reduce vehicle/train conflicts, including grade-separating 35th Avenue from the BNSF Railway. The project included significant stakeholder coordination regarding multimodal improvements. Billie performed drainage design and associated report..

- **ADOT SR 79 Gila River Bridge Replacement**
  Role: Drainage Lead
  This CMAR project assessed the condition of the superstructure and recommended replacing the existing 1,507-foot-long, 30-span bridge built in 1957. ABC methods were evaluated. The recommended alternative is a multi-span bridge replacement with wider shoulders and a sidewalk using the bridge slide method of construction. The project includes modifying a canal owned by the San Carlos Irrigation and Drainage District and relocating utilities. Billie was responsible for the drainage design, profiles, drainage reports, and quantity and cost estimations.

- **ADOT US 93, Cane Springs Roadway Final Design**
  Role: Drainage Engineer
  This project will reconstruct 3.4 miles of rural two-lane highway to a new divided four-lane highway with a variable median. It includes designing two new SB lanes and reconstructing the existing US 93 to two lanes for NB traffic. This project continues the improvements between Wikieup and I-40 that began in 2005. It will improve capacity, safety, and operational characteristics of the existing highway while minimizing environmental effects during and after construction. Billie was responsible for drainage plans, profiles, and drainage reports between the 30% design and final submittal.

- **ADOT US 191 Cochise Railroad Overpass Bridge Replacement**
  Role: Drainage Engineer
  This project replaces the existing three-span steel girder bridge crossing UPRR with a new precast girder bridge. The structure is built on a new roadway alignment to eliminate impacts to traffic. The project also includes a new bridge over the Walnut Wash. The existing soils in the area have excessive settlement and are highly corrosive. Protective measures are required to minimize settlement, especially around the existing railroad tracks. The project includes ROW, utility, and environmental clearances. Section 404 permitting is required to allow construction access in the creek. Billie was responsible for the drainage design at the bridge crossing.

- **MCDOT Lower Buckeye Road, 67th Avenue to 71st Avenue**
  Role: Drainage Engineer
  This project widened Lower Buckeye Road from 67th Avenue to 71st Avenue. The project was extended to include the intersection at 72nd Avenue. The road widening added vertical curb for the length of the project. Billie performed onsite drainage design, which included catch basins, new storm drain trunk line and laterals. The new storm drain will connect to the existing 96-inch storm drain under 67th Avenue. The drainage design required coordination of irrigation drainage structures and delivery/tailwater ditches for ongoing farming operations.

- **ADOT 75th Avenue at Cactus Road and 75th Avenue at Peoria Avenue Intersections**
  Role: Drainage Engineer
  This project improved safety at the intersections, including the addition and relocation of drainage facilities. Billie was responsible for the water line and drainage plans.

PERSONNEL INFORMATION

Years with the Firm: 27

Total Years Experience: 27

Existing/Corporate Responsibility:

Senior Roadway Engineer

Existing/Corporate Title:

Transportation Group Director

Education:

BS, Civil Engineering - Ohio State University

Licenses: AZ PE #53419

WHY BRIAN?

- With expertise in sequencing $10 billion in urban freeway projects, Brian optimizes constructability and traffic flow for complex corridors
- Corridor experience from his work on the I-10 MAG Study
- Delivers cost-effective, high-value PBPD solutions, optimizing infrastructure investments

Brian Toombs, PE

Implementation Expert

Availability: 50% | **Commitment:** 25%

BURGESS & NIPLE

Background

Brian has nearly three decades of experience leading approximately $10 billion worth of infrastructure investments for complex interchange, freeway and corridor improvement projects in urban environments. Brian is often engaged in MAG studies and was involved in the I-10 MAG Study for alternatives development and preliminary implementation strategies. He is familiar with the corridor and stakeholder interests. Brian is a national leader in providing practical, cost-effective solutions for interchange and highway geometric design projects. As a champion of Practical Design, he understands that transportation funding investments needs to be stretched to maximize their value. Brian develops implementation strategies for B&N's major urban freeway projects that consider cash flow, constructability, maintenance of traffic, and independent utility.

Relevant Experience

- **MAG I-10 Freeway Corridor Study from the Deck Park Tunnel to the I-10/I-17 Split**
  Role: Technical Expert
  B&N completed the study of I-10 to address safety, capacity and access needs. This project is the foundation of the I-10 DCR and ED project. In partnership with ADOT, MAG, FHWA, FAA, and Phoenix including Aviation/Sky Harbor International Airport, B&N developed and evaluated alternatives, conducted complex microsimulation traffic analyses, and prepared preliminary environmental documentation. Brian assisted with alternatives development, analysis, and implementation planning.

- **Ohio DOT Columbus Crossroads (I-70, I-71 and SR 315) DCR and ED**
  Role: Project Manager
  B&N completed the Ohio DOT equivalent of an ADOT DCR and ED update for the $2.4 billion reconstruction of nearly half of the Columbus inner loop freeway around the city's urban core. The project, similar in scale, complexity and urban environment to this I-10 project, included the reconstruction of over 5 miles of urban freeways, 3 system TIs, and 8 services TIs along with arterial street grid access changes. B&N partnered with ODOT, FHWA, city and stakeholders to identify PBPD savings of nearly $400 million. Brian developed a phased solution that solved key system problems early that delayed the need to reconstruct the full system TI for years. This project included an extensive workshop process that allowed for the key decision-makers to be strategically engaged during the selection of the alternative, contributing to the selection of the new recommended alternative. B&N was selected for subsequent final design services.

- **Ohio DOT Cleveland Innerbelt Modernization Plan (I-71, I-77, I-90, SR 2 and SR 179) DCR and ED**
  Role: Project Manager
  B&N completed the Ohio equivalent of an ADOT DCR and ED for the $2.2 billion reconstruction of the Cleveland Innerbelt Freeway. The project, similar in scale, complexity and urban environment to this I-10 project, traversed the city's urban core and included 9 miles of urban freeways, 4 system TIs, and 12 service TIs. Brian developed the implementation plan segmenting and sequencing the project into seven construction groups to facilitate maintaining traffic through the constrained corridor. B&N was selected for subsequent final design services.

- **MAG SR 202L South Mountain Freeway Design Review**
  Role: Senior Engineer
  B&N completed a cost risk assessment and value engineering study of the 22-mile South Mountain Freeway SR 202L connection between the I-10 Maricopa and I-10 Papago freeways. Brian developed recommendations for reconfiguring the I-10 Papago Freeway system TI; revised roadway design criteria to match site constraints; and minimized the project footprint (right-of-way).

- **ADOT Performance Based Practical Design Guidelines and Implementation**
  Role: Technical Expert
  B&N partnered with ADOT to develop and implement a unified approach to PBPD and Value Engineering (VE) principles. Brian's contributions included developing case studies and providing language for the guidance document. The case studies he developed were based on specific projects he had either managed or been part of the design team, offering insights into why these projects were good examples for the PBPD guidelines. His role was to support the team by providing practical examples and detailed explanations to promote the PBPD strategies effectively.

- **MAG US 60/Grand Avenue and Bell Road Intersection Improvement**
  Role: Senior Roadway Engineer
  Brian served as Senior Transportation Engineer for this study, which evaluated 19 options before selecting a grade-separated Median Urban Diamond (MUD), the first of its kind in Arizona. The study was completed in eight months, with construction completed 24 months later.

PERSONNEL INFORMATION

Years with the Firm: 10

Total Years Experience: 25

Existing/Corporate Responsibility: Environmental Lead

Existing/Corporate Title: Project Manager

Education:
MEP, Natural Resource Management - Arizona State University

WHY NANCY?

- Over two decades of experience working on projects with ADOT EP
- Recently completed the I-10/SR 101L System TI environmental document collaborating within the same Jacobs, B&N and AECOM team
- Nancy effectively manages complex urban projects to meet ADOT goals of schedule, budget, and successful environmental clearance

Nancy Shelton

Environmental Lead

Availability: 60% | **Commitment:** 55%

Jacobs

Background

Nancy is an environmental planner with more than 25 years of National Environmental Policy Act (NEPA) compliance and natural resource management and planning documentation experience. Her understanding of the protocols, procedures, and guidelines allows her to assist ADOT EP and local governments in obtaining timely project clearances. She has a proven record of completing expedited environmental processes including her work on the SR 303L tied to the semiconductor facility and the I-15 project with an EA completed within 6 months. Her reputation as a problem solver and her attention to detail proves her value as a key team member for quality control and assurance on any project. Her insights on projects and inter-disciplinary team design helped form the foundation for proactive scheduling approaches and effective budget and resource management. She is known for her ability to visualize overall project needs and to delegate and manage tasks.

Relevant Experience

- **ADOT I-10/SR 101L System TI Improvements DCR, ED and Final Design**
  Role: Environmental Lead
  Jacobs, with B&N and AECOM, prepared a DCR and environmental clearance for system improvements. Nancy provided environmental oversight and guidance during. Nancy conducted quality reviews of technical documents and coordination throughout the project.

- **ADOT SR 303L GPLs from Happy Valley Parkway to Lake Pleasant Parkway**
  Role: Environmental Lead
  Nancy served as the Environmental Lead for this widening project to add GPLs in both directions on SR 303L. The project also included a spot improvement at approximately MP 122.25 for a traffic control sign and pavement repairs to the inside lane in each direction between MP 135 and MP 137. Environmental investigations included a biological evaluation (short form), Section 106 consultation, preliminary initial site assessment, agency scoping letters, and noise analysis technical memorandum. Nancy led the environmental team, coordinated with design and client, and performed quality reviews of deliverables.

- **ADOT/City of Phoenix SR 303L TIs at 51st and 43rd Avenues PA and Final Design**
  Role: Environmental Lead
  Jacobs conducted activities in support of environmental clearance for this project to add two new TIs to accommodate growing demand and a large semiconductor development north of SR 303L. The project includes reconfiguring drainage, constructing a frontage road in addition to the two TIs. Nancy managed the biological, cultural, Section 404, air quality, noise, and hazardous materials technical teams; conducted NEPA scoping; coordinated closely with ADOT and the design team; and provided environmental support to ADOT to obtain an expedited environmental clearance. Through final design, Nancy continued to coordinate with the design team and ADOT EP for additional studies necessitated by modifications to the design and to mobilize technical crews and prepare documentation to keep construction on schedule.

- **ADOT Management Consultant for RTPFP**
  Role: Environmental Lead
  Nancy serves as the MC team's environmental lead in the delivery of tasks to enhance the MAG urban freeway system. Nancy has overseen several task orders including SR 303L widening from Lake Pleasant Parkway to I-17, SR 101L 16th Street Screen Wall, and SR 101L at SR 51 E-S Ramp Final Design. Nancy coordinates with the design team, manages the environmental technical specialists, and provides quality reviews of documentation.

- **ADOT I-10 and SR 210 DCR and EA**
  Role: Section 4(f) Lead
  Nancy prepared the Section 4(f) and Section 6(f) evaluation for this complex project. She identified potential resources afforded protection, determined if a use would occur, coordinated with ADOT and the Officials with Jurisdiction to determine the impact of the loss. Nancy also prepared the Section 4(f) EA section. This project includes widening I-10, extending SR 210 with a system interchange connection to I-10, and evaluating 15 service interchanges. Two build-alternatives were refined for evaluation in the DCR and fully evaluated for technical and environmental concerns. Public involvement meetings and stakeholder progress meetings were critical to the evaluation and refinement process.

- **ADOT I-15 Virgin River Bridge 1 EA and Final Design**
  Role: Environmental Lead
  Nancy served as primary author of the EA that was completed within 6 months. It assessed the effects of the bridge widening and associated river access and staging areas. She presented the public hearing presentation; coordinated with federal, state, local agencies, and various Indian tribes; performed plan reviews; coordinated the technical resource evaluations and provided quality assurance reviews.

PERSONNEL INFORMATION

Years with the Firm: 25

Total Years Experience: 25

Existing/Corporate Responsibility:

Public Involvement Lead

Existing/Corporate Title:

Communications Lead

Education:

BS, Marketing - Iowa State University

WHY DEBI?

- Recent ADOT in-person/ virtual meeting experience for I-10 with the same stakeholders
- Debi prioritizes early public input and translates technical content for public understanding
- Skilled in communications for large, complex projects

Debi Bohnet

Public Involvement Lead

Availability: 60% | **Commitment:** 40%

Jacobs

Background

Debi brings an in-depth understanding of the transportation industry and a proven track record of delivering public involvement services for ADOT. With 25 years of experience, her ability to effectively communicate with stakeholders and the public provides a solid foundation of trust for projects to build on as they move from planning to construction. Debi works seamlessly between public agencies, stakeholders, the public, and project teams to facilitate communication and transparency. Her knowledge of ADOT's public involvement processes and procedures, and experience with large projects, will streamline planning efforts for the public meetings/hearing needed for this project.

Relevant Experience

- **ADOT I-10/SR 101L System TI Improvements DCR, ED and Final Design**
  Role: Public Involvement Lead
  Debi worked closely with ADOT staff to update the Public Involvement Plan and plan/execute three public meetings (combination of virtual and in person) for the proposed DHOV ramps in the I-10/SR 101L System TI and the 91st Avenue Connector, as part of the DCR and ED. For the first meeting, Debi provided oversight of another consultant. For the second meeting, Debi continued to provide oversight of another consultant but also led several tasks including developing the presentation in English and Spanish and developing the exhibit boards for the in-person meeting. For the third meeting, Debi and her team led the entire effort, from selecting a meeting date to writing the meeting summary. This meeting was hosted on Zoom and included live translation in Spanish.

- **ADOT SR 303L DCR and EA from Lake Pleasant Parkway to I-17**
  Role: Public Involvement Lead
  Debi worked closely with ADOT staff to plan/execute a virtual public meeting to provide information about the purpose and need and anticipated timeline, and to seek public comments on the proposed near-term and long-term improvement plans for SR 303L, as part of the DCR and EA. The project's goal was to improve SR 303L to four GPLs and one HOV lane in each direction, while developing and evaluating service TI alternatives in the area, including the fast-tracked 51st and 43rd Avenue TIs to meet TSMC requirements. Tasks included developing/following a workback schedule, developing the presentation and script, translating all materials to Spanish, and hosting the virtual meeting on Zoom.

- **ADOT SR 303L TIs**
  Role: Public Involvement Lead
  Debi worked closely with ADOT staff to develop slides and a script to be presented during MAG's US 60 (Grand Avenue) - SR303L to SR74 Corridor Study public meeting.

- **Nevada DOT (NDOT) Downtown Access Project**
  Role: Community Liaison
  Debi led stakeholder outreach and public involvement efforts as part of the environmental and alternatives development process for improvements to I-11 between Rancho Drive and Mojave Road, through downtown Las Vegas. Outreach efforts included group and individual stakeholder meetings, direct communications with elected officials, grassroots outreach to communicate with adjacent residents and businesses, two public information meetings (virtual and in-person), social media channels, as well as a project office, project website, hotline, and email.

- **NDOT Project Neon Design-Build Advisory Services**
  Role: Information Plan Manager and Community Liaison
  Debi represented NDOT as the public information plan manager for this $600M design-build project, serving as the design-builder's single point of contact for all public information activities. Responsibilities included providing proactive communication with affected stakeholders and elected officials, including understanding their individual concerns and tailoring outreach efforts based on their areas of interest. Managed stakeholder meetings to provide project updates/information and provided oversight of public meeting strategy and preparation.

- **NDOT Henderson Interchange Design-Build Procurement**
  Role: Public Involvement Lead
  Debi led public outreach efforts during the design-build procurement phase for this $350-$400 million project, including planning and executing an industry day meeting for potential design-builders, writing public involvement technical provisions for the design-build contract, coordinating a DBE Workshop between shortlisted design-builders and DBEs, and developing a new project website.

PERSONNEL INFORMATION

Years with the Firm: 17

Total Years Experience: 22

Existing/Corporate Responsibility:
Senior Safety Engineer

Existing/Corporate Title:
Transportation Planning and Safety Section Director

Education:
BS, Civil Engineering - Arizona State University

Licenses: AZ PE #47853 | RSP #48

WHY DANA?

- ✓ **Dana's safety analysis for the I-10 MAG Study provides targeted safety solutions for the DCR and ED**
- ✓ **Deeply familiar with ADOT's safety group and key individuals needed to efficiently address corridor safety**
- ✓ **Dana's firsthand PBPD experience will facilitate and optimize safety-focused designs for the complex I-10 urban corridor**

Dana Biscan, PE, RSP$_{2B}$

Safety Lead

Availability: 45% | **Commitment:** 40%

BURGESS & NIPLE

Background

Dana is highly experienced in transportation studies, scoping and safety. She specializes in safety studies and analyses for both ADOT and MAG projects and serves as one of the firm's national safety experts with her involvement in the Transportation Research Board (TRB). Her comprehensive background combines technical transportation engineering with extensive public and stakeholder engagement, enabling her to effectively communicate complex concepts and analyses in a manner that is both informative and engaging. Dana leads all of B&N's safety analysis work in Arizona, including urban freeway project DCRs and preliminary feasibility studies. **She performed the safety analysis for the I-10 MAG Study and is intimately familiar with all of the safety needs to be addressed in this I-10 DCR and ED.** Dana also served as project manager for the development of the ADOT PBPD Guidelines, providing insight to its best application in this complex I-10 corridor.

Relevant Experience

- **MAG I-10 Freeway Corridor Study from the Deck Park Tunnel to the I-10/I-17 Split**
  Role: Safety Lead
  B&N completed the study of I-10 to address safety, capacity and access needs. This project is the foundation of the I-10 DCR and ED project. In partnership with ADOT, MAG, FHWA, FAA, and Phoenix including Aviation/Sky Harbor International Airport, B&N developed and evaluated alternatives, conducted complex microsimulation traffic analyses, and prepared preliminary environmental documentation. B&N leveraged complex urban environment expertise to build stakeholder MOMENTUM. Dana performed all safety analyses for the corridor.

- **ADOT Performance Based Practical Design Guidelines**
  Role: Project Manager
  B&N partnered with ADOT to develop and implement a unified approach to PBPD and Value Engineering (VE) principles. The PBPD Guidelines and the Design Decisions Documentation now serve as process project managers, design reviewers, and consultants to apply an approach that relies on quantitative analyses to guide decision-making throughout the project development process resulting in better system performance. Dana led the overall effort, partnering with all ADOT technical groups and B&N team members to develop and implement this new approach.

- **ADOT SR 202L: Gilbert Road to I-10 General Purpose Lane (GPL) Scoping**
  Role: Senior Safety Engineer/Planner
  B&N, as a subconsultant, completed the traffic analysis and assisted with the development and evaluation of corridor and TI alternatives for the DCR and ED 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. The team was selected for final design and B&N led the design of the McQueen Road and Cooper Road TIs as well as all crossroad improvements. Dana served as safety engineer for the DCR.

- **MAG I-10/SR 101L System TI Improvements Conceptual Alternatives Study**
  Role: Safety Engineer
  B&N completed a study in partnership with ADOT, MAG, FHWA, Phoenix and Tolleson to evaluate traffic operations and recommend improvements to the I-10/SR 101L system TI and vicinity. Alternatives were developed and assessed. Recommendations included a new DHOV ramp and improvements to nearby TIs on I-10 at Avondale Boulevard, 107th Avenue, 99th Avenue, 91st Avenue, and 83rd Avenue, as well as the TIs on SR 101L at McDowell Road, Thomas Road, and Indian School Road, and area arterial streets.

- **ADOT State Highway-Rail Grade Crossing Action Plan (SHRAP)**
  Role: Safety Engineer
  B&N was a subconsultant for a statewide initiative aimed at enhancing safety at nearly 700 active rail-grade crossings. Dana has been instrumental in identifying and prioritizing key areas for improvements, developing strategies to reduce crashes, and improving safety at each crossing. Her work involves creating prioritization criteria, which include refined ranking, treatment effectiveness, planning-level costs, and stakeholder support, all of which are presented to stakeholders for feedback and input on recommended treatments.

- **MAG Regional Priority Safety Improvement Toolkit (RP-SIT)**
  Role: Safety Engineer
  B&N is leading the development of a safety toolkit to promote and implement the use of high value countermeasures for the region. The result provides MAG member agencies with tools to integrate safety elements into transportation planning and studies, adopt the Safe System approach across all transportation-related projects, and cultivate a regional culture of safety.

PERSONNEL INFORMATION

Years with the Firm: 8

Total Years Experience: 10

Existing/Corporate Responsibility:
Transportation Engineer

Existing/Corporate Title:
Transportation Engineer

Education:
BS, Civil Engineering - Arizona State University

Licenses: AZ PE #73019

WHY WES?

- Wes's precise cost estimating for the I-10 MAG Study provides reliable budgets for the DCR
- Knows ADOT processes and standards and is central to the MC contract cost estimating
- Has I-10 corridor and major ADOT urban freeway project experience
- Skilled in the application of PBPD principles

Wes Scatena, PE

Cost Estimating

Availability: 65% | **Commitment:** 60%

BURGESS & NIPLE

Background

Wes's career has focused on ADOT projects. **For the ADOT MC for the RTPFP, he identifies risks and serves as construction cost estimator overseeing approximately half of the administered projects.** Wes also serves as a project manager for ADOT projects for B&N-led contracts and on behalf of ADOT as a project manager for ADOT on the current Temporary Part-Time Project Delivery Manager contract. Prior to joining B&N, Wes gained roadway and traffic design experience beginning his career as an EIT at ADOT. Wes's significant freeway project experience includes work on I-10, SR 101L, SR 202L, SR 303L, US 60 and I-40. The scopes of his projects have included: TI improvements, intersection improvements, freeway widening, arterial widening, pavement rehabilitation, signalization, ITS, FMS, and pump station rehabilitation. **Wes is skilled in developing highly-reliable cost estimates, identifying and monitoring project risks, and is very familiar with ADOT's freeway system, processes and expectations.**

Relevant Experience

- **ADOT Management Consultant for RTPFP**
  Role: Senior Engineer and Cost Estimator
  B&N and Jacobs (prime) partnered with ADOT, MAG, federal and local agencies to manage the program and conduct studies. Wes lead's B&N efforts to prepare project cards and parametric cost estimates. He maintains the cost model that is applied to evaluate ADOT projects ranging from 0% to Stage V (100%) in the project development process.

- **ADOT I-10/SR 101L System TI Improvements DCR, ED, and FD**
  Role: Senior Engineer and Cost Estimator
  B&N, Jacobs (prime) and AECOM completed the DCR, ED and Final Design to improve the I-10 urban system TI in Phoenix and Tolleson. Leveraging stakeholder MOMENTUM created by B&N's preliminary engineering work for a MAG study, the team quickly refined, assessed and developed improvements for safety and operations with a new I-10/SR 101L DHOV connection, additional mainline lanes, and enhancements to service TIs and the arterial street grid. Wes was instrumental with developing TI alternatives and preparing cost estimates.

- **MAG I-10 Freeway Corridor Study from the Deck Park Tunnel to the I-10/I-17 Split**
  Role: Roadway Engineer
  B&N completed the study of I-10 to address safety, capacity and access needs. This project is the foundation of the I-10 DCR and ED project. In partnership with ADOT, MAG, FHWA, FAA, and Phoenix including Sky Harbor International Airport, B&N developed and evaluated alternatives, conducted complex microsimulation traffic analyses, and prepared preliminary environmental documentation. B&N leveraged complex urban environment expertise to build stakeholder MOMENTUM. Wes was involved in all roadway engineering aspects of the project and prepared the cost estimates.

- **ADOT SR 202L, Gilbert to I-10 General Purpose Lane (GPL) DCR and ED**
  Role: Roadway Engineer
  B&N, as a subconsultant, assisted with the development and evaluation of corridor and TI alternatives for the DCR and ED of GPL additions for over 12 miles of urban freeway and nine TIs. The team was selected for final design and B&N led the design of the McQueen Road and Cooper Road TIs as well as all crossroad improvements. Wes was involved in all roadway engineering aspects of the project and prepared the cost estimates.

- **ADOT I-10 Pump Stations at 3rd Avenue, 3rd Street and 16th Street PA and Design**
  Role: Project Engineer
  B&N completed the scoping and final design for the rehabilitation and modernization of three pump stations on I-10 in downtown Phoenix. Mechanical, electrical and communication improvements were designed for each site. Wes coordinated work with ADOT and Phoenix, completed cost estimates and has overseen implementation.

- **ADOT Performance Based Practical Design Guidelines and Implementation**
  Role: Senior Engineer
  B&N partnered with ADOT to develop and implement a unified approach to PBPD and Value Engineering (VE) principles. The PBPD Guidelines and the Design Decisions Documentation now serve as process project managers, design reviewers, and consultants to apply an approach that relies on quantitative analyses to guide decision-making throughout the project development process resulting in better system performance. Wes's contributions included process updates and technical expertise.

- **ADOT I-40, McCarrell to Querino**
  Role: Project Manager
  B&N is completing the scoping and design project for pavement rehabilitation to 12 miles of I-40 from milepost 330.6 to milepost 342.2.

PERSONNEL INFORMATION

Years with the Firm: 1

Total Years Experience: 27

Existing/Corporate Responsibility: Arizona Deputy Director

Existing/Corporate Title: Senior Project Manager

Education:
BS, Civil Engineering - Arizona State University

Licenses: AZ PE #37302

WHY CHRIS?

- Chris is familiar with ADOT's process and expectations and serves in the same role for B&N's other ADOT projects
- Brings nearly 30 years of experience as an owner and consultant, providing unique perspective of project development, operations and maintenance to reviews
- Detail-oriented and implements B&N's quality assurance program to meet ADOT's expectations

Chris Lemka, PE

Quality Manager

Availability: 50% | **Commitment:** 20%

BURGESS & NIPLE

Background

Chris will oversee B&N's rigorous quality control program to provide error-free deliverables, on-time delivery, and cost efficiency for the I-10 Deck Park Tunnel to I-10/I-17 Split project. Utilizing our systematic QC process with tiered reviews and verification checkpoints, Chris integrates critical deadlines into project schedules, promoting adherence to ADOT standards. This approach delivers constructible plans, minimizing contractor change orders. With nearly 30 years of experience, Chris has performed these functions for DCRs and Plans, Specifications, and Estimates (PS&E) for urban freeway projects, including system interchanges, traffic signals, and arterial enhancements. His expertise in coordinating multidisciplinary engineering efforts strengthens our QA/QC reviews, ensuring seamless integration of design elements. For this contract, Chris will implement our tailored quality plan, monitor compliance with B&N's QA protocols, and verify that deliverables align with ADOT, FHWA, and FAA requirements.

Relevant Experience

- **ADOT I-10/SR 101L System TI Improvements Final Design**
  Role: Quality Assurance
  B&N, Jacobs (prime) and AECOM completed the DCR, ED and Final Design to improve the I-10 urban system TI in Phoenix and Tolleson. Leveraging stakeholder MOMENTUM created by B&N's preliminary engineering work for a MAG study, the team quickly refined, assessed and developed improvements for safety and operations with a new I-10/SR 101L DHOV connection, additional mainline lanes, and enhancements to service TIs and the arterial street grid.

- **ADOT SR 303L Lake Pleasant Parkway to 51st Avenue General Purpose Lane (GPL)**
  Role: Quality Assurance
  B&N was subconsultant for traffic design for the new SR 303L GPL addition to support the new TSMC facility in the City of Phoenix.

- **ADOT Management Consultant for RTPFP**
  Role: Quality Assurance
  B&N and Jacobs partnered with ADOT, MAG and local agencies to manage the program and conduct studies. This includes project assessments such as the SR 24 extension at Ironwood TI, cost estimating for all freeway projects and more. Keys to success include interagency coordination, stakeholder partnering, and complex urban freeway concept development and analysis.

- **ADOT El Mirage Road, 303L to Jomax DCR and EA**
  Role: Quality Assurance
  B&N is preparing a design concept report and an environmental assessment for El Mirage Road from SR 303L through Happy Valley Road to Jomax Road. The corridor traverses unincorporated Maricopa County and the City of Peoria. B&N is the prime consultant tasked with roadway design, traffic signal design, utility coordination, right-of-way coordination, and stakeholder coordination. The project features two bridge structures, the first being a structure over McMicken Wash and the second being a structure over the Beardsley Canal. The project also features extensive public involvement given the priority and high stakes nature of the project within the surrounding community. B&N is collaborating with ADOT, Peoria, MAG, Maricopa County, and Surprise.

- **ADOT I-40, McCarrell to Querino**
  Role: Quality Assurance
  B&N is completing the scoping and design project for pavement rehabilitation to 12 miles of I-40 from milepost 330.6 to milepost 342.2. Improvements include milling the pavement surface and replacing it with new asphaltic concrete, guardrail installation, drainage work, bridge rehabilitation, signing, pavement marking, and traffic control.

- **ADOT PDOC**
  Role: Quality Assurance
  B&N has had eight scoping and design projects under the most recent PDOC on-call. They include a variety of project types from safety studies, to scoping/design project for new roadways and pavement rehabilitation efforts.

- **MCDOT Northern Parkway Program**
  Role: Quality Assurance
  B&N completed scoping and environmental document for approximately 6 miles of federally funded major arterial improvements and the TIs at SR 101L and US 60/Grand Avenue. The regional project addressed complex engineering challenges, such as right-of-way coordination, drainage design, and utility relocation, while maintaining a strong focus on public engagement and stakeholder consensus.

SOQ PROPOSER'S SOLICITATION CONFIRMATION EMAIL (FROM BECO)

From: Cynthia Alvarez
To: Jake Kenney
Subject: Fw: Bidders List for Burgess & Niple
Date: Monday, May 26, 2025 10:12:11 AM

Get Outlook for iOS

From: ADOT Business Engagement and Compliance Office <AZUTRACS-Support@azdot.gov>
Sent: Monday, May 26, 2025 10:11:35 AM
To: Cynthia Alvarez <Cynthia.Alvarez@burgessniple.com>
Cc: contractorcompliance@azdot.gov <contractorcompliance@azdot.gov>
Subject: Bidders List for Burgess & Niple

You don't often get email from azutracs-support@azdot.gov. Learn why this is important

Burgess & Niple , AZUTRACS Number: 10098 has submitted a Bidder/Proposer list for **2025-014** on 05/26/2025 at 10:11 AM MST (UTC - 07:00).

Bidders/Proposers for this firm include:

Firm Name	Address	Ethnicity	Gender	Age of Firm	Annual Gross Receipts	DBE Status	NAICS Codes
AECOM Technical Services 01	7720 N. 16th Street, Suite 100 Phoenix, AZ 85020	Other	M	10+ years	More than $100 million	Non-DBE	541330
AeroTech Mapping Inc	3285 North Fort Apache LAS VEGAS, NV 89129	Hispanic American	F	4-7 years	$5 million to $10 million	Non-DBE	541370
AZTEC Engineering Group, Inc.	501 N. 44th Street Phoenix, AZ 85008	Other	M	10+ years	$10 million to $50 million	Non-DBE	541330
Corral Design Group, Inc.	4632 S. 36th St Phoenix, AZ 85040	Hispanic American	M	10+ years	$500,000 to $1 million	DBE	541320
Ethos Engineering, LLC	9180 South Kyrene Rd Tempe, AZ 85284	Hispanic American	M	10+ years	$1 million to $2 million	DBE	541330
HDR Engineering, Inc.	20 E Thomas Road, Ste 2500 Phoenix, AZ 85012	Other	M	10+ years	More than $100 million	Non-DBE	541330
Infrastructure Mavens, LLC	21001 N. Tatum Blvd., Suite 1630-603 Phoenix, AZ 85050	Caucasian	M	10+ years	Less than $500,000	Non-DBE	813920
Jacobs Engineering Group Inc.	1501 W. Fountainhead Parkway Tempe, AZ 85282	Caucasian	M	10+ years	More than $100 million	Non-DBE	541330
Kimley-Horn & Associates, Inc.	1661 East Camelback Road Phoenix, AZ 85016	Caucasian	M	10+ years	More than $100 million	Non-DBE	541330
Ninyo & Moore Geotechnical and Environmental Sciences Consultants	3202 East Harbour Drive Phoenix, AZ 85034	Hispanic American	M	10+ years	$50 million to $100 million	Non-DBE	541380
Point Engineers, LLC	7600 N. 16th Street, Suite 202 Phoenix, AZ 85020	Caucasian	M	10+ years	$1 million to $2 million	Non-DBE	541330
Stanley Consultants, Inc.	3133 East Camelback Road Suite 100 Phoenix, AZ 85016	Caucasian	F	10+ years	More than $100 million	Non-DBE	541330
T.Y. Lin International	1475 N. Scottsdale Road Scottsdale, AZ 85257	Other	M	10+ years	More than $100 million	Non-DBE	541330
T2 UES, Inc.	19621 N 23rd Dr Phoenix, AZ 85027	Other	M	4-7 years	More than $100 million	Non-DBE	541330
TRACE Consulting, LLC	1201 E. Jefferson Street,, Suite 3 Phoenix, AZ 85034	Asian-Pacific American	M	10+ years	$5 million to $10 million	DBE	541330
WSP USA Inc.	1230 W. Washington Street, Suite 405 Tempe, AZ 85281	Other	M	10+ years	$10 million to $50 million	Non-DBE	541330
Y2K Engineering, LLC.	1921 S Alma School Rd Ste 204 Mesa, AZ 85210	Asian-Pacific American	F	8-10 years	$2 million to $5 million	DBE	541330

AMENDMENTS - AMENDMENT NUMBER 01

ARIZONA DEPARTMENT OF TRANSPORTATION

205 S. 17th Ave., MD 616E,
Phoenix, AZ 85007

KATIE HOBBS
GOVERNOR

JENNIFER TOTH
DIRECTOR

Date: May 15, 2025

TO: ALL INTERESTED PARTIES

SUBJECT: AMENDMENT NUMBER 01

REFERENCE: REQUEST FOR QUALIFICATIONS
CONTRACT NUMBER: 2025-014
CONTRACT DESCRIPTION: INTERSTATE 10 STUDY, DECK PARK TUNNEL TO I-10/I-17 SPLIT

The following questions have been asked in reference to the above Request for Qualifications (RFQ) package:

Question No. 1: Section 160 indicates a length of service of 365 calendar days. Due to the size and complexity of this project, this length does not seem possible. Should the schedule provided in SOQs show a 365 day schedule, or should a more realistic schedule be provided?

Answer No. 1: The overall estimated schedule based on your firm's understanding of the activities should be provided. The duration shown in the schedule section is not intended to be the expected duration of the project.

Question No. 2: Can you please confirm if we need to include a resume for the Project Principal that will be mentioned in the Organization Chart?

Answer No. 2: The Project Principal is not considered Key Personnel and does not require a resume unless named for a specific expertise on the project.

Jennifer Workman

Jennifer Workman
Contract Manager
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.
CONSULTANT NAME

SIGNATURE 5/16/2025
Jason Pagnard | Vice President

* This amendment is not included in the total page count in the Statement of Qualification submittal.

azdot.gov

CONSULTANT INFORMATION PAGES

CONSULTANT INFORMATION PAGES (CIP)

CONTRACT NO.: 2025-014

CONTACT PERSON: Jason Pagnard

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

TITLE: Vice President

CONSULTANT FIRM: Burgess & Niple, Inc.

ADDRESS: 1230 West Washington Street, Suite 511

CITY, STATE, ZIP: Tempe, Arizona 85288

TELEPHONE: 480.580.4333

FAX NUMBER:

UNIQUE ENTITY ID# (FROM SAM WEBSITE): JGKUUVVJDKW3

ADOT CERTIFIED DBE FIRM? (YES/NO) No

SUBCONSULTANT(S):	TYPE OF WORK	ADOT CERTIFIED DBE FIRM (YES/NO)
AECOM Technical Services, Inc.	Bridge/Structural Engineering	No
Aerotech Mapping, Inc.	Survey, Mapping, Aerial	Yes
Corral Design Group, Inc.	Landscape Architecture	Yes
Ethos Engineering, LLC	Geotech, Material Testing, Subsurface	Yes
Infrastructure Mavens LLC	Misc/Other Skills	No
Jacobs Engineering Group Inc.	Environmental & Related Services	No
T2 UES, Inc. d/b/a T2 Utility Engineers	Utilities & Related Services	No

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

Revised 05/02/2024

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	AECOM Technical Services, Inc.
CONTACT PERSON:	Jennifer Bixby
E-MAIL ADDRESS:	jennifer.bixby@aecom.com
TITLE:	Vice President
ADDRESS:	7720 North 16th Street
	Suite 100
CITY, STATE ZIP:	Phoenix, Arizona 85020
TELEPHONE:	480.363.0447
FAX NUMBER:	602.371.1615
UNIQUE ENTITY ID #:	EPUXNLX5EYC4

SUBCONSULTANT FIRM NAME:	AeroTech Mapping, Inc.
CONTACT PERSON:	Alicia Mendoza
E-MAIL ADDRESS:	aliciamendoza@atmlv.com
TITLE:	Business Development Manager
ADDRESS:	8433 North Black Canyon Highway
	Suite 120
CITY, STATE ZIP:	Phoenix, Arizona 85021
TELEPHONE:	602.245.5088
FAX NUMBER:	
UNIQUE ENTITY ID #:	J34PH4CCSMJ4

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 CIP is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.

*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.

Revised 05/02/2024

CONSULTANT INFORMATION PAGES

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	Corral Design Group, Inc.
CONTACT PERSON:	Edward Corral
E-MAIL ADDRESS:	ecorral@corraldesigngroup.com
TITLE:	President
ADDRESS:	4632 South 36th Street
CITY, STATE ZIP:	Phoenix, Arizona 85040
TELEPHONE:	602.222.9822
FAX NUMBER:	
UNIQUE ENTITY ID #:	D2PBVZ6LJMJ9

SUBCONSULTANT FIRM NAME:	Ethos Engineering, LLC
CONTACT PERSON:	Pancho Garza
E-MAIL ADDRESS:	pgarza@ethosengineers.com
TITLE:	President/Senior Geotechnical Engineer
ADDRESS:	9180 South Kyrene Road
	Suite 104
CITY, STATE ZIP:	Tempe, Arizona 85284
TELEPHONE:	480.326.8487
FAX NUMBER:	
UNIQUE ENTITY ID #:	QQGVC86EHVA5

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 CIP is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.

*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.

Revised 05/02/2024

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	Infrastructure Mavens LLC
CONTACT PERSON:	Andrew Flecky
E-MAIL ADDRESS:	aflecky@infrastructuremavens.com
TITLE:	Manager/Independent Construction Expert
ADDRESS:	21001 North Tatum Boulevard
	Suite 1630-603
CITY, STATE ZIP:	Phoenix, Arizona 85050
TELEPHONE:	602.721.3853
FAX NUMBER:	
UNIQUE ENTITY ID #:	X3DADKL2A8G6

SUBCONSULTANT FIRM NAME:	Jacobs Engineering Group Inc.
CONTACT PERSON:	Troy Siegltiz
E-MAIL ADDRESS:	troy.sieglitz@jacobs.com
TITLE:	Authorized Signatory
ADDRESS:	1501 West Fountainhead Parkway
	Suite 401
CITY, STATE ZIP:	Tempe, Arizona 85282
TELEPHONE:	602.708.3450
FAX NUMBER:	
UNIQUE ENTITY ID #:	VBXLMKKVC5C5

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 CIP is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.

*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.

Revised 05/02/2024

CONSULTANT INFORMATION PAGES

SUBCONSULTANT(S) TABLE:

SUBCONSULTANT FIRM NAME:	T2 UES, Inc. d/b/a T2 Utility Engineers
CONTACT PERSON:	James Mueller
E-MAIL ADDRESS:	james.mueller@t2ue.com
TITLE:	Senior Project Manager
ADDRESS:	19621 North 23rd Drive
	Suite 150
CITY, STATE ZIP:	Phoenix, Arizona 85027
TELEPHONE:	602.977.8076
FAX NUMBER:	
UNIQUE ENTITY ID #:	VXR7DY7K6DJ7

SUBCONSULTANT FIRM NAME:	
CONTACT PERSON:	
E-MAIL ADDRESS:	
TITLE:	
ADDRESS:	
CITY, STATE ZIP:	
TELEPHONE:	
FAX NUMBER:	
UNIQUE ENTITY ID #:	

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 CIP is not evaluated by the Selection Panel but is used by Engineering Consultants Section for administrative purposes.

*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.

Revised 05/02/2024

DBE GOAL ASSURANCE/DECLARATION

This Contract is Race Neutral (No DBE Goal-DBE use encouraged).

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

5/9/2025
Date

Jason Pagnard
Printed Name

Vice President
Title

SOQ SUBMITTAL CHECKLIST

Place a check mark on the left side of the table indicating compliance with the following items. Only include the Supplemental Services Disclosure Form listed below if the form is requested in the Request for Qualifications:

☑	SOQ is within the page limit indicated in the RFQ
☑	SOQ is combined into one PDF Document no larger than 15 MB
☑	All Amendments are Included and Signed
☑	Introduction Letter (Including all required elements/statements)
☑	SOQ Proposal Formatted According to Requirements Listed in RFQ Section IV, #11.
☑	Correct SOQ Certification List (15 pt **OR** 9 pt) Signed and Dated by a Principal or Officer of the Firm
☑	Completed Consultant Information Pages (CIP)(Including listing DBE firms, if applicable)
☑	DBE Goal Assurance/Goal Declaration completed (located at the top of this page)
☑	All Subconsultants & Proposed Work Type listed on CIP (Including indicating DBE firms)
☑	Any Additional Required Documents (Specific to RFQ such as Resumes for all Key Personnel named)
☑	Commenting or User Rights Feature Enabled in SOQ PDF Document
☐	Supplemental Services Disclosure Form (Required for Supplemental Services Type Contracts ONLY)

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

Revised 05/02/2024