

**CCAA BOARD MEMO** 

Agenda Item: H-1

BOARD MEMO 2023-22

Meeting Date: August 16, 2023

Agenda Title: FOR DISCUSSION AND POSSIBLE ACTION: CCAA RFQ COMMITTEE TO PRESENT DATA COLLECTED AND RESULTANT RANKING REGARDING APPLICANTS FOR AIRPORT ARCHITECTURAL/ENGINEERING AND PLANNING SERVICES CONTRACT(S); CCAA TO DETERMINE RANKING OF CONSULTANTS AND AUTHORIZE AIRPORT MANAGER TO ENGAGE IN FEE NEGOTIATIONS WITH HIGHEST RANKED CONSULTANT(S).

**Staff Summary:** A committee of airport staff and a few (less than a quorum of) CCAA members scored the applicants using the Selection Criteria defined in FAA Advisory Circular 150/5100-14E Section 2.8. The committee will present the results of their scoring for the selection for Airport Architectural/Engineering and Planning services contracts based on the selection criteria, so that the CCAA can vote on the ranking and selection.

Agenda Action: Formal Action/Motion

Time Requested: 0 Minutes

# **Proposed Motion**

I move to accept the composite rankings as delivered and authorize Staff to proceed with the negotiation phase with \_\_\_\_\_\_ and \_\_\_\_\_.

# **CCAA'S Strategic Goal**

Maintain airport infrastructure in top condition and provide for the safety and security of airport users.

# **Previous Action and Executive Summary**

November 14, 2018 (Item G-6) – The Carson City Airport Authority approved the professional services agreements with Armstrong Engineering Consultants for architectural/engineering services and Coffman & Associates for planning; and for airport staff to complete the independent fee estimates and complete negotiations with Armstrong Engineering Consultants and Coffman & Associates.

November 19, 2018 – The services agreements with Coffman & Associates and with Armstrong Engineering were executed with a term ending November 19, 2023.

May 17, 2023 (Item H-2) – The CCAA approved the RFQ for planning services and architectural/engineering services.

July 13, 2023 – The Airport Manager received statements of qualifications from Coffman & Associates for planning services. For architectural/engineering services, we received statements of qualifications from Wood Rodgers and Armstrong Consultants.

A committee made up of three CCAA members, the Airport Manager, and the Supervisor of Airport Operations and Maintenance have reviewed and ranked the statements of qualifications from each of the respondents using the requirements listed in FAA Advisory Circular 150/5100 14E. Attached are the statements of qualifications and the score sheets from the committee. The Airport Authority is asked to determine the ranking and authorize the Staff to proceed with fee negotiations.

# **Financial Information**

Is there a fiscal impact?  $\Box$  No  $\boxtimes$  Yes

If yes, account name/number & amount: 3099 General Fund

General Fund/ Federal Share: The amount will be determined after negotiations.

Is it currently budgeted? Yes

# **Alternatives**

Do not set or accept the rankings provided and direct staff to take another action.

# **Board Action Taken:**



(Vote Recorded By)

A Statement of Interest and Qualifications to Provide Airport Planning Services for



# CARSON CITY AIRPORT





Submitted by:



In association with:









Mr. Corey Jenkins, ACE Airport Manager Carson City Airport 2600 E. College Parkway #6 Carson City, NV 89706

Dear Mr. Jenkins:

In response to your recent Request for Statement of Interest and Qualifications for Airport Planning Services for Carson City Airport, Coffman Associates, Inc. is pleased to submit our qualifications for your review and consideration.

Since our founding in 1979, Coffman Associates has been dedicated exclusively to aviation and airport planning and development. During the past 44 years, we have completed over 1,300 airport planning assignments, including nearly 600 airport master plans, 150 airport noise and land use compatibility studies, and 400+ airport environmental studies, with a significant amount of our firm's airport planning and environmental experience for reliever airports similar to Carson City Airport. In addition, Coffman Associates has completed assignments for more than 150 airports in the Federal Aviation Administration's (FAA) Western-Pacific Region and works regularly with FAA staff in the Phoenix Airports District Office.

Coffman Associates has provided airport planning services at Carson City Airport, including the most recent two airport master plans. Our long-standing working relationship with Carson City Airport Authority provides us with not only a detailed understanding and knowledge of the airport, but also a comprehensive understanding of the development issues facing the airport during the next several years. In addition, we have completed the required environmental documentation for numerous public and private projects at the airport. This background and experience will enable us to immediately begin addressing those specific airport planning and environmental issues most important to the airport, its users, and the regional community in general.

FAA Advisory Circular 150/5100-14E, Change 1, indicates there can be a potential for a loss of objectivity and transparency when the same firm that does the planning will be doing the engineering design. You likely will have the opportunity to consider several firms with airport engineering backgrounds; however, as the FAA recommends, do not choose your airport planner based upon their engineering capability. Instead, choose an experienced airport planning firm that can provide a truly independent and objective plan. Maintaining independence of your airport planning efforts separate from the design engineer benefits you in the public process during planning and environmental approvals.

Phoenix • Kansas City

#### Mr. Corey Jenkins, ACE July 11, 2023 Page 2

Coffman Associates will work with your selected engineer to provide work items listed on page 2 of the RFQ, as needed, including the following engineering tasks:

Item #7 – Furnish qualified inspectors for construction inspection.

Item # 10 - Incorporate and blend aesthetics and architectural concepts with project design while accomplishing the basic requirement that transportation facilities be functional, safe, and efficient.

Item #12 – Conduct Value Engineering (VE) study for projects that are particularly complex or have unique features.

We believe our specialization in airport planning and environmental services makes us a valuable extension to the airport's staff. Since our firm is involved exclusively in airport planning, you can be assured that we focus our efforts solely on what is in the best interest of the airport and the community. We strive to help the Carson City Airport Authority make the best decisions for the long-term viability in both fiscally and environmentally responsible manners.

I will serve as Principal-In-Charge and Airport Planning Project Manager for this assignment and will be the primary contact. I have over 20 years of experience in airports and aviation and have been with Coffman Associates for more than 16 years. Judi Krauss will be the Environmental Project Manager. Judi is an associate with the firm and has more than 20 years of environmental experience with more than 12 years at Coffman Associates. We will be supported by 27 professional and technical staff members who exclusively work with airports and aviation planning and environmental issues daily. Most of the staff listed in this submittal, as well as our subconsultant SWCA Environmental Consultants, have prior experience with the Carson City Airport. Our other subconsultant, Martinez Geospatial, is DBE-certified and has extensive experience in both Nevada and with other reliever airports.

Coffman Associates is eager and available to extend our airport consulting services to the Carson City Airport Authority, particularly because we sincerely believe that this assignment is ideally suited to our qualifications and competitive strengths. Our emphasis on high quality, costeffective, and innovative service to our clients has brought us national recognition in the airport consulting field as well as the airports we have served. We are very proud of our past service to the Carson City Airport Authority and appreciate the opportunity to continue to serve the planning service needs of the airport.

Thank you for your consideration.

Sincerely,

Matt Quick Principal

# **Table of Contents**

Section 1	-	Capability and Experience 1
Section 2	-	Key Personnel's Professional Qualifications and Experience
Section 3	-	Capability to Meet Schedules or Deadlines, Capability of Branch Office to Work Independently of Home Office
Section 4	-	Quality of Projects Previously Undertaken and Capability to Complete Projects without Major Cost Escalations or Overruns
Section 5	-	Understanding the Project's Potential Challenges and the Sponsor's Special Concerns
Section 6	-	Familiarity with and Proximity to the Geographic Location of the Project and Degree of Interest Shown in Undertaking the Project
Section 7	-	Disadvantaged Business Enterprise Participation
Section 8	-	References



Coffman Associates



# SECTION ONE Capability and Experience



# **CAPABILITY AND EXPERIENCE**



Coffman Associates is a specialized airport planning firm of 29 professional and technical staff members focused exclusively on airport planning and associated airport environmental and noise/land use studies. The firm's unique capabilities and extensive experience provide Coffman Associates with the qualifications required to produce the most valuable airport planning and

environmental documentation in the industry. Coffman Associates has earned a reputation for excellence since its founding in 1979. Awards include the American Association of Airport Executives (AAAE) Corporate Cup of Excellence Award and the Federal Aviation Administration (FAA) Partnership Award. During the past 44 years, Coffman Associates has completed more than 1,300 planning assignments, including nearly 600 airport master plans, 150 airport noise compatibility studies, and 400+ airport environmental studies. **This nationwide experience includes more than 450 planning assignments for 150 FAA Western-Pacific Region airports including recent airport planning and environmental documentation for Carson City Airport.** 

#### Summary of Airport Planning/Environmental Experience



#### Our Primary Airport Planning/Environmental Services Include:

- Environmental Documentation
- Airport Master Plans
- ALP Update and Narratives
- Airports GIS
- Exhibit 'A' Property Maps
- Part 150 Noise Compatibility Studies
- Airport Zoning and Land Use Planning
- Airspace Analysis
- Benefit-Cost Analysis
- Airport Financial Analysis
- Sustainability Planning
- Rates and Fees Analysis
- Minimum Standards
- Airport Rules and Regulations
- Airport Business and Strategic Planning

#### Personnel by Discipline

<i>,</i> <b>,</b>	
Airport Planners	11
Environmental Planners	. 4
GIS Technicians	. 4
Airport Planning Technicians .	. 2
Graphic Artists	. 4
Administrative	. 4
Total Employees	29

#### Recognition

2022 President's Award(Mike Dmyterko)AAAE South Central Chapter

2017 Corporate Member ofthe Year Award (James M. Harris)Arizona Airports Association

2016 Airport Business"40 Under 40" AwardAwarded to Matt Quick

**2013 Corporate Award** •AAAE South Central Chapter

2008 and 2009 FAA Partnership Awards •FAA, Western-Pacific Region 2008 Corporate Award of Excellence

• AAAE Southwest Chapter

2006 Consultant of the YearOregon Airport Managers Assoc.

2005 AAAE National Corporate Cup of Excellence

• American Association of Airport Executives

Scan QR Code for an overview of our services



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# FAA GRANT FUNDED PROJECTS IN THE PAST FIVE YEARS



#### LEGEND

- General Aviation Master Plans/ALPs (67)
- Air Carrier Master Plans (22)
- Environmental Studies (85)
- Noise/Land Use Studies (8)
- Wildlife Hazard Studies (4)

# MASTER PLANS/ALPs (GA)

**RELIEVER AIRPORTS** Caldwell, ID **Carson City, NV** Chandler, AZ Chino, CA Conroe, TX Galveston, TX Georgetown, TX Hawthorne, CA Mesa, AZ San Carlos, CA NATIONAL AIRPORTS Camarillo, CA Fort Worth (Meacham), TX Henderson, NV Hillsboro, OR **McKinney**, TX Oklahoma City (Wiley Post), OK Wichita (Jabara), KS Ames, IA Benton, CA Blair, NE Boscobel, WI Brady, TX Brazoria County, TX Brenham, TX Carroll County, AR Casa Grande, AZ Cleburne, TX Columbia, CA Concord, CA Cotulla, TX Dunsmuir, CA Fallon, NV Gilmer, TX Grants Pass, OR Holdrege, NE Jal, NM Kansas City, MO Kingman, AZ Lake Havasu, AZ Lebanon, MO Louisville, KY Lusk, WY

Marina, CA

McGehee, AR Merrill, WI Morrilton, AR Mountain Home, AR North Las Vegas, NV Odessa, TX Oxnard, CA Paragould, AR Payson, AZ Platteville, WI Pocahontas, AR Redlands, CA Ruth, CA Sabetha, KS San Bernardino, CA Sawyer County, WI Sevier County, AR Sidney, NE Skagit, WA Spencer, IA Superior, AZ Stuttgart, AR Ulysses, KS Visalia, CA Williams, AZ Wisconsin Dells, WI Zip, NM

#### **MASTER PLANS (Air Carrier)**

Albuquerque, NM Boulder City, NV Bullhead City, AZ Dubuque, IA Elko, NV Flagstaff, AZ Fort Smith, AR Friday Harbor, WA Grand Canyon, AZ Killeen, TX Lincoln, NE Longview, TX Lubbock, TX Manhattan, KS Maui, HI McAllen, TX Monterey, CA

Page, AZ Portland, ME Redding, CA Santa Maria, CA Texarkana, AR Waco, TX

#### ENVIRONMENTAL STUDIES

Abilene, KS Bakersfield, CA (2) Bellingham, WA (2) Benton, CA Boulder City, NV Bullhead City, AZ Camarillo, CA (4)

#### Carson City, NV (4)

Casa Grande, AZ (3) Eloy, AZ (3) Fresno, CA Grand Canyon, AZ (4) Half Moon Bay, CA Kern Valley CA(2)Kingman, AZ (5) Lake Havasu, AZ (3) Las Cruces, NM Lea County (Hobbs), NM Lubbock, TX Manhattan, KS Marina, CA (2) Mason City, IA Mesa Falcon Field, AZ (6) Monterey, CA (3) Napa, CA (3) Nogales, AZ (2) Phoenix-Mesa Gateway, AZ (2) Portland, ME Redding, CA (5) Reno (Stead), NV San Bernardino, CA (3) San Carlos, CA Santa Barbara, CA (2) Scottsdale, AZ (4) Sedona, AZ (4) Tehachapi, CA Tucson, AZ Wilmington, NC Winslow, AZ

#### PART 150 NOISE/LAND USE Compatibility studies

Camarillo, CA Fresno, CA Hawthorne, CA Johnson County, KS (2) Marina, CA Oxnard, CA San Carlos, CA

#### WILDLIFE HAZARD STUDIES

Flagstaff, AZ Hawthorne, CA Modesto, CA Redlands, CA

## AIRPORT MANAGEMENT SUPPORT SERVICES

With airport operating budgets often reduced and staff resources stretched to the limits, Coffman Associates can help by serving as an extension of an airport's staff. Through our Airport Management Support Services program, we provide assistance to numerous airports on a variety of tasks (see list to the right).

The ability of airport managers to utilize our services on an "as-needed" basis provides a cost-effective means for airports to address complex issues and tasks, meet critical deadlines, and respond to political and community concerns. Airports benefiting from Coffman Associates' Airport Management Support Services are illustrated below.



#### Airports who have utilized Coffman Associates' Airport Management Support

#### Coffman Associates' Airport Internet Resource Suite (AIRS)

Our latest innovation to assist airport management teams is an internet applications suite for data organization. AIRS is customizable to serve the specific needs of any airport, large or small. Access to GIS, interactive mapping, reports, and secured records provides instant benefits to airport management without the high cost of purchasing GIS software and training.



#### Airport Management Support Services

- Grant Applications
- FAA Airport Capital Improvement Programs (ACIP)
- Grant/Program Management
- Passenger Facility Charge (PFC) Applications
- 14 CFR Part 139 Certification Programs
- Runway Safety Area
   Determinations
- Property Acquisition Programs
- Preparation of Airport Property Map (Exhibit A)
- Grant Assurance Compliance
- Economic Benefit Analysis
- Air Cargo Analysis
- Business Park Planning
- Air Service Evaluations
- Lease Evaluations
- Airport Geographic Information Obstruction Analysis
- FAA Design Standards Evaluation
- Airport Layout Plan Updates/ Revalidations
- "Through-The-Fence" Evaluations
- Pilot Guides
- Public Relations Programs
- Promotional/Marketing Material
- Graphic Design/Printing
- Wildlife Hazard Assessments and Management Plans
- Safety Management System (SMS) Programs

# QUALIFICATIONS AND EXPERIENCE OF SUBCONSULTANTS



#### SWCA Environmental Consultants (SWCA) is included on the Coffman Associates' team to provide cultural resource survey support. SWCA

Environmental Consultants (SWCA) was founded in 1981 in Arizona and has had a Nevada presence since 2002. SWCA offers a team of qualified aviation specialists and environmental professionals who have provided environmental support on aviation projects by working with airports and alongside aviation engineers on airport safety, improvements, and development projects, such as runway extensions, master planning, facilities development, and land acquisition projects. SWCA can provide the following services:

- Archaeological, historic preservation, and cultural studies
- Biological resource studies, including species-specific surveys
- Clean Water Act (CWA) reviews and permitting
- Wildlife hazard studies and plans
- Phase I Environmental Site Assessments
- Visual simulations and analysis

**Cultural Resources** | SWCA has a long history of providing archaeological and historic preservation consulting services in Nevada. They know the types of archaeological and architectural resources found in Nevada and are well versed in the regulatory environment. Their familiarity with state and federal guidelines is demonstrated by their repeated success assisting Nevada local, state, and federal agencies in fulfilling their regulatory requirements, including Section 106 of the *National Historic Preservation Act*. SWCA's in-house staff include archaeologists and architectural historians, all of whom exceed applicable state and federal guidification standards for cultural resources professionals.

SWCA has worked on three projects for the Carson City Airport with Coffman Associates, including two cultural resources surveys and an historic evaluation of the existing terminal.



SWCA and Coffman Associates have worked together on airport projects including:

#### Carson City Airport, NV

- Benson Municipal Airport, AZ
- Buckeye Municipal Airport, AZ
- Kingman Airport, AZ
- Laughlin/Bullhead International Airport, AZ
- Marana Regional Airport, AZ
- Page Municipal Airport, AZ
- Payson Municipal Airport, AZ
- Prescott (Ernest A. Love Field), AZ
- Phoenix-Mesa Gateway Airport, AZ
- Scottsdale Airport, AZ
- Sedona Airport, AZ
- Show Low Regional Airport, AZ
- H.A. Clark Memorial Williams, AZ
- Wickenburg Municipal Airport, AZ
- Apple Valley Airport, CA
- Camarillo Airport, CA
- Benton Airpark Redding, CA
- Chino Airport, CA
- Fresno Executive Airport, CA
- Fresno Yosemite Int'l Airport, CA
- Half Moon Bay Airport, CA
- Marina Municipal Airport, CA
- Meadows Field Airport, CA
- Monterey Regional Airport, CA
- Riverside Airport, CA
- Santa Maria Public Airport, CA
- Tehachapi Municipal Airport, CA
- Albuquerque International Sunport, NM
- Double Eagle II Airport, NM
- Clovis Municipal Airport, NM
- Raton Municipal Airport, NM
- Santa Fe Municipal Airport, NM



#### Martinez Geospatial joins the Coffman Associates' team, providing valuable assistance in the Airports GIS portion of the planning effort.

Martinez Geospatial, a certified DBE, has more than 40 years experience in the transportation industry and is recognized nationally as a leading provider of exceptional geospatial services to the aviation industry. MTZ has consistently demonstrated the ability to produce high-quality and robust datasets at airports of all sizes, from the nation's largest Part 139 airports to smaller general aviation airports.

MTZ has been involved in the Airport Geospatial Information System (AGIS) Program since its inception and has developed a nationwide reputation as an expert and leader in this arena. Through successful completion of more than 75 AGIS projects, the company leverages a wealth of knowledge and close working relationships with key FAA and National Geodetic Survey (NGS) individuals that directly benefit your project. MTZ has proven success in the largest and most complex AGIS projects, with seven monumental projects completed under the FAA's eALP Pilot Program. MTZ offers all services necessary to successfully complete AGIS projects in compliance with Advisory Circulars 150/5300-16, -17, -and 18.





MTZ offers all services necessary to successfully complete AGIS projects in compliance with Advisory Circulars 150/5300-16, -17, and -18.

Coffman Associates has teamed with MTZ for more than 10 years for aeronautical surveys and airport data collection, and for services in support of FAA AGIS survey/data requirements. MTZ's reliable, high-quality service enables us to provide our clients with a product that not only meets, but exceeds their expectations.

#### MTZ's relevant AGIS experience includes:

- Airlake Airport, MN
- Arnold Palmer Regional Airport, PA
- Bemidji Regional Airport, MI
- Brainerd Lakes Reg'l Airport, MN
- Charles B Wheeler Downtown Airport, Kansas City, MO
- Chippewa Valley Regional Airport, WI
- Cook Municipal Airport, MN
- Dallas-Ft. Worth International Airport, TX
- Detroit Lakes Airport, MN
- Duluth International Airport, MN
- El Paso International Airport, TX
- Garden City Regional Airport, KS
- Grand Marais/Cook County, MN
- Greeley-Weld County Airport, CO
- Hector International Airport, ND
- Houston Hobby Airport, TX
- Indianapolis Int'l Airport, IN
- Jackson Municipal Airport, MN
- Lebanon State Airport, OR
- LM Clayton Airport, MT

- Los Angeles Int'l Airport, CA
- Metropolitan Oakland
   International Airport, CA
- Ottawa Municipal Airport, KS
- Philadelphia Int'l Airport, PA
- Princeton Municipal Airport, MN
- Rhinelander-Oneida County Airport, WI
- Ronald Reagan Washington National Airport, Washington, D.C.
- Rostraver Airport, PA
- San Luis Obispo County Regional Airport, CA
- Springhill Airport, MO
- Stockton Metropolitan Airport, CA
- Strother Field Airport, KS
- University Park Airport, PA
- Vicksburg Tallulah Regional Airport, LA
- West Houston Airport, TX
- Will Rogers World Airport, OK

# MTZ and Coffman Associates' joint project experience includes:

- Boulder City Municipal Airport, NV
- Elko Regional Airport, NV
- Glendale Municipal Airport, AZ
- Kingman Airport, AZ
- Payson Municipal Airport, AZ
- Redding Regional Airport, CA
- San Carlos Ăirport, CĂ
- Santa Maria Public Airport, CA
- Grants Pass Airport, OR
- Albuquerque Int'l Sunport, NM
- Baxter County Airport, AR
- Double Eagle II Airport, NM
- East Texas Regional Airport, TX
- Fort Smith Regional Airport, AR
- Dubuque Regional Airport, IA
- Mason City Municipal Airport, IA
- Morrilton Municipal Airport, AR
- Philip Billard Municipal Airport, KS
- Pine Bluffs Municipal Airport, WY
- Salina Regional Airport, KS
- Skagit Regional Airport, WA
- Topeka Regional Airport, KS



# SECTION TWO Key Personnel's Professional Qualifications and Experience



# **KEY PERSONNEL'S PROFESSIONAL EXPERIENCE AND QUALIFICATIONS**

Key personnel are assigned to assist the project manager on specific tasks as needed. Each brings experience to the tasks in which he or she will be involved. This approach ensures that major planning elements are initiated and completed in a timely manner, while also allowing for better coordination and a more comprehensive level of service. As a result, the project manager has more time to concentrate on providing responsive personal service, addressing specific complex issues, and refining detailed elements of our product.

Matt Quick is proposed as the project manager for airport planning projects and general consulting services. Matt is a principal with the firm and has been involved in all aspects of airport planning since joining Coffman Associates. He will be responsible for the day-to-day project coordination with the Carson City Airport Authority (Authority) and airport staff for airport planning projects for Carson City Airport.

Judi Krauss is proposed as the project manager for environmental studies. Judi is an associate with the firm and has prepared environmental documentation for a wide range of airport development and air service projects, including recent environmental documentation for Carson City Airport. Judi will be responsible for the day-to-day project coordination with the Authority and airport staff for airport environmental documentation for Carson City Airport.

The organizational chart below illustrates the specialty assignments of our key personnel. **Our personnel were** selected for this project due to their expertise in planning/environmental disciplines, their experience working on aviation projects in the region, and their availability to work on the anticipated projects. Resumes of key personnel are included in the following pages.



# MATT QUICK - Airport Planning Project Manager

Matt has 20+ years of experience in airports and aviation, including roles in airport management and aviation consulting. Prior to his time with Coffman Associates, he was an airport manager for a general aviation airport in Texas where he was involved with overseeing a major capital improvement project associated with a runway extension and enhanced airfield safety measures. He was also involved in coordinating with various entities to include the FAA, TxDOT- Aviation, City Council, Airport Board, and Economic Development on a regular basis to plan for airport projects, funding, and expansion potential. For the past 16+ years, Matt has been with Coffman Associates and has taken part in a variety of roles that include project management, business development, public outreach, and regular engagement with airport staff and aviation stakeholders. His planning experience is associated with master plans, safety area improvements, wildlife hazard management, and airport guidance studies such as rates and charges and rules and regulations. Matt has a thorough understanding of the different aspects involved with the development and operation of airports, and brings realistic solutions to the table when working with airport sponsors.

#### **Relevant experience includes:**

#### Elko Regional Airport, Nevada

Project: Focused Planning Study

Role: Project Manager

**Description:** The focused planning study was commissioned by the FAA as a follow-up to the airport's previous master plan in order to determine the best course of action to improving airfield safety deficiencies and getting an approved airport layout plan (ALP). The study is evaluating the primary runway system in relation to separation standards, safety area deficiencies, runway protection zone (RPZ) incompatibilities, and airspace penetrations. The intent of the study is to prepare a recommended development concept that provides an outcome for the airport to practicably adhere to FAA design and safety standards and set up a program the lays the foundation for future capital projects to address the airfield issues.

#### Scottsdale Airport, Arizona

**Project:** Airport Master Plan/Economic Impact Study **Role:** Project Manager

**Description:** Coffman Associates recently completed its third airport master plan for the airport, as well as an environmental assessment for proposed runway improvements. In the last three decades, the airport expanded from a 4,800-foot-long runway serving small general aviation aircraft to its present 8,249-foot length, regularly serving large corporate aircraft with "through-the-fence" access to the adjacent industrial airpark.

#### Lake Havasu Municipal Airport, Arizona

Project: Airport Master Plan

#### Role: Project Manager

**Description:** The master plan presented aviation demand forecasts for the potential return of commercial airline service. The plan recommended replacement of the existing terminal building to meet future commercial operation needs. General aviation activity was forecast to remain an integral part of the future growth and development of the facility. The plan called for adhering to safety design standards associated with larger business jet aircraft. The landside plan proposed a new terminal area, an array of aircraft storage facilities, and potential land acquisition.



#### **Professional Information**

- Principal
- 19 Years of Experience
- M.S. Aviation Safety, University of Central Missouri (2002)
- B.S. Aviation Technology, University of Central Missouri (2001)
- Multi-Engine and Instrument-Rated Commercial Pilot
- Airport Business "Top 40 Under 40" Award Recipient

#### Member

- SWAAAE Corporate Director (2018-2020)
- Aircraft Owners and Pilots Association
- Southwest Chapter A.A.A.E.
- Arizona Airports Association
- Association of California Airports
- Missouri Airport Managers
   Association
- Nevada Aviation Association
- New Mexico Airport Managers Association

#### Planning Experience at Coffman Associates

#### LEGEND

• Master Plans

- Wildlife Studies
- Special Studies

Total Studies	90
Special Studies	30
Wildlife Studies	10
Master Plans	50

# JUDI KRAUSS, AICP - Environmental Project Manager

Judi is a native of California with extensive environmental experience in the West and Southwest regions of the country. Since joining Coffman Associates, Judi has managed or contributed to numerous environmental evaluations associated with airport development and planning projects under both federal and applicable state regulations. She has participated in several Part 150 studies, airport land use compatibility plans, and airport master plans. Prior to joining Coffman Associates, Judi worked as an environmental analyst for the Arizona Department of Transportation's Environmental Planning Section and as an environmental planner and project manager for a large multi-discipline environmental projects under NEPA and other special purpose laws as well as in conducting socioeconomic studies.

#### **Relevant experience includes:**

#### Carson City Airport, Nevada

Project: Documented Categorical Exclusion

#### Role: Project Manager

**Description:** The intent of the project is to remove the existing 45-year-old 4-foot-tall wire fence that does not meet standards for airport perimeter fencing, and replace it with 6-foot-tall chain link fence with barbed wire extensions at the top. In addition, there are two manual vehicular gates at the airport. These secondary access gates would be replaced with 6-foot-high swing gates matching the style of the proposed perimeter fence. A document-ed categorical exclusion was prepared.

#### Carson City Airport, Nevada

#### Project: Documented Categorical Exclusion

#### Role: Project Manager

**Description:** Carson Airport received funding to relocate the airport's automated weather observing system and construct a new snow removal equipment building. The Coffman Associates team reviewed local environmental conditions, such as prime farmlands, water resources, and surrounding sensitive land uses, to determine if the airport's project will have an impact on the surrounding community. Coffman Associates prepared the documented categorical exclusion.

#### Sedona Airport, Arizona

**Project:** Focused Planning Study

## Role: Project Manager

**Description:** The focused planning study addresses preliminary engineering and environmental considerations for proposed RSA improvements and the extension of Taxiway A at Sedona Airport. The focused planning study will contain a public outreach component to vet public input. Since the airport shares common borders with the United States Forest Service (USFS) - Coconino National Forest (NF) and the project may involve land exchanges between Coconino NF and Yavapai County (county), interagency coordination between the county, USFS, and FAA is also included. An environmental assessment on the project may be required after the study is accepted.



#### **Professional Information**

- Associate
- 26 Years of Experience in the Public and Private sectors
- M.A. Economics w/emphasis in Natural Resource Economics, University of California, Santa Barbara (1989)
- B.A. Environmental Studies w/minor in Biology, California State University, Sacramento (1984)

#### Member

- American Institute of Certified Planners (AICP)/American Planning Association
- Arizona Airports Association
- Association of California Airports (ACA)
- Nevada Aviation Association
- National and California Association of Environmental Professionals
- Southwest Chapter A.A.A.E.

Planning Experience at Coffman Associates

#### LEGEND

- Environmental Study
- Part 150 Study
- Special Study

Environmental Studies	107
Part 150 Studies	2
Special Studies	3
Total Studies	112

## MICHAEL W. DMYTERKO, C.M.

Mike has been primarily involved in airport master planning and has also participated in several Part 150 noise and land use compatibility studies and environmental assessments. He has also been involved in a variety of specialty planning projects, including Safety Management System (SMS) processes. Mike has focused on analysis of airport financial data and the development of feasible programming for planned development costs. Since joining Coffman Associates, he has served as the primary planner and project manager for more than 80 airport master plans for primary commercial service, reliever, and general aviation airports.

#### **Relevant experience includes:**

#### Carson City Airport, Nevada

**Project:** Airport Master Plan **Role:** Project Manager

**Description:** Located in the state capital and in close proximity to the Reno-Tahoe metropolitan area, this reliever airport attracts a wide variety of aircraft operators, including 22 based business jets. Due to the operational mix of airport users, the airport environment is presented with many challenges to both efficiency and safety. The plan recommends a runway extension to better accommodate business jet aircraft, realignment of non-standard taxiways to meet FAA airfield geometry standards, and potential property acquisition to protect runway safety areas. Landside improvements include designating areas to accommodate future hangars, apron, maintenance, and fueling facilities.

#### Boulder City Municipal Airport, Nevada

Project: Airport Master Plan

Role: Project Manager

**Description:** A tremendous amount of growth at the airport can be attributed to its proximity to Las Vegas, Nevada, the Hoover Dam, Lake Mead, as well as the Grand Canyon, which attracts air tour service providers to the airport. The operational mix of air tour service providers and general aviation airport users presents many challenges. The plan's recommendations included runway extensions to better accommodate business jet operations and improved helipad and taxiway design to better segregate helicopter and fixed-wing traffic. Landside improvements include sites for future ARFF and airport maintenance facility and future airport traffic control tower, as well as additional hangars and apron.

#### Fallon Municipal Airport, Nevada

Project: Airport Master Plan

Role: Project Manager

**Description:** Fallon Municipal Airport has experienced increased general aviation interest, and the high number of existing based aircraft at the airport created a need for both air and landside facility enhancement. The airport master plan focused primarily on how the airport could most efficiently meet future aviation demands while providing a safe and efficient airfield system. Recommendations included a possible runway extension, new and relocated taxiways to improve airfield efficiency, instrument approach and visual aid improvements, hangar development, a new maintenance facility, and property acquisition.



#### **Professional Information**

- President
- 28 Years of Experience
- B.S. Aviation Administration, University of Nebraska at Omaha (1994)
- Licensed Private Pilot

#### Member

• Certified Member (C.M.) of American Association of Airport Executives

#### Planning Experience at Coffman Associates

#### LEGEND

Ø,

- Master Plan
- Environmental Study
- Special Study

Total Studies	135
Special Studies	18
Environmental Studies	34
Master Plans	83

## PATRICK C. TAYLOR, C.M.

Patrick, a principal with Coffman Associates, has been involved in all aspects of airport master planning, including aviation demand forecasting, airport financial analysis, alternative development evaluation, and needs analysis. Additionally, Patrick has worked on airport feasibility studies and site selection studies. Patrick has valuable recent experience providing airport planning services in the FAA Western-Pacific Region. Prior to joining the firm, Patrick spent 10 successful years in sales and marketing in the technology industry, including two years with a large international engineering firm.

#### **Relevant experience includes:**

#### Elko Regional Airport, Nevada

**Project:** Focused Planning Study **Role:** Project Manager

**Description:** The focused planning study was commissioned by the FAA as a follow-up to the airport's previous master plan in order to determine the best course of action to improving airfield safety deficiencies and getting an approved airport layout plan (ALP). The study is evaluating the primary runway system in relation to separation standards, safety area deficiencies, runway protection zone (RPZ) incompatibilities, and airspace penetrations. The intent of the study is to prepare a recommended development concept that provides an outcome for the airport to practicably adhere to FAA design and safety standards and set up a program the lays the foundation for future capital projects to address the airfield issues.

#### Buchanan Field Airport, California

Project: ALP Update and Narrative Report

Role: Project Manager

**Description:** Buchanan Field Airport is a busy reliever airport in the San Francisco Bay area. The airport desired to develop certain property for non-aviation uses; however, FAA required an update to the ALP to first determine if the land would be needed for aviation uses in the future. Data gathered early in the process determined that the subject land and several other parcels would not be needed for future aviation use. The ALP update also reflected resolution to several airfield "Hot Spots" and improvements to the taxiway configuration

#### Georgetown Municipal Airport, Texas

Project: Airport Master Plan

#### Role: Project Manager

**Description:** The airport is a reliever general aviation facility that is experiencing a significant increase in activity by turboprops and business jets. Currently, the runways are constrained from traditional expansion by residential housing and primary roads. Employing declared distances, the plan reflects the only possible method for adding 1,000 feet to the takeoff runway length in both directions. The additional runway length will meet the needs of the operators of these larger aircraft. Long-term airport land uses include more than 60 acres identified for aviation development and another 100 acres for non-aviation commercial/ industrial development. The project also included an FAA AGIS survey that was successfully processed through the FAA Airports-GIS portal.



#### **Professional Information**

- Principal
- 22 Years of Experience
- M.A. Geography/GIS, University of Kansas (2004)
- B.A. Political Science, Miami University (1992)

#### Member

- Certified Member (C.M.) of American Association of Airport Executives
- Kansas Association of Airports
- Northwest Chapter A.A.A.E.
- Oregon Airport Management Association
- Washington Airport Management Association

Planning Experience at Coffman Associates

#### LEGEND

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- Master Plan/ALP Narratives
- Feasibility/Site Selection
- Environmental Studies
- Special Studies

Master Plans/	
ALP Update & Narrative	52
Feasibility/Site	
Selection Studies	6
Environmental Studies	4
Special Studies	9
Total Studies	71

### **KORY A. LEWIS**

Upon completion of his Master's Degree in Urban Planning, Kory joined Coffman Associates as an airport planner. For 19 years, Kory has prepared the environmental documentation for a wide range of airport development and air service projects and has served as project manager for environmental projects at general aviation and commercial service airports. With expertise in land use planning, he performs aircraft noise analyses, land use compatibility analyses, and noise measurement analyses. Kory also conducts air quality modeling and greenhouse gas inventories. Prior to joining Coffman Associates, Kory worked in the engineering industry performing field reconnaissance and GIS support for public infrastructure projects.

#### **Relevant experience includes:**

#### Reno Stead Airport, Nevada

*Project:* Environmental Assessment *Role:* Project Manager

**Description:** Coffman Associates prepared an environmental assessment to evaluate proposed non-aeronautical development at Reno-Stead Airport in Reno, Nevada. The project included requesting the release of the property from a federal land obligation and constructing two warehouse and distribution buildings, totaling 1,127,080 square feet on 56.4 acres. Other on-site developments would include parking areas, drainage improvements, a railroad crossing, and landscaping. Coffman Associates oversaw the preparation of studies for cultural and architectural, biological, and surface water resources.

#### Fresno County, California

**Project:** Airport Land Use Compatibility Plan (ALUCP) **Role:** Project Manager

**Description:** Fresno Council of Governments (COG) retained Coffman Associates to prepare an ALUCP update and accompanying environmental documentation for the county's nine public-use airports. Prior to the update, Fresno COG was using six plans of varying age, ranging from 1980 to 2012, for compatibility planning in the county. The updated plan consolidated the plans into one document based on the current California Airport Land Use Planning Handbook. The plan also incorporated Air Installation Compatible Use Zone land use guidance for Naval Air Station Lemoore. Coffman Associates prepared updated noise exposure contours and coordinated with Fresno COG staff to prepare airport diagrams for approval by the California Department of Transportation.

#### San Carlos Airport, California

*Project:* Part 150 Noise and Land Use Compatibility Study *Role:* Project Manager

**Description:** Next Generation Airspace implementation has created aircraft noise concerns in communities surrounding San Carlos. The study evaluated recent changes to operations and the implementation of the existing quiet-flying program. An extensive public process, designed to educate area residents on the process and recommendations, was conducted throughout the study. Recommendations include updating the quiet-flying program brochure, Community General Plan amendments, updating the county ALUCP, and continued coordination with the FAA on the Bayside Approach implementation.



#### **Professional Information**

- Principal
- 21 Years of Experience
- Master of Urban Planning, University of Kansas (2004)
- B.A. Geography, University of Kansas (2000)

#### Member

• American Planning Association

#### Planning Experience at Coffman Associates



#### LEGEND

- Airport Noise and Land Use Compatibility Plans
- Environmental Study
- Wildlife Hazard Assessment

Environmental Studies	69
Airport Noise and Land Use	
Compatibility Plans	28
Wildlife Hazard	
Assessments	4
Total Studies	101

### **MADELINE HOLLIMAN**

After graduating from Truman State University with a research-focused Bachelor of Science in Psychology, Madeline began her professional career in rural north Missouri, eventually relocating to the Kansas City metropolitan area. During her first three years as a real estate professional, Madeline assisted with managing a large portfolio of 62 buildings, over three million square feet in the North Kansas City's historic industrial area, which included construction redevelopment projects, property leases, tenant improvements, acquisitions, and dispositions, as well as representing the landowner as a stakeholder in city planning projects. During this time, Madeline also received technical training in surveying and site design through the U.S. Army Corps of Engineers (USACE). Prior to joining Coffman Associates, Madeline was the lead real estate property manager for Class II short line railroad assets across the western United States and Great Lakes Regions, managing property leases, acquisitions, dispositions, and redevelopment of railroad property. This experience included significant cooperation with local municipalities, state, and federal agencies. At Coffman Associates, Madeline utilizes her diverse skill set assisting airports with environmental documentation, land use compatibility plans, and Part 150 studies.

#### **Relevant experience includes:**

#### Johnson County Planning Department, Johnson County, Kansas

**Project:** Comprehensive Land Use Compatibility Plans **Role:** Airport Planner

**Description:** Two publicly-owned airports in Johnson County, KS, have comprehensive land use compatibility plans in place from 1996 and 2004. Since the plans were adopted, the property boundaries and land uses surrounding the airports have changed considerably. Johnson County has engaged Coffman Associates to update the comprehensive land use compatibility plans for New Century AirCenter and Johnson County Executive Airport. Coffman Associates is also assisting Johnson County with planning advisory committee meetings and public outreach efforts for both airports.

#### Ventura County Department of Airports, Oxnard and Camarillo, California

**Project:** Part 150 Studies

Role: Airport Planner

**Description:** Coffman Associates previously prepared the Part 150 study noise exposure map and noise compatibility programs for Oxnard and Camarillo Airports in 1998 and 2001. In Advisory Circular 150/5020-1A, *Noise Control and Compatibility Planning for Airports*, the FAA recommends airport sponsors periodically update the noise exposure maps and evaluate whether revisions to the noise compatibility program are necessary. Due to complaints from community members in the surrounding area and changes in the aviation industry, the Ventura County Department of Airports engaged Coffman Associates to complete new Part 150 Studies for both airports.

#### Meadows Field Airport, Bakersfield, California

Project: Categorical Exclusions

#### Role: Airport Planner

**Description:** Coffman Associates completed categorical exclusions for two pavement rehabilitation projects pursuant to Environmental Orders FAA Order 1050.1F and FAA Order 5050.4B and compliance with NEPA. The two projects approved for categorical exclusion include asphalt rehabilitation on the Terminal Road loop and Runway 12L-30R at Meadows Field Airport.



#### Professional Information

- Airport Planner
- 6 Years of Experience
- B.S. Psychology, Minor in Biology, Truman State University (2014)

#### Service

• Army National Guard (2020) 12T Technical Engineer SGT

#### Planning Experience at Coffman Associates

#### LEGEND

- Part 150 Study
- Airport Land Use Compatibility Plan
- Environmental/Special Study/Master Plan

Part 150 Studies	2
Airport Land Use Compatibility Plans	6
Environmental Studies	5
Total Studies	13

## **ALYSON HULET**

Alyson is a native of Arizona with an educational background in sustainability and urban planning. During her undergraduate program, Alyson specialized both her capstone and thesis projects on areas of climate resiliency within planned communities. Her capstone project focused on ways in which desert communities can capture rainwater through a biomimicry design lens by looking towards nature's designs for inspiration. Alyson's thesis examined how Pacific Island nations can adapt to, and mitigate, the impacts of climate change through both community-oriented and government-led solutions. Utilizing her educational background in sustainability and urban planning, Alyson contributes to environmental inventories, recycling plans, and environmental overviews for airport master plans. In addition to this, Alyson has been involved in writing environmental documentation subject to NEPA, such as categorical exclusions and environmental assessments.

#### **Relevant experience includes:**

#### Carson City Airport, Nevada

**Project:** Environmental Documentation **Role:** Environmental Planner

**Description:** Coffman Associates prepared environmental documentation for a private hangar development project at Carson City Airport. The documentation began with a Section 163 Determination and eventually followed up with a documented categorical exclusion to analyze potential impacts the hangar development may have on the airport and natural resources.

#### Glendale Municipal Airport, Arizona

Project: Categorical Exclusion

Role: Environmental Planner

**Description:** Coffman Associates completed a categorical exclusion for a flight training building project pursuant to Environmental Orders FAA Order 1050.1F and FAA Order 5050.4B and compliance with NEPA. The project proposed for categorical exclusion involves the construction of a new flight training building that will consist of office and hangar space.

#### Napa County Airport, California

Project: Categorical Exclusion

Role: Environmental Planner

**Description:** Coffman Associates completed a categorical exclusion for a terminal building project pursuant to FAA Order 1050.1F and FAA Order 5050.4B and compliance with NEPA. The project proposed for categorical exclusion includes demolition of the old terminal building and the rehabilitation of a former airline training building for the new terminal building location.



#### **Professional Information**

- Environmental Planner
- 1 Year of Experience
- B.A. in Sustainability, Arizona State University
- B.S. in Urban Planning, Arizona State University
- Research Assistant for Transportation Lab: Pedestrian Safety in Phoenix Metropolitan Area

#### Membership

- Arizona Airports Association
- National Association for Environmental Professionals (NAEP)

#### Planning Experience at Coffman Associates

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#### LEGEND

• Environmental

Recycling Plan

Total Studies	27
Recycling Plans	4
Environmental Studies	23

### TIMOTHY M. KAHMANN

Since joining Coffman Associates, Tim has served as the GIS/CAD team lead. He has implemented GIS technology across all lines of business to improve operational efficiency and accuracy. He oversees the collection of environmental data available in GIS databases for most environmental projects undertaken by our firm. Tim also performs airspace and obstruction analyses, as well as site analysis, wind analysis, land use analysis, demographics and statistical analysis, including spatial database design and cartography. Tim serves as the firm's primary 3D modeler, using GIS to perform three-dimensional analysis and rendering. Prior to joining the firm, he worked for city and county governments as a GIS Analyst.

#### **Relevant experience includes:**

#### Phoenix-Mesa Gateway Airport, Arizona

*Project:* Airports-GIS/eALP *Role:* GIS Manager

**Description:** The Phoenix-Mesa Gateway airport developed an eALP as part of the FAA Phase II Pilot program. Phoenix-Mesa Gateway Airport had no GIS system, and data was stored in AutoCAD files on a network drive. Being in the pilot program, a near complete build of the FAA data model was provided. Additionally, Coffman Associates worked with the airport to incorporate utility data from the AutoCAD files, building a foundation for a GIS system. Coffman Associates conducted a GAP Analysis as part of the eALP effort to assist the airport in the decision-making process and recommended best ways to develop the airports GIS. Electronic data submission standards were also developed as part of the planning effort, and the ALP was updated with the eALP survey data.

#### Monterey Regional Airport, California

**Project:** ALP Update

#### Role: GIS Manager

**Description:** Coffman Associates updated the ALP to reflect runway improvements and make it compliant with FAA AC 150/5300-16A, -17B, and -18B. The eALP was processed through the FAA Airports-GIS portal for approvals, providing the Airport District with a GIS-compliant ALP. The product database continues to be populated utilizing the GIS control established during the eALP survey. This includes the as-built runway improvements as they come online, as well as for use during the upcoming master plan process.

#### Santa Barbara Airport, California

Project: Master Plan

#### Role: GIS Manager

**Description:** In addition to scheduled airline activities, the airport has a thriving business/corporate jet market, as well as air cargo, military, and small general aviation activities. The ALP associated with the master plan project was developed following the guidance provided in FAA AC 150/5300-16A, -17C, and -18B. The eALP will be processed through the FAA Airports-GIS portal for all approvals. 3D modeling was used to depict planned development, including rendering the airport environment and buildings.



#### **Professional Information**

- Principal
- 21 Years of Experience
- M.S. Geographic Information Systems, Northwest Missouri State University (2015)
- B.S. Geography, University of Central Missouri (2002)

#### Member

• Association of American Geographers (AAG)

#### Planning Experience at Coffman Associates

#### LEGEND

- Airspace Analysis
- Master Plan
- Environmental Study
- Wildlife Hazard Assessment
- eALP/AGIS

Airspace Analysis	33
Master Plans	3
Environmental Studies	7
Wildlife Studies	10
eALP/Airports-GIS	12
Total Studies	65

# **VICTOR VILLAGRAN**

Victor is SWCA's Nevada Cultural Resources Program Lead. His responsibilities consist of managing large projects with natural and cultural resources components. He has supervised archaeological inventory, data recovery, and laboratory analysis projects and is permitted as a Principal Investigator on Bureau of Land Management (BLM) land in Nevada. He has overseen Section 106 compliance for numerous energy generation and transmission projects. Victor's expertise includes overall contract management, tracking and managing project schedules, agency and tribal coordination, cultural resource reporting, excavation, and environmental compliance monitoring. His training and experience emphasize the prehistoric archaeology of the Great Basin and lithic technologies.

#### **Relevant experience includes:**

#### Carson City Airport, Nevada

**Projects:** Cultural Resources Survey, Terminal Historic Evaluation (as a subconultant to Coffman Associates) **Role:** Project Manager

#### Lincoln County Airport, Nevada

**Project:** Biological and Cultural Surveys

**Role:** Archaeologist. Conducted class I recorded search, class III survey and recording, co-author report.

**Description:** SWCA conducted biological and cultural surveys for a fuel expansion at the Lincoln County Airport.

# U.S. Bureau of Land Management; Las Vegas, Clark County, Nevada *Project:* Cultural Sites Mitigation

**Role:** Field Director. Assisted in mitigation of five prehistoric and historic sites; report preparation, including figures and map production.

**Description:** As part of a land exchange between the BLM and Clark County, Nevada, SWCA conducted a series of data recovery and site investigations for five historic properties, including the World War II Las Vegas Gunnery Range and School, a historic wagon road, an early twentieth-century (1905) railroad work camp, and a small prehistoric ceramic scatter.

#### Nellis Air Force Base; Las Vegas, Clark County, Nevada

Project: Natural Resource Studies

Role: Archaeologist

**Description:** SWCA provided senior biologists to lead baseline surveys for vegetation and wildlife to support the natural resource monitoring and inventory activities outlined in the Nevada Test and Training Range (NTTR) Nellis Natural Resources Program (NNRP) Integrated Natural Resources Management Plan (INRMP). Specifically, SWCA supported vegetation classification molding efforts through ground surveys and reporting; conducted surveys of spring and wetland areas; evaluated and inventoried large mammals including pronghorn, bighorn sheep, and wild horse; and located and described unique habitat and rare plants in order to inform ecosystem management decisions.



#### **Professional Information**

- Cultural Resources Specialist
- 18 Years of Experience
  B.A., Anthropology, e: Archaeology; California State University, Long Beach

#### Training

- Project Management Bootcamp, PSMJ Resources, Inc.
- First Aid, CPR, AED, American Red Cross
- Section 106 Compliance: An Introduction to Professional Practice Under Section 106 of the National Historic Preservation Act, SWCA Environmental Consultants

#### **Certifications/Registrations**

• Certified Remote Pilot No. 4312251; Federal Aviation Administration

#### Expertise

- Great Basin archaeology
- GPS / GIS
- Lithic analysis
- Site testing and recordation
- Survey and excavation
- Cultural resource monitoring
- Historic archaeology

### SEAN MCMURRY, PH.D

Dr. McMurry is a cultural resources project manager and archaeologist at SWCA. She has worked in the archaeological field since 2002, participating in both prehistoric and historic projects in Nebraska, Colorado, Utah, Idaho, California, Arizona, and Nevada. She has led and worked as a crew member on numerous excavation and survey projects for universities, federal and state agencies, and private clients. Her graduate research at the University of Nevada, Reno, focused on historic mining resources in Nevada, with a Master's thesis that examined Depression-era placer gold mining, and a PhD dissertation that investigated a 20th-century sulfur mining townsite. At the Nevada State Historic Preservation Office, Dr. McMurry acted as a Nevada Cultural Resources Inventory System data assistant, Nevada Historical Marker Program assistant, and Section 106 BLM Review and Compliance consultant archaeologist. She has significant experience in Section 106 compliance, oral history management, historical research, artifact processing and curation, GIS data collection and processing, historic artifact analysis, and report preparation for both government and private clients.

#### **Relevant experience includes:**

#### Carson City Airport, Nevada

Project: 3-Parcel Survey
(as a subconultant to Coffman Associates)
Role: Cultural Resources Specialist
Project: Cultural Resources Survey
(as a subconultant to Coffman Associates)
Role: Cultural Resources Specialist. Preparation of report

#### Carson City, Nevada

**Project:** Treatment Facility NEPA **Role:** Cultural Resources Specialist

#### U.S. Bureau of Land Management; Carson City and County, Nevada

**Project:** Nine Treatment Units Pine Nut Mountains **Role:** Cultural Resources Specialist. Archaeological fieldwork and preparation of report.

**Description:** SWCA conducted a cultural resources inventory for nine treatment units within the Pine Nut Mountains.

#### Uncle Sam Notice; Tonopah, Nye County, Nevada

**Project:** Natural Resource Inventory

**Role:** Project Manager. Cultural project management, archaeological fieldwork, preparation of report, and GIS and mapping.

**Description:** SWCA conducted a Class III cultural resources inventory for approximately 22 acres on land administered by the Bureau of Land Management to determine if proposed surface-disturbance activities for a mining notice would cause unnecessary or undue degradation to cultural resources as defined in 43 Code of Federal Regulations 3809.



#### **Professional Information**

- Cultural Resources Specialist
- 18 Years of Experience
- Ph.D., Anthropology; University of Nevada, Reno; 2011
- M.A., Anthropology; University of Nevada, Reno; 2007
- B.A., Anthropology; m: Spanish and Math, Honors Program Scholar; Colorado State University, Fort Collins, Colorado; 2003

#### **Certifications/Registrations**

 Registered Professional Archaeologist; Register of Professional Archaeologists

#### Expertise

- Great Basin archaeology
- Cultural resources regulations compliance
- ArcGIS analysis and modelling
- Historic artifact analysis
- Archival research
- Oral History
- Public Outreach
- Cultural resources regulations compliance with mining regulations

### **RYAN P. FLICEK**

Ryan has served the aviation industry in a variety of fields over the past 14 years, including experience as a pilot, an air traffic controller, and a managing consultant in the mapping/photogrammetry field. Aviation is Ryan's passion, both as a professional consultant and as a flight instructor and aerobatic pilot in his spare time. His knowledge of the national airport and airspace system as a professional, teacher, and user gives Ryan a rare thorough understanding of the system as a whole. He has acted as MTZ's Project Manager on more than 40 airport layout plans, eALP/AGIS, and/or obstruction analysis projects; this includes work on seven eALP pilot-projects. His skills include project planning, project management, procedural control, project specifications, quality assurance, compliance management, and aviation technical support.

#### **Relevant experience includes:**

#### Oakland International Airport, California

#### Project: On-Call Geospatial Services

**Role:** Ryan served as Geospatial Technical Lead and oversaw all geospatial data collection efforts, except for field survey. The aerial imagery acquisition flight mission posed significant challenges to the project, due to ATC conflicts with departing air traffic from San Francisco International Airport. Ryan facilitated communication between the client, the project team, and air traffic control and worked diligently to find an acquisition flight altitude that would be free of ATC conflicts but would also meet project requirements and accuracy specifications. In the end, a favorable solution was devised and the imagery was successfully acquired.

#### McCarran International Airport & North Las Vegas Airport, Nevada

Project: Runway Incursion Mitigation Study & ALP Update

**Role:** Ryan served as Geospatial Technical Lead and oversaw all geospatial data collection efforts. The main challenge of this project was posed due to the sheer volume of data collected due to the large size of McCarran Airport. In consideration of the thousands of projects submitted to AGIS around the country, this project is certainly one of the very largest ever submitted and accepted by FAA. This project demanded higher than usual coordination between Martinez Geospatial and HNTB, the prime firm, in order to ensure all project and FAA requirements were met. In the end, the final submission to FAA received quick and first-time approval from AGIS.

#### Ontario International Airport, California

Project: Airport Layout Plan Update

**Role:** Ryan served as Geospatial Technical Lead and oversaw all geospatial data collection efforts. One of the challenges posed by this project concerned existing airfield pavement that is no longer considered by the airport to be active and part of the operations area. Because the pavement is physically part of the airfield and appears in aerial imagery, it was mapped to comply with AGIS specifications. However, the client did not wish to have these inactive areas depicted on ALP drawings. Therefore, close coordination between the project team and the client took place in order to satisfy the client's needs for depiction of inactive pavement, yet still comply with AGIS specifications.



#### **Professional Information**

- Vice President/Aviation Director
- 14 Years of Experience
- Saint Olaf College (MN) -B.A. Political Science
- Minneapolis Community and Technical College (MN) -A.A. Air Traffic Control
- Federal Aviation Administration Academy (OK) -Air Traffic Control

#### Member

- FAA Commercial Pilot
- FAA Certificated Flight Instructor
- FAA Certificated Ground Instructor

#### **Roles and Responsibilities**

- Organization management and complete responsibility for aviation business
- Aviation marketing, client management, and project management
- Daily coordination with airports, clients, and/or FAA
- Oversight of project technical compliance with FAA Advisory Circulars
- Primary company reference for FAA regulation interpretation and compliance
- Utilize multiple databases on a daily basis



# SECTION THREE

# Capability to Meet Schedules or Deadlines, Capability of Branch Office to Work Independently of Home Office



# CAPABILITY TO MEET SCHEDULES OR DEADLINES

Coffman Associates has developed an extremely efficient internal project work flow that enables us to maintain project timeliness. We have separate teams dedicated to specific elements within the project. Our supporting teams include graphics, CAD technicians, GIS professionals, and content editors, along with our in-house printing capabilities. These internal processes were implemented specifically to assure on-time, on-budget delivery of a high-quality product. Since maintaining the project schedule is also critical to our revenue base and cash flow, we establish weekly status checks for every project. Our service is designed to work within the timeframe best for our clients. We try to anticipate the placement, timeframe, and resulting requirements of review periods in the planning process so that our continued production/schedule is not negatively affected.

Unless a change of scope occurs that significantly increases work effort, we do not request additional fees. This is accomplished through project management methods established at the outset. The project managers meet with key FAA regulators, airport stakeholders, and airport staff to develop a detailed and comprehensive scope of work to meet the project needs.

"With each and every project, you (Coffman Associates) have been professional, articulate, and respectful of this organization. Your dedication is unsurpassed – spending many hours in our office helping to work out the details of complex elements of our master plan. You have been readily available, engaged in each meeting, and offered beneficial insights. In a day where time is money – you are punctual and accessible. Your word is golden in submitting deliverables by the due date."

Gary P. Mascaro, Aviation Director Scottsdale Airport

"Each project was completed on time and on budget. The process for each was efficient and timely. The resulting documents have proved to be highly useful and have led directly obtaining development grants and to many successful airport projects. I continue to refer to the master plan for each airport regularly. What I find particularly satisfying is knowing that I can call you with any questions I have, even if it has been years since the project has closed."

Eric Johnson, President/Director of Airports Metropolitan Topeka Airport Authority

# CAPABILITY OF BRANCH OFFICE TO WORK INDEPENDENTLY OF HOME OFFICE

Since our inception, Coffman Associates has provided planning services for airports nationwide from California to Maine, as well as Alaska and Hawaii. If selected for the proposed project, Matt Quick and Judi Krauss, who are based out of our West Coast (Phoenix) office, will serve as project managers for airport planning and environmental documentation respectively. Matt and Judi have completed more than 200 airport and environmental projects, most of which were located in the FAA Western-Pacific Region. Key personnel for the planning efforts will be located in both our Kansas City and Phoenix offices. While the Phoenix office operates independently of our Kansas City office and has personnel available to perform most airport planning tasks, both offices work on a common network allowing access to shared project information. Coffman Associates routinely teams personnel from both offices to collaborate on individual planning projects. In fact, personnel from both our offices worked on the Carson City Airport Master Plan completed in 2020.

We anticipate a travel schedule to accommodate the meetings required for the proposed projects. While these meetings provide invaluable on-site communication, we are also able to supplement this interaction with the availability of technology such as our web page, email, internet hosted meetings, and teleconferencing. This enables us to be a part of the daily functions of your airport with no additional cost.



# SECTION FOUR

# Quality of Projects Previously Undertaken and Capability to Complete Projects without Major Cost Escalations or Overruns



# QUALITY OF PROJECTS PREVIOUSLY UNDERTAKEN AND CAPABILITY TO COMPLETE PROJECTS WITHOUT MAJOR COST ESCALATIONS OR OVERRUNS

# **Environmental Planning Experience**

Coffman Associates has extensive recent experience in preparation and coordination of environmental documentation for airport development projects. While a few of these studies have been simple and non-controversial projects, many have been unique, complex, and highly controversial; yet we have never failed to build adequate mitigation and justification. Our knowledge of the *National Environmental Policy Act* (NEPA) makes us uniquely qualified to move our airport sponsors through environmental documentation processes. In the past five years, we have completed NEPA analyses at nearly 40 airports. Each of our project team members has worked closely with the FAA and local approval bodies, ensuring a seamless transition from project environmental clearances through design and implementation. Through our environmental experience in the FAA Western-Pacific Regional Office, we have developed a relationship with the FAA environmental protection specialists that allow us tremendous insight into their project requirements.

#### Carson City Airport, Nevada

Coffman Associates prepared environmental documentation for a private hangar development project at Carson City Airport. We initially wrote and submitted a Section 163 Determination to begin the environmental process. Once the Section 163 Determination was completed a documented categorical exclusion (CatEx) was prepared to comply with NEPA. The CatEx was assembled utilizing a desktop review for natural resources such as wetlands, floodplains, hydric soils, and more. The analysis also reviewed aerial imagery to assess any historic development that may have occurred near the project site, and further evaluated if coordination with the Nevada State Historic Preservation Office (SHPO) was required. Coordination with both the developer and airport was also undertaken to provide a thorough analysis of the project site.

#### Carson City Airport, Nevada

Carson City Airport received funding to relocate the airport's automated weather observing system and construct a new snow removal equipment building. The Coffman Associates team reviewed local environmental conditions, such as prime farmlands, water resources, and surrounding sensitive land uses, to determine if the airport's project will have an impact on the surrounding community.

#### Boulder City Municipal Airport, Nevada

The Boulder City Municipal Airport is currently considering the construction of an airport traffic control tower (ATCT) and is in the process of conducting an environmental assessment (EA) on the proposed project. This general aviation airport hosts several commercial operators who provide aerial tours of the Grand Canyon, Lake Mead, and Hoover Dam using a variety of helicopter and fixed wing aircraft and is the third busiest airport in the State of Nevada. The adopted airport master plan identifies the proposed ATCT project as one needed for Safety/Security and Efficiency of the airport and an in-depth ATCT siting study has been completed to evaluate site alternatives. Coffman Associates first prepared the airport master plan and is now completing the EA on the project and coordinating public outreach as a part of the environmental process. *Project:* Environmental Documentation *Completion:* Ongoing *On Budget:* Yes *Reference:* Corey Jenkins, Airport Manager, (775) 841-2255 CJenkins@FlyCarsonCity.com



*Project:* Documented CatEx *Completed:* April 2021 *On Budget:* Yes *Reference:* Corey Jenkins, Airport Manager, (775) 841-2255 CJenkins@FlyCarsonCity.com

*Project:* Environmental Assessment *Completion:* Ongoing *On Budget:* Yes *Reference:* Marissa Adou, Assistant Airport Manager (702) 293-9405 madou@bcnv.org



#### Reno Stead Airport, Nevada

Coffman Associates prepared an environmental assessment to evaluate proposed non-aeronautical development at Reno-Stead Airport in Reno, Nevada. The project included requesting the release of the property from a federal land obligation and constructing two warehouse and distribution buildings, totaling 1,127,080 square feet on 56.4 acres. Other on-site developments would include parking areas, drainage improvements, a railroad crossing, and landscaping. Coffman Associates oversaw the preparation of studies for cultural and architectural, biological, and surface water resources.

#### Sedona Airport, Arizona

The overall project to be completed under this Scope of Services is described as a focused planning study on preliminary engineering and environmental considerations for proposed runway safety area improvements and a taxiway extension at Sedona Airport, which is owned by Yavapai County. The study also contains a public outreach component to vet public input on the proposed project. Since the airport shares common borders with the United States Forest Service (USFS) - Coconino National Forest (NF) and the project may involve land exchanges between Coconino NF and Yavapai County, interagency coordination between the county, USFS, and the FAA is also included. The information gathered during the focused planning study will be used to inform future environmental analysis and documentation required for the project under NEPA, as implemented through FAA Order 1050.1F.

#### Eloy Municipal Airport, Arizona

The proposed action involved three key actions: relocation of Taxiway A and its taxiway system to provide a 300-foot runway/taxiway centerline separation to meet FAA design standards; construction of certain improvements identified in the airport's master drainage plan to protect the airport and airfield infrastructure from flooding; and land acquisition (12.4 acres) to accomplish the first two action components. As a result of the completion of the land acquisition, a revalidation of the EA was needed to evaluate the installation of new security fencing. Security fencing, comprised of six-foot-high chain link with barbed-wire topping, would be installed along the perimeter of all newly acquired properties (approximately 4,940 linear feet [lf]). Two 24-foot-wide swing gates and one 15-foot-wide swing gate would be included within the new security fencing to provide secure access to the parcel. Approximately 720 lf of existing perimeter fence that is now internal to the airport property would be removed. An EA Revalidation was issued by FAA for the project revisions.

**Project:** Environmental Assessment **Completed:** January 2022 **On Budget:** Yes **Reference:** Todd Welty, C.E.M., Environmental Program Manager (775) 328-6467 twelty@renoairport.com



*Project:* Focused Planning Study *Completed:* July 2023 *On Budget:* Yes *Reference:* Chris Steele, Assistant Yavapai County Engineer (928) 771-3183 chris.steele@yavapaiaz.gov



*Project:* Environmental Assessment Revalidation *Completed:* March 2020 *On Budget:* Yes *Reference:* David Malewitz, City Manager, (520) 466-9201 dmalewitz@eloyaz.gov



#### Kingman Airport, Arizona

Coffman Associates is preparing an environmental assessment to evaluate the release of 1,750 acres of land from federal land obligations at Kingman Municipal Airport in Kingman, Arizona. Following completion of the environmental assessment and land release request, the City of Kingman will make the land available for sale or lease for development of non-aeronautical land uses compatible with airport operations. The purpose of the project is to generate revenue to support the airport. To further define the project, Coffman Associates was retained by the City of Kingman to prepare an industrial park master development plan. To complete this project, Coffman Associates is leading a multidisciplinary team (traffic, earthwork, drainage, utilities, rail, and roadways) to provide project specific details for future industrial and commercial development projects on the site. Additionally, the project includes industry target analysis and the preparation of a zoning ordinance to further define future development on the property.

#### Lea County Regional Airport, New Mexico

The environmental assessment was prepared for a proposed 602-foot runway extension to Runway 3-21 to meet the length requirements for commercial aircraft operated by existing commercial service providers at the airport. Associated actions include extending parallel Taxiway D, construction of a hold apron, importing fill material to meet FAA's grading specifications for the runway safety area, and relocation of the perimeter service road. Land acquisition to encompass the runway protection zone, taxiway object free area, and relocated perimeter access road were also included in the Proposed Action. During preparation of the environmental documentation, FAA requested that multiple connector taxiways be reconfigured to meet FAA taxiway design specifications and that a portion of Runway 17-35, which overlaps a portion of Runway 3-21, be removed. This would enhance airport safety by preventing aircraft operating on Runway 17-35 from penetrating the RSA and object free zone (OFZ) associated with Runway 3-21.

#### Camarillo Airport, California

Coffman Associates completed an administrative draft Initial Study on the Camarillo Airport's proposed Northeast Hangar Development Project. The proposed project includes the development of approximately 20 acres of open land on the northeast quadrant of the airport. The purpose of the proposed project is to provide additional County-owned hangars at the airport. The airport currently has a wait list of 130 people, which normally involves an approximate five- to six-year wait. Based on the conclusions of the draft Initial Study, the County Department of Airports tentatively intends to adopt a Mitigated Negative Declaration for the project.

*Project:* Environmental Assessment *Completion:* Ongoing *On Budget:* Yes *Reference:* Doug Breckenridge, Airport General Manager (928) 565-1420 dbreckenridge@cityofkingman.gov



*Project:* Environmental Assessment *Completed:* January 2021 *On Budget:* Yes *Reference:* Corey Needham, Assistant County Manager (575) 391-2942 cneedham@leacounty.net



*Project:* Initial Study *Completed:* June 2020 *On Budget:* Yes *Reference:* Erin Powers, Projects Manager (805) 388-4205 erin.powers@ventura.org



# **Airport Planning Experience**

Coffman Associates is known for our extensive experience in airport master planning, having completed more than 550 such studies. Airport master plans vary with the size, complexity, and role of each airport and may include a variety of supporting studies. The plans provide a comprehensive study of the airport that describes the short-, intermediate-, and long-term plans for airport development. Coffman Associates utilizes Advisory Circular 150/5070-6B, *Airport Master Plans*, as a guide for the preparation of master plans for airports that range in size and function from small general aviation to large commercial service facilities. The firm has always given specific attention to tailoring each master plan scope for the individual airport under evaluation.

#### Carson City Airport, Nevada

Carson City Airport has experienced continued growth because of its location in the state capital city and its proximity to the Reno-Tahoe metropolitan area. The airport's convenient location attracts a wide variety of aircraft operators, including 22 based business jets. The airport master plan evaluated existing airport and operational characteristics, formulated a 20-year forecast, and identified the facility requirements needed to meet operational demands and FAA standards. The plan recommended airfield and landside improvements, including:

- Consideration of runway extension options to better accommodate business jet operations
- Addressing safety area deficiencies, including location of windcones
- Property acquisition to protect runway environment, including safety areas
- Enhancing visual approach aids
- Additional infrastructure for general aviation terminal facilities
- Identification of areas that can accommodate aviation development
- A self-service fueling island
- Identification of a site for future airport maintenance and snow removal equipment

#### Elko Regional Airport, Nevada

Elko Regional Airport is a Part 139 commercial service airport that accommodates scheduled passenger service and an array of general aviation activities. The airport's critical aircraft classifies the primary runway as a Runway Design Code (RDC) C-III facility; however, many obstructions and penetrations on and adjacent to the airport make it difficult to meet appropriate FAA design standards. The purpose of the focused planning study was to analyze in greater detail the non-standard issues, prepare a recommended development program that enhances overall airfield safety and efficiency in the coming years, and prepare an ALP drawing set that is conditionally approved by the FAA. Coffman Associates worked with airport staff and the FAA to identify "low hanging" projects that are realistic to implement in the short term, such as relocating certain navaids and cleaning up specific portions of the airfield's safety areas. An ultimate focus is to identify "bigger ticket" projects that will require significant funding and lead time to implement, such as the potential relocation of the aircraft rescue and firefighting (ARFF) facility. The capital program that is established as part of the focused planning study will be used to inform the sponsor and the FAA regarding future projects and the level of environmental documentation needed for their implementation.

**Project:** Airport Master Plan **Completed:** December 2020 **On Budget:** Yes **Reference:** Corey Jenkins, Airport Manager (775) 841-2255 cjenkins@flycarsoncity.com



*Project:* Focused Planning Study *Completion:* Ongoing *On Budget:* Yes *Reference:* Jim Foster, Airport Manager (775) 777-7194 jfoster@elkocitynv.gov



#### Chandler Municipal Airport, Arizona

Chandler Municipal Airport (CHD) is a reliever airport for the Phoenix metropolitan area. In 2020, CHD was the sixth busiest general aviation airport in the country, registering over 214,000 total operations. The master plan focused on ensuring the airport can continue to grow in its role as a reliever by improving its facilities to better accommodate the growing business jet segment. At 4,870 feet in length, CHD's primary runway utility for mid-sized business jets is marginal, particularly during hot periods of the year. The master plan identified reasonable extension options to achieve a full length of 5,550 feet while considering various constraints, including the surrounding airport business park. In addition, the plan called for the development of a modern terminal facility and expanded services to make CHD an attractive choice in a competitive regional market. Other recommendations of the master plan included:

- Correction of airfield geometry to improve airfield circulation and mitigate the potential for runway incursions and FAA-identified "hot spots"
- Gradual replacement of airfield lighting systems with LED systems to save on operational and maintenance costs
- Consolidated airport administration and maintenance facilities to provide for better coordination, communication, and responsiveness with airport staff and tenants
- Identification of approximately 121 acres of undeveloped airport property for aviation-related and non-aviation-related development to increase and diversify revenues

#### Lake Havasu City Municipal Airport, Arizona

Lake Havasu City Municipal Airport is an important regional general aviation airport in rural western Arizona. Coffman Associates has served as the airport's primary aviation planning firm since its construction in 1991. Having completed a master plan for the airport in 1994 and a master plan update in 2009, Coffman Associates was again selected to prepare the 2018 airport master plan update. The objective of the study update was to provide the framework needed to guide future airport development and satisfy aviation demand in the most cost-effective way, while also considering potential environmental and socioeconomic impacts. The master plan update also evaluated airport sustainability as a core part of the planning process by focusing on maximizing the airport's revenue generation potential. Study recommendations included:

- Avigation easements and/or acquisitions of properties in the RPZs to protect against further encroachment
- Acquiring land to expand aviation development potential
- Reconfiguration, realignment, and construction of multiple taxiways to satisfy FAA airfield geometry standards
- Identifying airfield pavement that could be removed from service without significantly impacting safety, efficiency, or capacity
- Designation of areas capable of accommodating aviation development, to include aircraft storage hangars and aircraft parking apron space
- Identification of potential locations for air cargo area, aircraft wash rack, and airport maintenance facility development

*Project:* Airport Master Plan with AGIS Survey *Completed:* November 2021 *On Budget:* Yes *Reference:* Chris Andres, Airport Planning Administrator (480) 782-3543 christopher.andres@chandleraz.gov



*Project:* Airport Master Plan with AGIS Survey *Completed:* August 2020 *On Budget:* Yes *Reference:* Paul Blazer, Interim Airport Manager (928) 764-3330 blazerp@lhcaz.gov



#### Falcon Field Airport, Arizona

Falcon Field Airport serves the greater Phoenix metropolitan area and points beyond as one of the busiest general aviation airports in the country. Coffman Associates worked with airport staff and the City of Mesa to update the airport's master plan, which was approved by the Mesa City Council in 2019. The master plan focused on the airfield's ability to accommodate demand and capacity while improving safety and geometry concerns, and a detailed evaluation of the taxiway network was made during the study. Through a collaborative effort with key stakeholders-including airport staff, airport traffic control tower (ATCT) personnel, tenants, and the FAA-a recommended development concept was established to support the airport's continued performance as a premier general aviation facility. The master plan accounted for significant proposed landside developments on various areas of the airport, including extension of airfield access to the northwest and east quadrants to support future demand potential. Other important elements of the study included a detailed AGIS survey and an economic benefit analysis that demonstrated the value of the airport to the region. The master plan included:

- Taxiway construction and relocation to enhance airfield geometry and improve taxiway design and geometry associated with midfield taxiways
- Implementation of no-taxi pavement
- Potential land acquisition for approach/departure protection
- Construction of holding bays
- Designation of aviation development on currently vacant parcels
- The set-aside of portions of the airport for non-aviation revenue-producing uses

#### Kingman Municipal Airport, Arizona

The U.S. Army founded the Kingman Army Airfield in 1941, at the beginning of World War II. The facility served as an aerial gunnery training base and was home to approximately 35,000 service men and women and 7,000 military aircraft. The airport is now owned by the City of Kingman and consists of a complex dual-runway system and approximately 3,000 acres of land. The airport caters to a wide array of aviation activities, including large aircraft storage, Bureau of Land Management operations, the Mohave County Sheriff's Department, air ambulance services, and general aviation functions. Coffman Associates has partnered with the airport to provide planning and environmental support for a number of projects over the past several years. The most recent airport master plan focused on airside and landside considerations, including:

- The runway system meeting appropriate design standards and maintaining existing runway width as practicable
- Property acquisition for an ultimate extension to the primary runway
- Several airfield geometry issues associated with the taxiway network
- Additional hangar development
- The release of certain areas of airport property to support non-aviation development and bolster airport revenues

*Project:* Airport Master Plan with AGIS Survey *Completed:* January 2021 *On Budget:* Yes *Reference:* Corinne Nystrom, Airport Director (480) 644-4045 corinne.nystrom@mesaaz.gov



**Project:** Airport Master Plan with AGIS Survey **Completed:** May 2021 **On Budget:** Yes **Reference:** Doug Breckenridge, Airport General Manager (928) 565-1420 dbreckenridge@cityofkingman.gov



#### Chino Airport, California

Chino Airport (CNO) is a busy reliever general aviation facility owned by San Bernardino County in California. During this planning study and in consultation with the FAA, a focused airfield geometry study was initiated with the intent of coordinating the findings into the master plan. CNO had a history of runway incursions and several FAA-identified "hot spots." The geometry study provided numerous alternatives, each intended to meet FAA design standards. Following FAA input, the study was refined to include several planned taxiways that would not normally meet the standards; however, the FAA determined that those planned non-standard taxiways provided a higher level of safety for ground movements. Planned hold aprons and a new taxiway naming plan were designed to follow the most recent FAA standards and guidance. The master plan recommended extending one of the two parallel runways to reduce the potential for pilots to line up for landing on the wrong runway. The plan also outlined redevelopment options for several aging hangars, as well as new aviation development options for previously undeveloped airport land. Further recommendations included:

- Elimination of "hot spots" through numerous taxiway improvements
- A primary runway extension and installation of an approach lighting system
- Rehabilitation of the parallel runways and most taxiway pavements
- Construction of four new apron areas to serve planned hangar development
- Addition of three new signalized entrance points to the airport

#### **Oxnard Airport, California**

Oxnard Airport, one of two airports within the County of Ventura's system, is currently a general aviation facility that has historically accommodated scheduled passenger commercial service activities. It is home to approximately 150 based aircraft and experiences an array of aviation activities on a regular basis. One key focus of the project was to properly plan for the future critical aircraft in order to make recommendations for appropriate airfield design and safety standards. The airport has seen an increase in larger corporate/business jet activity, so the future critical aircraft was determined to fall within FAA Airport Reference Code (ARC) D-III standards. As a result, the following improvements were outlined in the report and conveyed on the new FAA-approved airport layout plan:

- Maintenance of the runway width at 100 feet to satisfy the larger business jets expecting to use the airport
- Ultimate relocation of parallel Taxiway F to meet proper runway/taxiway separation
- Relocation of certain areas for aircraft parking and other displaced facilities to accommodate the runway/taxiway separation
- Acquisition of certain properties adjacent to the north side of the airport to accommodate runway object free area (ROFA) standards

*Project:* Airport Master Plan *Completion:* Ongoing *On Budget:* Yes *Reference:* James Jenkins, Director of Airports (909) 844-3334 jjenkins@airports.sbcounty.gov



*Project:* ALP Update and Narrative Report *Completed:* June 2022 *On Budget:* Yes *Reference:* Erin Powers, Projects Manager (805) 388-4205 erin.powers@ventura.org


### Grant Administration and Airport Capital Improvement Programs/ Development Schedules

Because Coffman Associates works exclusively for airports, we have developed a detailed understanding of the FAA's Airport Improvement Program (AIP) funding requirements and processes. Our background and experience include the preparation and administration of Standard Form (SF) 424 and 5100-100/101 forms for FAA grant applications, SF 270/271 forms for grant reimbursement requests, and SF 425 forms for quarterly/annual financial reporting requirements.

Beginning with the airport planning process and the development of the airport master plan, we will prepare a new five-year airport capital improvement program (ACIP), which is then submitted to the FAA for review and approval. While the master plan/narrative report will provide the justification for a specific project, before any funding is approved for that project, it must be accurately depicted on the FAA-approved airport layout plan, and the appropriate level of environmental documentation must be reviewed and approved by the FAA. When a project is included in the airport's ACIP, it is critical that these requirements are considered when identifying the appropriate timing for the actual construction of a project. Once all the requirements have been met, Coffman Associates will prepare the appropriate pre-application and/or application packages for the Authority to submit to the FAA.

Coffman Associates has enjoyed an extremely successful track record in helping airports secure and administer FAA grant funding. For example, we have been working with the City of Redding, CA, since 1998 and have assisted the airport staff in preparing grant applications, PFC applications, and ACIP submittals to the FAA. As a result, the City of Redding has been successful in securing more than \$45,000,000 of grant funding from the FAA for a variety of airport improvement projects for both Redding Regional Airport and Benton Airpark.

### **Our Recent Comparable Grant Administration and ACIP Preparation Services Include:**

## Redding Regional Airport &

Benton Airpark, CA Project: Grant Application and ACIP Preparation Date of Services: Ongoing Owner: City of Redding Reference: Jim Wadleigh, Airport Director, jwadleigh@cityofredding.org, (530) 224-4321

#### Laughlin/Bullhead Int'l Airport

**Project:** Grant Administration, Grant Application, and ACIP Preparation **Date of Services:** Ongoing **Owner:** Mohave County **Reference:** James H. Scheller, Airport Director, jscheller@flyifp.com, (928) 754-2134

## Camarillo and Oxnard Airports, CA *Project:* Grant Application and

ACIP Preparation **Date of Services:** Ongoing **Owner:** Ventura County Department of Airports **Reference:** Erin Powers, Projects Administrator, erin.powers@ventura.org, (805) 388-4205

Sedona and Bagdad Airports , AZ Project: Grant Application and ACIP Preparation Date of Services: Ongoing Owner: Yavapai County Reference: Chris Steele, Assistant County Engineer, chris.steele@yavapaiaz.gov (928) 771-3183

#### Scottsdale Airport, AZ

*Project:* Grant Application and ACIP Preparation *Date of Services:* Ongoing *Owner:* City of Scottsdale *Reference:* Gary Mascaro, Aviation Director, gmascaro@scottsdaleaz.gov, (480) 312-7735





## SECTION FIVE

## Understanding the Project's Potential Challenges and the Sponsor's Special Concerns



## UNDERSTANDING THE PROJECT'S POTENTIAL CHALLENGES AND THE SPONSOR'S SPECIAL CONCERNS

Coffman Associates is fortunate to have a long-standing working relationship with the Carson City Airport Authority. Coordinating on a variety of planning and environmental projects over the years at Carson City Airport gives our team a solid understanding of the surrounding area and the airport's unique offering of an array of aviation demand segments in context of positioning the airport to provide the highest level of service it can.

Coffman Associates prepared the most recent airport master plan in 2020. This master plan provides a road map for the Authority to maximize revenue production opportunities from current airport properties, as well as target acquisitions to bolster revenue and promote and ensure long-term compatibility with the surrounding community. Over the past five years we have completed environmental compliance documentation for numerous airport development projects, including construction of a snow removal equipment building, relocation of the airport's automated weather observing system, and installation of an offset precision approach path indicator and medium intensity approach lighting system with sequenced flashers. Each of these projects will improve the airport's status as a public airport that provides unparalleled access to the state capital of Nevada. More recently, Coffman Associates has assisted private developers at the airport in the preparation of Section 163 determination requests, airspace obstruction analyses (Form 7460-1), and coordination on a variety of environmental documents to position the Authority for continued success by allowing growth and development at Carson City Airport.

Recommended Master Plan Concept - 2020 Airport Master Plan



Coffman Associates

The Carson City Airport Authority has requested statements of interest and qualifications for both future engineering projects and planning projects. As a firm purposefully founded to operate exclusively as an airport planning services consultancy, Coffman Associates will not pursue the architectural/engineering services RFQ. We firmly believe in the principle that airport engineering and airport planning should be conducted separately. This separation ensures complete objectivity in planning and environmental review and eliminates all potential or perception for conflict of interest that arises when the same firm that plans the project will benefit from the design.



That being said, it is important that there be synergy between an airport's planning and engineering consultants. Coffman Associates will work with the Authority's selected engineer to provide the best of both firms as a resource. We understand in talking with airport staff that it is very important to the Authority that the planning and engineering consultants work together as a collective unit to advance the growth and development of the airport in the coming years.

Coffman Associates has a solid working relationship with the airport's current on-call engineer as well as with other firms who we know will be pursuing the engineering services RFQ. We would propose regular project coordination meetings (either bi-weekly or monthly) with airport staff and the engineering consultant to discuss existing projects and their status and role from an environmental, design, construction, and grant administration standpoint. Coffman Associates currently offers this service to many of its clients which encourages a forward-thinking and progressive approach to project implementation.



We can also be as involved in the ACIP process as the Authority would like for us to be. We have a history of working with multiple airport sponsors and their engineering consultants in the development and implementation of ACIPs. This includes setting the program schedule, developing cost estimates, and representing the airport sponsor in coordination with the FAA and Nevada Department of Transportation's Aviation Division during their annual ACIP programming.

## **Future Planning/Environmental Projects**

Future planning will need to focus on a number of issues related to the continued development of Carson City Airport, which includes a detailed evaluation of airside and landside enhancements to accommodate general aviation and other specialty aviation activities. Coffman Associates will bring an understanding of airside and landside facility needs in being able to maximize airport property and aviation revenue support which are key to the long-term viability of the airport and surrounding region it serves. With the ever-changing role of airports and aviation, Coffman Associates' perspective on planning and environmental support also extends beyond airport property. This is important for the Carson City Airport Authority as current constraints both on and adjacent to the airport will impact future activities. Our team, through its understanding of land use compatibility in the area, will serve as an extension of airport staff in confronting these issues. The airport has several potential important projects on its five-year ACIP, including a potential runway extension and a terminal replacement project. We have national experience in assisting airports in these types of efforts. Environmental documentation will need to follow FAA's NEPA requirements. These processes could range from minimal categorical exclusion documentation to environmental assessments or even full environmental impact statements.

#### Environmental issues typically associated with airport expansion include:

- Cultural/Historic/Biological
- Water Resources
- Airport Noise
- Compatible Land Use
- Wildlife Habitat
- Wetlands



Coffman Associates has provided environmental services for FAA airport projects from coast-to-coast and regularly coordinates with the airport's engineer as necessary while maintaining independent, objective environmental services. Not only does Coffman Associates understand what FAA's Phoenix Airport Districts Office (ADO) requires in terms of compliance with NEPA, but we are experienced in assisting the Phoenix ADO in communicating with the Nevada State Historic Preservation Office.

We have also assisted several airport sponsors in the Western-Pacific Region with requesting land use releases from the FAA so that airport property can be utilized for non-aviation purposes. In the past, the Airport Authority has considered "through-the-fence" (TTF) users. We have considerable experience with TTF practices, policies, and revenue maximization at airports across the country.

Coffman Associates has a unique understanding and capability to accommodate Carson City Airport's future planning needs as we have been involved in its planning over the past two and a half decades. This has provided us with not only a detailed knowledge of the Our through-the-fence airport planning experience includes:

- Addison Airport, TX
- Millard Airport, NE
- Payson Airport, AZ
- Pearland Regional Airport, TX
- Pine Mountain Lake Airport, CA

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- Scottsdale Airport, AZ
- Stellar Airpark, AZ

airport, but also a comprehensive understanding of the development issues to be faced over the next several years. We fully understand FAA's "planning-based" approach to the ACIP. Our ability to ensure that planning and environmental approvals are obtained early will enable the airport to seamlessly design and construct projects on time and on budget.





## SECTION SIX

## Familiarity with and Proximity to the Geographic Location of the Project and Degree of Interest Shown in Undertaking the Project



# INTEREST IN UNDERTAKING THE PROJECT AND FAMILIARITY WITH AND PROXIMITY TO THE GEOGRAPHIC LOCATION OF THE PROJECT

## **Coffman Associates' Interest**

As previously stated, Coffman Associates is fortunate to have a successful working relationship with the Carson City Airport Authority and Carson City Airport dating back several years. Since that time, we have successfully completed the airport master plan having the opportunity to work with federal, state, and local officials throughout the process. As such, our team has a solid understanding of the surrounding area and each airport's unique offering of an array of aviation demand services.

Coffman Associates has assisted airport staff on a variety of planning and environmental issues enabling Carson City Airport to continue providing the high level of service upon which the aviation community depends. The airport and its surrounding area continue to see transformations over time, and it is now important to look ahead at how the airport can continue to meet the demands of the local and regional area. Coffman Associates' historical involvement gives us a proper understanding of what is needed for the airports to do just this.

Our approach is twofold:

- 1) Focus on reasonable airport development projects necessary to accomplish the Authority's goals and objectives.
- 2) Shape the airport's future airport aviation operations and activities, revenue growth, and local land use compatibility to ensure long-term viability.

We are dedicated to providing comprehensive evaluations in areas such as FAA guidelines, environmental concerns, future use and commitment of land, community response, and regulatory constraints. Our team of professionals have backgrounds and expertise in land use planning, environmental documentation and surveys, airport management, GIS, sustainability, and public outreach. Several of our team members are also licensed private pilots. In addition, our team offers engineering support to assist with planning and environmental analysis. This wide-ranging skillset enables us to serve as a true extension of airport staff and assist with navigating the challenges associated with operating airports. Whether we are conducting a master plan, environmental assessment, land use compatibility plan, or other study, any project we undertake includes the following elements:

**Project Initiation** | Each planning study starts with a collaborative effort that establishes the scope of work and the overall cost and schedule. During this process, critical plan components will be defined along with roles and responsibilities of all project participants. Depending on the project complexity, an advisory committee of airport stakeholders will be assembled and asked to provide insight and comment throughout the study process.

**Visioning** | We plan for an airport's success not only now but for the future. Without a vision for what the airport and community will become,



it is all too common for airports to make short-sighted decisions about airport development that can impede future potential. The overall goal of our strategic visioning is to assess the airport's current role and project its future growth opportunities. The intended outcome is to establish strategic goals and objectives, which guide overall planning efforts. **Public Outreach** | Community involvement plays a critical role in any planning project. Public support will undoubtedly contribute to the success of the plan but garnering this support is sometimes only achieved through a robust community outreach program. Many communities live with significant misconceptions about the airport and the value it offers. The planning process provides an ideal opportunity to educate and engage the public regarding airport development and the benefits that can result. We offer a dynamic approach to involving the community in planning studies. Coffman Associates also has a full suite of virtual meeting options to satisfy public outreach requirements if it is determined that in-person meetings are not feasible.



**Environmental Considerations** | Whether it is identifying an environmental baseline, issues, or constraints for planning purposes, providing environmental documentation under federal, state, or local environmental regulations, or conducting future environmental permitting, our approach is to bring the proper expert for the task to each project. Coffman Associates has experienced environmental planners who specialize in working with FAA Environmental Protection Specialists, as well as other regulatory agencies such as the U.S. Army Corps of Engineers. Noise, air quality, greenhouse gases, land use compatibility, and many other environmental categories can all be evaluated by our environmental staff. Coffman Associates then supplements our in-house capabilities with biologists, archaeologists, and historians with local knowledge and experience to apply the most accurate and comprehensive body of knowledge to each project.



**Technical Ability** | We value innovation and remain at the cutting edge of planning technology. We are committed to lead a planning process that yields realistic and implementable solutions. To achieve this, Coffman Associates utilizes 3D technology, drones, and GIS analytic tools. Providing 3D renderings of existing and ultimate facilities and infrastructure provides the necessary framework to best illustrate future planning concepts to decision-makers and the public. Furthermore, the use of GIS analysis technology offers a unique investigative tool in identifying aviation demand, topography, airspace, wildlife attractants, land use compatibility issues, and other airport siting requirements. We also offer custom-

ized GIS-based suite of tools that provide airport management the ability to more effectively manage revenues, property, and airspace. Our goal is to provide airport management with effective resources which can provide real-time answers for complex issues.

**Timely Deliverables** | Coffman Associates has maintained a reputation for excellence for more than 40 years, as our past and current airport clients can attest. We do not set deadlines we cannot keep. Our promise has always been to keep projects moving forward with realistic goals, regular communication with staff, and deliverables that do not just meet, but exceed expectations.

We are very excited for the opportunity to continue planning for the success of Carson City Airport!



## Familiarity with the Airport

Carson City Airport possesses unique characteristics that are attractive to its respective users. The airport is designated as a "Regional" general aviation airport in the FAA's National Plan of Integrated Airport Systems (NPIAS) and has long been a facility that caters to a variety of aircraft operations ranging from general aviation activities to specialty aviation sectors. General aviation functions related to aircraft storage, flight training, aircraft maintenance, and fixed base operator (FBO) services provide support to local and transient aircraft. In addition, a host of specialty aviation activities have traditionally utilized the airport and give the facility a unique ability to cater to an array of demand segments.

Anticipated projects for Carson City Airport involve the following:

- Installation of approach lighting to allow for enhanced instrument approach capabilities.
- Runway safety area drainage and grading improvements.
- Rehabilitation of airfield pavements including Runway 9-27 and various aircraft parking aprons.
- Proposed extension of Runway 9-27.
- Proposed terminal building replacement.

These projects will require NEPA environmental documentation and approvals as well as detailed planning support and justification (i.e., runway extension and terminal replacement), which our team is well-positioned to accomplish. Having been involved with preparing the master plan gives Coffman Associates a unique understanding of Carson City Airport that goes beyond the projects slated in the ACIP. Our team experience on the airport, whether it be providing planning and environmental services, as well as ancillary support, gives us the ability to come alongside the Authority and the local tenant base. This is important to communicate the appro-

priate vision for the airport that accounts for timing of projects, minimal disruptions to the airfield, and being able to implement funding mechanisms through appropriate entities. Coffman Associates will work with airport staff and the engineering consultant to identify growth and development opportunities for the airport based on the continued safety, demand, and land use compatibility of the airfield.

Furthermore, since Coffman Associates works exclusively for airports, we have developed a successful working relationship and understanding of the goals and objectives of the FAA's AIP funding requirements and processes. Beginning with the airport planning process, we can work



with airport staff to assist in the preparation of the ACIP. Coffman Associates regularly works with airport sponsors to make sure FAA timeframes are being met and appropriate documents are being submitted so that the airport does not miss out on the opportunity to secure entitlement and discretionary grants funds to further airport development.

From a planning perspective, we can serve as a liaison between airport sponsors and the FAA in making sure adequate documents are prepared and administered including:

- FAA Standard Form (SF) 424 and 5100-100/101 forms for FAA grant applications
- SF 270/271 forms for grant reimbursement requests
- SF 425 forms for quarterly/annual financial reporting requirements
- Airport Capital Improvement Program

## **Proximity to the Geographic Location**

Coffman Associates has provided planning services for airports nationwide. If selected for the proposed project, Matt Quick and Judi Krauss, who are based out of our West Coast (Phoenix) office, will serve as the planning and environmental project managers, respectively.

We can provide travel schedules that will accommodate the meetings required for the proposed projects. While these meetings provide invaluable on-site communication, we are also able to supplement this interaction with the availability of technology such as our web page, email, internet hosted meetings, and teleconferencing. This allows us to be a part of the daily functions of your airport with no additional cost. With the complications presented by Covid-19, we have all become more adept at working from remote locations and using virtual meeting software to conduct business. While this is no replacement for on-site, in-person meetings, it has allowed us the opportunity to explore new methods of communication and outreach. Coffman Associates has constructed a studio in our office to more effectively conduct coordination and advisory committee meetings, as well as public workshops. Our public workshop presentations can be recorded and posted on the project website to be viewed when convenient by interested citizens.

We also understand the importance of internal coordination to make sure projects are meeting the needs and expectations of the airport sponsor. As such, Coffman Associates engages its clients on a regular basis to monitor



the progress of projects and make sure key milestones are being met according to sponsor and FAA schedules. Coordination is key to the success of any project or study, and Coffman Associates factors this into every element of the planning and environmental effort. Examples of regular coordination include:

- Weekly or bi-weekly conference calls/go-to meetings with airport staff and consultant team.
- Written progress status updates.
- In-person meetings when circumstances dictate.

Coffman Associates has been providing airport planning services for the Carson City Airport Authority. This relationship, along with the 500+ planning assignments for more than 150 airports in the FAA Western-Pacific Region, is a clear indicator that Coffman Associates is in a prime position to continue providing services for Carson City Airport.





## SECTION SEVEN Disadvantaged Business Enterprise Participation



## DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

Coffman Associates' philosophy is to assist whenever possible to provide opportunities for disabled veterans, disadvantaged business enterprises (DBE), and minority and woman-owned firms. We have established numerous working relationships with DBE firms whose quality of service is outstanding and have satisfied the needs of our clients.

These firms provide a variety of services, including travel, urban planning, financial analysis, public relations, engineering, drafting, aerial photography, and mapping. We incorporate their services and maximize their expertise as we develop each work scope. When DBE goal requirements are in place, Coffman Associates makes every effort to add DBE team members that we have existing relationships with to meet those goals while providing valuable service. Whether DBE goals are in place, or not, Coffman Associates routinely utilizes DBE firms for up to 35 percent of the work effort on major projects. For this planning effort, Coffman Associates anticipates sub-contracting to Martinez Geospatial, a certified DBE, for aeronautical survey support.



#### Affirmative Action Program

Our Equal Employment Opportunity Program is a commitment by our firm to encourage the hiring of minorities and establish specific methods consistently followed in our advertising, solicitation, evaluation and selection of new company employees. We also believe in providing training at local colleges, along with on-the-job training that empowers employees' advancement to better jobs within the company.

#### Veteran Friendly Employment Policy

While Coffman Associates does not have a formal veteran friendly employment policy, we do have a history of hiring U.S. military veterans, including three of our current employees. We also always retain the positions for employees called to active duty.





# SECTION EIGHT References



## REFERENCES

Coffman Associates has built a solid reputation of honesty, quality, and a balanced, thoughtful approach to airport planning. Our extensive project experience is a testament to this, and we have developed strong relationships with airport sponsors and stakeholders, resulting in a high percentage of projects from repeat clients. Our clients know they can trust us to prepare an unbiased plan designed to benefit their airport and community. Our firm's planning-only focus means we don't plan projects that would benefit us to design later. This results in our reputation for objectivity and benefits our clients in ways that an engineering firm can't provide. Coffman Associates has also received numerous awards from past clients and industry organizations for the quality of our work. We encourage you to contact the following references, as well as those on pages 19-26, to discuss our qualifications and past performance.

#### Scottsdale Airport, AZ

*Projects:* Airport Master Plans (3), Part 150 Study (3), State and Federal Environmental Documentation (7) *Reference:* Gary Mascaro, Aviation Director *Phone:* (480) 312-2321 *Email:* gmascaro@scottsdaleaz.gov *Address:* 15000 N. Airport Dr., Ste. 100, Scottsdale, AZ 85260



#### Sedona Airport, AZ

**Project:** Airport Master Plans (2), State and Federal Environmental Documentation (13) **Reference:** Chris Steele, Assistant Yavapai County Engineer **Phone:** (928) 771-3183 **Email:** chris.steele@yavapaiaz.gov **Address:** 235 Air Terminal Dr., Sedona, AZ 86336



#### Mesa-Falcon Field Airport, AZ

Project: Airport Master Plan (2) Environmental Documentation (10+) Reference: Corinne Nystrom, Airport Director Phone: (480) 644-2450 Email: corinne.nystrom@ mesaaz.gov Address: 4800 E. Falcon Dr., Mesa, AZ 85215



Chandler Municipal Airport, AZ Projects: Airport Master Plans (2), Part 150 Noise Study Reference: Chris Andres, Airport Planning Administrator Phone: (480) 782-3543 Email: christopher.andres@ chandleraz.gov Address: 2380 S Stinson Way, Chandler, AZ 85286



#### Eloy Municipal Airport, AZ

Project: Airport Master Plans (2), State and Federal Environmental Documentation (4) Reference: David Malewitz, City Manager Phone: (520) 466-9201 Email: dmalewitz@eloyaz.gov Address: 595 N. C Street, Ste. 104 Eloy, AZ 85131



Page Municipal Airport, AZ Projects: Airport Master Plans (3) Environmental Documentation (4) Financial Analysis Reference: Kyle Christiansen, Director of Public Works Phone: (928) 645-4302 Email: kchristiansen@pageaz.gov Address: 697 Vista Ave., Page, AZ 86040







**PHOENIX** (602) 993-6999 4835 E. Cactus Road • Suite 235 Scottsdale, AZ 85254

### **KANSAS CITY**

(816) 524-3500 12920 Metcalf Avenue • Suite 200 Overland Park, KS 66213



# STATEMENT OF QUALIFICATIONS FOR AIRPORT ARCHITECTURAL/ENGINEERING SERVICES





5

BUILDING RELATIONSHIPS ONE PROJECT AT A TIME1361 Corporate BoulevardTel: 775.823.4068Reno, NV 89502Fax: 775.823.4066



## WOOD RODGERS TEAM

The Carson City Airport Authority (Airport) is looking to obtain the services of an engineering team to assist the Airport Manager, Mr. Corey Jenkins and his team with engineering and construction related services such as obtaining FAA funding, delivery of airport capital improvement projects, and supporting the Airport in oversight of private development currently happening and planned at the Airport. These future projects are a valuable part of maintaining a thriving airport, keeping the airfield safe and keeping the Airport's clients (airfield users/tenants) satisfied for years to come. We have reviewed the anticipated project list and assembled the enclosed team members to provide a well -rounded, local and yet aviation specialized group that will serve the Airport's needs for years to come. If the Airport is looking for a local team that has broad technical competence, a well-developed approach and proven history of executing aviation and general engineering projects in the Carson City Are; **We are that team!** 

Wood Rodgers, Inc. is a multi-disciplinary firm offering expertise in a wide range of technical areas, including airside and landside Airport Consulting services, Grant assistance, Environmental Planning and Permitting, General Civil Engineering, Geotechnical Engineering, Materials Testing and Inspection, Construction Management, Highway/Roadway Design and Improvements, Transportation Planning & Design, Drainage Facilities, Water Quality Engineering, Erosion Control and NPDES Permitting, NEPA environmental permitting, Bridge Hydraulics, Bridge Design, Topographic Surveys and Mapping.

#### Year Established | 1997

Wood Rodgers, Inc. was founded in 1997 by two engineers who set out to create an innovative engineering firm focused on the needs of their clients.

#### Number of Employees | 320

We have a staff of over 320 employees including engineers, planners, land surveyors, GIS and CAD technicians, project management professionals, floodplain managers, landscape architects, and LEED Accredited Professionals.

• Hydrology/Hydraulics

Mapping/Surveying

Geotechnical

Construction Administration

• Materials Testing & Inspection

**Aviation Areas of Expertise** 

- Runway, Taxiway & Aprons
- Airside & Landside Roadways
- Terminal Facilities
- Airfield Geometric Design
- Parking Facilities

#### .....

- Public Works Areas of Expertise
- Transportation
- Utilities
- Site Design
- Planning
- Environmental

#### Reno Office

1361 Corporate Boulevard | Reno, Nevada 89502 Tel: 775.823.4068 | Fax: 775.823.4066 | www.woodrodgers.com

WOOD RODGERS

1

- Pavement Design & EngineeringFAA Coordination
- Tenant Outreach
- Construction Administration
- Cargo & Maintenance Facilities



Wood Rodgers currently maintains offices in Nevada including Reno as well as Las Vegas, and throughout California in Sacramento, Orange, San Diego, Roseville, Oakland, Pleasanton. Companywide, the firm has approximately 320 talented and creative professionals who work together to ensure our client's timeframes and specific project needs are fully satisfied. With over 100 staff and **our Aviation Team headquartered in northern Nevada**, your projects will be completed by **local staff with local knowledge!** 



The staff at Wood Rodgers have been designing aviation projects for more than 35 years in Northern Nevada and throughout the west coast. These services include engineering (landside and airside), aviation planning, surveying, and mapping as well as construction support services. Our experience ranges from runway, taxiway and apron design to airfield service roads, terminal renovations, parking facilities, hangar development, and other landside design services. Our staff airport experience includes General Aviation Airfields to Small and Medium Hub airports such as Reno-Stead Airport, Carson City Airport, North Las Vegas Airport, Ely Airport and others Reno-Tahoe International and Oakland International. Our Part 139 airports include airports such as Reno-Tahoe International. We take great pride in successfully delivering the easiest to the most complicated projects with extensive construction and phasing constraints to our aviation clients.

In addition to our staff, we have included Lean Engineering (Lean) as our lead aviation electrical, NAVAID, and airspace engineering efforts. Wood Rodgers and Lean have been partnering together on projects on a continuous basis for the past 11 years.

**Lean is a small business electrical engineering firm specializing in aviation electrical as** well as airspace consulting. Lean offers a full range of electrical, airspace, and flight operation engineering services. Within their practice, they specialize in airfield lighting, NAVAIDs, power, CCRs, aircraft performance, flight procedures, security/technology systems, and safety risk management. Their expertise in aviation has gained the company international recognition and they are also a frequent contributor to FAA Briefs and Advisory Circulars. Lean has supported aviation projects for over 16 years and has performed over 200 electrical projects at 100 airports, including Monterey, Ontario, Hollywood Burbank, Santa Monica, John Wayne, Los Angeles, San Francisco, Oakland, Sacramento, Salt Lake City, Seattle Tacoma Reno-Stead, Carson City, Reno-Tahoe, North Las Vegas, Crescent City, Mather and Denver. Their vast experience at multiple airports proves that they can deliver large-scale and small-scale projects in a timely, cost-effective manner.



#### PRESONNEL ORGANIZATIONAL CHART

Team members proposed for the project are introduced within the following pages including their anticipated assignments, a brief description of their experience and key resumes. The team members you see in this proposal are the same people who will be sitting across the table from you at the project kick-off meeting and through the end of the project. With our depth and expertise, **we can staff any number of the Airport's projects without overwhelming this team.** Each team member can support the others in a wide variety of tasks and while each firm is not a huge national firm, the combination of firms brings that national level of competence and depth while also bringing that smaller firm personal touch.



**On-call Aviation Planning.** You have our commitment to coordinate, work with, and partner with your aviation planning firm to ensure a smooth and seamless transition from planning to engineering. We've had a long-standing working relationship with your current planning firm and are committed to work the Airport and your Aviation Planning firm for the duration on this contract. **Architectural.** Architectural support to be brought on if needed and based on the expertise needed for a given project.



## **APPROACH TO PROJECT MANAGEMENT**

We understand project assignments to be included within this on-call contract may vary depending upon actual Airport or FAA funding as well as other influences. While a specific project approach will be customized to meet a given project's requirements and complexity, the following represents an approach for a typical airfield project which we have successfully executed time and time again to deliver projects large and small for our clients.

#### **Project Management / Administration**

Throughout the life of each project, the Airport will have a single point of contact for project related questions. **Our project manager, Mr. Brian Martinezmoles, will be your single point of contact.** Brian has a history of executing aviation projects in this same manner. He will focus not only on the detailed delivery of the project scope but also on maintaining project schedule, budget, finances, and quality throughout the life of the project.

#### Project Scope / Schedule

At the start of each assignment, we will develop a project scope and schedule for design and construction in concert with the Airport and anticipated FAA grant timing. Wood Rodgers has a history with our aviation clients as well as FAA ADOs to get projects designed on time, construction completed, and grants closed out. We set a project schedule up front, obtain consensus and then we hit the deadlines. We give our clients time to review plans and then we hit the next deadline. Project schedule is not an optional item for us, in fact it is one of the most important elements to a successful project. **We hit our deadlines**, so you stay on schedule.

#### **Project Meetings / Coordination**

Coordination is a critical element to execution of a successful project, and we will ensure that coordination is handled in an efficient and timely manner. Our project manager will be responsible to maintain schedule, prepare agenda, document meeting minutes, and follow up on identified action items for all meetings. Project coordination for each project is anticipated to be handled through the following series of meetings:

- Project start-up / Kick-off Meeting
- Coordination with Corey Jenkins and Airport staff
- Design Milestone Review Meetings (will vary by project type)
- Additional coordination meetings with Stakeholders, as needed (Airport staff, tenants, FBO(s), FAA, other agencies, etc.)

#### **Coordination on the Airfield**

The criticality of maintaining airport operations cannot be overstated. Construction on an airfield is by nature intrusive to operations but since some of the projects may temporarily close portions of the airfield, careful consideration and coordination of impacts to the airfield is paramount to a successful airfield project.

During the design process we will work closely with Airport staff as appropriate to develop a complete approach for scheduling field investigations, closures, and construction activities. Key topics during these initial meetings are likely to be project phasing (further discussed below), impacts of operations, construction access, material disposal and general safety during construction. A careful review of these considerations, as well as suitability of the design to these considerations will go a long way towards a successful project.

### **Meeting Action Items**

We end each of our meetings with a review of Action Items including:

- ✓ What is needed
- ✓ Who is responsible
   ✓ When it is due

A running action item list is maintained throughout the life of the project to ensure important discussions don't "fall through the cracks".



#### Airport Users & Airport Board Coordination

We understand the importance of not only keeping the project safe, operational and within FAA guidelines, we also understand the importance of keeping the **airport users and Board of Directors informed and enthusiastic about projects.** This collaboration will involve thorough discussions about the project and attentive listening to concerns expressed by the airport community. By giving careful consideration to concerns and careful planning, airfield construction projects can be significantly less disruptive for the airport users. Incorporating remedies for their concerns into the project from the outset, even at minimal or no cost, can lead to a substantial enhancement in the overall project's quality. Dean Schultz will utilize his 20+ years of experience as an airport executive, in addition to his experience as a pilot, to work with airport management and the user group to discuss the project, listen to concerns, and work with our engineering team to determine potential mitigations.

#### **Grant Administration Support**

The quality of grant administration can greatly influence the Airport's ability to compete for FAA funding. We understand the easier and smoother a grant funded project goes the more favorably an airport will be looked upon by the FAA for future grants. Grant funding is limited and there is competition among airports for those

resources. This is one aspect where we can help our clients be more competitive. Performing this process well, will make a real difference on how much grant assistance the Airport receives. Grant assistance is just one reason why Wood Rodgers is the right choice.

KEYS TO SUCCESSFUL GRANT ADMINISTRATION							
<ul> <li>Know &amp; Monitor Timelines</li> <li>Maintain constant conversation with the ADO</li> <li>Accept the Grant</li> <li>Construct the Project</li> <li>Closeout the Grant</li> <li>Position yourself to accept last minute funding</li> <li>Have a Valued Design Partner</li> </ul>	Wood Rodgers has a long history of grant performance working with our airport sponsors, Mike Williams, and the Phoenix ADO team. As a result, our airport clients are often in a position to accept additional funding when others' projects fall through or if additional discretionary funds become available. You have our commitment to ensure you are able to accept funding, through grant performance or even accelerated design if needed.						

Mr. Dean Schultz will be your grant administration liaison with 20+ years of experience managing the grant process from the Sponsor's perspective. Dean worked for the Reno-Tahoe Airport Authority (RTAA) for 23 years and throughout that time he was responsible for all aspects of the grant administration process including ACIP development and coordination with the FAA, grant application preparation/submittal, grant reimbursement processing and final grant close out. We understand that successful grant funding is highly attributable to making the process easy on the FAA. Dean will be a value resource for the Airport to be utilized as needed in support of Grant Administration.

#### **Quality Control**

Quality control is not only completed at the end of the project or with each milestone deliverable. Quality control is done daily, weekly, task by task and is completed by each team member with them reviewing their design materials each step of the way. You could call this informal quality control or perhaps just a culture of providing quality services, regardless, this how we execute every project regardless of the size or client requirements for a quality control program.



In addition to daily staff level quality control, our formal QA/QC program is controlled by our Principal-in-Charge, Mark Casey. Our project management approach, outlined above, allows our Project Manager, Brian Martinezmoles, to be responsible for oversight of day-to-day design efforts and design team coordination. Thus allowing Mr. Casey to remain involved in the project but distance himself enough from day-to-day design operations that he is able to act as an independent internal QC review. A QC review will be completed by Mr. Casey prior to issuance of all project deliverables. He has over 35 years of airfield design and construction experience and is an owner of the company. Trust us when we say he sweats the details. His review focuses not only on the details of the design but also on constructability and construction cost control.



Wood Rodgers Quality Control Program Flow Chart

#### **Construction Cost Control**

Design changes during construction due to unforeseen conditions or conditions not addressed during the design process can be costly to the Airport. We work extremely hard at providing plans that are as complete as possible, addressing potential construction problems during the design phase rather than the construction phase. This serves to reduce changes during the construction process and ends with a **project that is within budget at the end of the construction period, not simply when bid.** Beyond our outstanding staff and team members, our QA/QC program is set up to ensure our designs consistently meet the Wood Rodgers' Standard and perform during construction.

Perhaps the most important element of any QA/QC plan is the **proof that the design and QA/QC program works**. Reviewing our final vs. bid costs over the last 10 years for our airport projects shows our actual construction cost has tended to be **3.5% lower** at the end of construction than at bid time. This speaks to the accuracy of our designs as a whole and that our designs put the airport in a good position with the contractor during construction. Our design process results in a well thought out set of construction documents that results in cost savings to the owner. **This is something many design firms claim, but very few actually deliver**.



Final Construction vs Bid Costs on Aviation Projects						
Location	Name	Bid Amount	Final Cost	% Change	Complete d	
RNO	Phase 14 Apron Rehabilitation	\$3,124,124	\$2,931,812	-6.1%	2011	
RNO	Stage 15 Apron Rehabilitation	\$2,740,740	\$2,556,673	-6.7%	2011	
RNO	Stage 16 Apron Rehabilitation	\$3,281,233	\$3,126,923	-4.7%	2013	
VGT	Taxiway A, G, & F Improvements	\$2,662,567	\$2,656,700	-0.2%	2014	
RNO	Runway 16L/34R Rehabilitation	\$5,170,673	\$4,893,781	-5.3%	2015	
RTS	Taxiway C Rehabilitation	\$2,905,345	\$2,924,826	0.6%	2015	
RNO	Taxiway C Rehabilitation	\$8,308,308	\$8,364,202	0.6%	2016	
OAK	FedEx Gate 20 Reconfiguration	\$2,479,330	\$2,130,895	-14.0%	2017	
RTS	Runway 8-26 Reconstruction	\$15,120,120	\$14,743,640	-2.4%	2018	
RNO	Runway 16R-34L Reconstruction, P1	\$14,235,235	\$14,552,243	2.2%	2020	
RNO	Runway 16R-34L Reconstruction, P2	\$44,518,615	\$43,371,175	-2.6%	2021	

#### Construction Cost Estimation, Inflation, and Supply Chain Issues

The economy over the last handful of years has caused construction pricing to be highly variable, compounded with global supply chain issues, industry wide construction pricing has increased upwards of 30% in 2022 alone. While some costs have started to come down, such as the cost of diesel, construction bid pricing has not. Based on our discussions with ADOs, Contractors, and various airport sponsors bid openings are continuing to come in well above their entitlements and construction costs are anticipated to remain volatile for the near future. While economic uncertainty is always a challenge, **Wood Rodgers continues to stay up to date with construction costs** by talking with local contractors, monitoring Producer Price Indexes, as well as witnessing bids for projects designed not only by us but by other firms. This enables us to provide more dependable construction estimates, making internal budgeting a less stressful, more reliable proposition for our clients.

We will continue to follow construction price trends, discuss any uncertainty, potential funding shortfalls or areas of risk at each design milestone to ensure the team understands the likely bid costs relative to available funding. Over the next few years, we are certainly going to continue to see variability in construction costs. With proper attention, we can incorporate items such as bid alternatives to help ensure that price variability does not stop your project. One of our primary goals, as your design partner, is to ensure successful grant performance increasing the Airport's ability to compete for additional discretionary funding and future grant awards. Construction cost estimating is a very important piece of that puzzle.

## Successful grant performance is a primary goal of ours. We will be sure your project is not impacted by bid cost variability. Using tools such as:



Reuse of MaterialsValue Engineering StudiesReuse of MaterialsDetailed Phasing RequirementsCost Friendly Design Decisions



## **DESIGN & CONSTRUCTION PROCESS**

Our focus during design of a project is to prepare complete construction documents to obtain necessary approvals and execute bidding and construction. During preliminary design we will focus on gathering of existing conditions, documenting detail design criteria, coordination with airfield users, and development of construction phasing and sequencing. Transitioning into final design we will prepare project deliverables to lead the project into final approval. Finally, throughout construction we will work with the Airport and the Contractor to ensure the project is executed efficiently, within standard, and properly documented so the grant can be closed out with the FAA.

#### **Collection of Existing Conditions Data**

Our team will take a multifaceted approach to preparing baseline data including aerial topography, supplemental topographic survey, review record airport CAD files and drawings, and lastly our engineering team will walk the project areas to take notes and document surface observations. While there is always value to pen and paper, Wood Rodgers will utilize our internal GIS software to document field conditions with georeferenced photos and field data such as inlet dimensions; pipe sizes, material type, and flow direction; and sign type, size, and manufacturer to name only a few. This data is automatically loaded into a secure web viewer so our team and subconsultants can use the data as well. In fact, we provide our subconsultants with access to our data collection software, so we have a single source of field data across the team. This is extremely helpful throughout design to ensure record drawings are matching the current field conditions. While this may seem like a costly extra, it has proven to save time and we have been using this process on our projects for almost a decade with great success.

#### **Topographic and Aerial Survey**

Wood Rodgers is an industry leader in aerial and topographic survey. Our in-house certified photogrammetrist oversees our aerial mapping department and in-house post-processing of topographic maps keep us in control of this critical early design task.

The first and most critical step is to review what information is on-hand to ensure that we conduct only what is necessary for the project. There is no need to spend time and money to duplicate work. If the Airport has design quality aerial topography, we would proceed with supplemental survey as needed for the specific project which would include conventional survey ground shots, for example, at critical pavement tie-in locations where we need a higher level of accuracy than aerial survey can provided. Additionally, we would GPS necessary supplemental information such as sign foundations, edge lighting, or inlet rim and invert elevations to name a few.

#### **Geotechnical and Pavement Design**

Most projects will require a separate geotechnical investigation and report to determine subgrade conditions and to provide data for pavement design and evaluation in accordance with FAA criteria. Wood Rodgers has a full-service geotechnical lab with 20 staff members specializing in performing these services. Our geotechnical engineer, Mickey Smith, has 30+ years of geotechnical experience in Northern Nevada including aviation, public works, and private projects. We will use this experience to develop a geotechnical investigation that is both cost efficient, but also meets FAA requirements for each specific project. Pavement design will be completed in accordance with AC 150/5320-6G utilizing the FAA's pavement design software FAARFIELD.

#### **Development of Construction Phasing**

Each project will require a focus on construction phasing to minimize impacts; granted our focus will vary by project type (ramp vs runway vs terminal). We will work with Corey, his staff, and the user groups to identify



operational constraints and opportunities in development of specific construction phasing and sequencing, meeting the needs of a given project.

We will engage airport users gathering their input early in each project. Their input, in conjunction with Airport concerns and needs, will be incorporated into our phasing requirements. Construction phasing is one of those critical milestones in a project that benefit greatly from tenant/user feedback, and "buy-in" which is why this is such an important element of our preliminary design approach.

#### **Development of Grading and Drainage**

Grading and drainage approach and impacts will vary project by project. As an example, for your apron projects we may focus primarily on pavement grade while a RSA project will encompass meeting FAA standard, limiting earthwork costs, and maintaining or improving drainage including on-site and managing regional offsite flows. By in large, unless there are specific problems to address, the goal will be to maintain historical drainage patterns and limit grading to only the extent required to provide positive drainage and meet FAA taxiway grading/shoulder or apron requirements.

#### **Development of Airfield Lighting and Signage**

Airfield lighting and signage improvements will be evaluated with each project. Working with the Airport, we will determine the extent of the improvements needed. For example, if the construction budget is limited and the sign bases are in the proper location and in good condition it is possible to install a new sign on the existing base. Often times, one of the first conversations that will come up during preliminary design is the airports desire to utilize LED or incandescent fixtures. Currently, your airfield is primarily incandescent signs and fixtures with the exception of your taxiway edge lighting which is a 1<sup>st</sup> generation LED fixture.

It is critical that your design team understand the nuances that come with LED equipment including sole-sourcing, availability, and technical limitations. In the context of taxiway and runway projects, we will talk with you about beginning to process of converting to LED fixtures. Review the pros/cons and discuss expectations with regards to the different appearance of each fixture. In fact, Lean Engineering is an industry leader in not only airfield lighting but also airfield photometrics. We will review electrical design decision early in the project process to ensure you can make informed decisions and we can execute a successful project.

#### **Reuse of Material**

The removal of existing pavement will generate AC millings, in addition to structural excavation of any existing pavement base material. Material off haul can be costly. Our team will evaluate and discuss opportunities with the Airport to reuse onsite materials saving on construction costs. Some options include recycling onsite base material as subbase (P-154) or allowing the contract to sell the millings for use as recycled asphalt pavement (RAP) helping to lower construction costs. If construction is early in the construction season, AC millings often hold value for batch plants. We often provide the contractor a bid option to import or reuse material, allowing prospective bidders to provide the best value at bid time opposed to as a valued engineering proposal post-award. These options, in addition to others, will be discussed with the Airport during design.

#### **PROJECT DELIVERABLES**

Project deliverables will be prepared and provided to the Airport for review and/or submittal to the FAA throughout the design process. All our project deliverables go through our internal QA/QC process ensuring deliverables will be correct and complete.



#### **Basis of Design Memorandum**

As part of our preliminary design effort, we will prepare a basis of design memorandum which will identify critical design criteria such as environmental conditions of approval, applicable design criteria, available funding, construction scope, materials discussions (PCCP vs ACP), and/or conceptual layouts to name a few. This document will allow the design team to proceed with design in an efficient manner. With this document, critical design decisions and early discussions will occur upfront in a documented manner allowing the Airport to review discussion items in advance of our project meetings. This document is not an FAA requirement, but we have found this to be a vital document to ensure our design process can be completed with little redesign effort while maintaining our aviation clients' objectives. This is just one way we ensure we meet project schedules, deadlines, and design budgets.

#### **Engineer's Design Report**

Our basis of design memo review, discussed above, transitions right into the Engineer's Design Report since much of the content included is required as part of the Engineer's Report. We anticipate the Engineer's report to include items such as general project scope, applicable FAA standards, pavement design including life cycle analysis, drainage, airfield lighting and signage, NAVAID considerations, pavement markings, geotechnical subsurface investigation, environmental considerations, and any modifications to standard.

#### Preparation of Bidding Documents (Specifications)

We will work with the Airport on review of the boilerplate front end bidding documents and customize general provisions as necessary for these projects including any limitations identified during the design process. An example may include limiting grading activities per local standard (no grading after October 15<sup>th</sup> or before May 1<sup>st</sup>) In addition to supporting the Airport with front end documents, we will prepare technical specifications according to FAA standards (AC 150/5370-10H) and/or local Orange Book standards when allowed by the FAA or for Landside projects. Lastly, a Construction Safety and Phasing Plan (CSPP) will be prepared in accordance with AC150/5370-2G for airfield projects.

The CSPP is a critical safety document for FAA approval and utilized throughout construction. Our CSPPs have been through the FAA Safety Management System (SMS) process many times with little comment. Regardless of if a formal SMS Review is required for a project, our CSPP documentation is always prepared with the highest care. The CSPP really sets up the project for success from a safety and operations perspective.

#### **Plan Preparation and Content**

Engineering plans will be prepared for each submittal. During our project scoping discussions, we will determine an appropriate submittal schedule. For example, an apron slurry project can easily proceed with perhaps a 90% and final submittal while an airfield reconstruction project will most likely require a 60%, 90%, and final plan submittal schedule.

Regardless, plan progression will occur throughout the design process with a goal of the 90% drawings to be complete, ready for bid, drawings. This is an important step to enable our final review meeting with the Airport to be focused on discussing items such as minor details or bidding language rather than design elements or missing plans.



#### **Bidding Activities**

Our team will assist the Airport throughout the bidding process. The first step, as outlined above, is to prepare detailed and accurate bidding documents and plan drawings. Once under bid, we will respond to contractor questions in the form of bidding RFIs, facilitate a pre-bid meeting, lead the pre-bid project tour, and ensure that the Airport has everything needed to open bids. After bids are received, the Wood Rodgers team will analyze contractor bids and preparation of recommendation of award and issue construction documents, as needed.



#### **Construction Management**

Throughout construction, we will schedule and facilitate pre-construction, pre-activity meetings and weekly construction project meetings. Our team will review contractor submittals and respond to contractor questions throughout construction. Typical to our role as construction manager, we will assist and represent the Airport with the full range of construction management services, including but not limited to, negotiation of change orders, review of materials performance tests, tracking of contractor DBE utilizations, and review of payment applications just to name a few. We will generally prefer to manage construction documentation through a construction management software but can work with the Contractor and Airport to determine the best solution for a given project. Wood Rodgers maintains a subscription with Procore however we have used many different software packages if an alternative platform is desired.

In addition to full-time site inspection (see below), our engineers will conduct periodic site visits to review the progress of construction. Our engineers are not only familiar with FAA and local design criteria, but also construction methods and challenges. Construction training is standard practice for our group, because we believe it makes us better engineers and allows us to better serve our clients. It is standard practice for our design engineers, to see project through construction in the role of CM bringing consistency and a thorough background of the project, design decisions, and fulfillment of the promises made during airport user coordination.

#### **Construction Testing and Inspection**

Construction Testing will be performed by our team of testing professionals who hold the necessary certifications for gathering field samples and completing onsite testing including but not limited to density testing, soil sampling, concrete (air, slump, beams/cylinders, etc.) and asphalt plant inspection. Our team has a full geotechnical AASHTO accredited laboratory, and the ability to setup a mobile lab if needed, all of which maintain necessary certifications for earthwork, asphalt, and concrete testing as necessary for Quality Assurance testing prescribed by the FAA.





#### **Project Closeout Phase Activities**

Upon the contractor's completion of the project, we will conduct a final inspection to identify any punch list items or deficiencies to be addressed prior to final acceptance of the project. In addition, utilizing Contractor's redlines, we will prepare as-built record drawings and provide them to the Airport for their records. Lastly, Wood Rodgers will prepare a Final Construction Engineer's Report which is a required as part of the FAA grant closeout process.

#### SPECIFIC PROJECT CONSIDERATIONS

Much of this SOQ addresses a "typical airfield project" however in the following section we have reviewed a few of the potential airfield projects which could come up during the contract period. Based on past coordination with Airport staff, it is our understanding project assignments may range from pavement maintenance, apron reconstruction or potential expansion associated with hangar development or even a runway extension.

Each project brings unique challenges however, with our team's extensive aviation experience and decades of aviation design experience, we can execute these projects with skill, expertise, and confidence. Below we have identified a few potential project challenges and potential solutions. This by no means is a complete list, rather is intended to highlight our knowledge, experience, understanding of design and construction at airports and how we can bring this expertise to your airport.

#### Runway 9/27 Extension

The first step in the potential extension of Runway 9/27 is the completion of a focused planning study and preliminary design. It is our expectation that the focus planning study will be led by your on-call aviation planning partner. You have our commitment to partner with your on-call planning firm to complete preliminary design and support the study as necessary. We have a history of successful teaming with various firms and subconsultants, including your current on-call planning firm, to complete even the most challenging projects. Through this commitment, we will be able to advocate for the Airport with the goal of working directly with the planning lead without the need for Airport staff to act as a mediator between your two teams. We will discuss this arrangement in more detail to ensure we serve in a manner desired by the airport at the time of the project.



Conceptual Layout of Runway 9 Extension

It is our understanding the starting point for the focus study includes a 600' extension to accommodate a displaced threshold on the west and a 200' extension on the east with a displaced threshold (alternative 4 from Master Plan). This approach will ensure that the recent efforts on the approach lighting system and offset PAPI can remain in service while also increasing the ability to serve larger business jets which have a need to access our Capital



City. An example of a key airfield design consideration is the layout and design of Taxiway A & D extensions, new connecting Taxiways and RSA grading relating to airfield improvements. With each new pavement, improvements to the RSA/TSA areas will be necessary. The extension of Taxiway A and Runway 9 displaced threshold, for example, will impact the existing Goni Canyon Creek (see figure above).

The existing creek in this area conveys regional stormwater from Carson City watershed G, in addition to acting as a receiving ditch for airport runoff. As part of the project, it is likely that additional portions of the creek will need to be covered in a pipe or box culvert. Based on preliminary review, we estimate the top of nre piped sections of Goni Canyon Creek should be about 5' below final grade allowing for improvements to occur without impacting airfield pavement or airfield electrical underground. Coordination with the planning lead will be necessary for any environmental areas of potential effect (APEs) and scope of environmental clearances required.

This is just one example, but during preliminary design it is critical that our design efforts are focused on items which can increase project scope/cost and equally important ensure that environmental approvals are sufficient to meet the project needs throughout final design and construction.

#### Supporting Airport with Review of Private Development

The Carson City Airport has a unique opportunity for economic development with the ability to support throughthe-fence operations. In recent years, the airport has had an increase in business interest in developing adjacent to the airport. With this interest, we understand the Airport management team has increased responsibility to review and approved such improvements. Wood Rodgers staff has years of experience conducting agency plan review. In fact, Wood Rodgers and specifically Mark Casey, is currently an independent plan reviewer for the Nevada State Public Works Division. Using these skills and our knowledge of aviation, we can easily assist the Airport with a compliance review to ensure the proposed private developments will not negatively impact current or future operations and airfield projects. Such a review at the airport can be done for a relatively small fee, understanding building permits for the project will be processed by the developer with the City. Perhaps the Airport could assess a small administrative fee to prospective developments to cover such administrative costs. We can work with the Airport Management to determine if this is a valuable service for the Airport, if so we can work out the details to ensure you get what you need, when you need it. This is a perfect example of how we will use our skill set to provide value and service to the Airport.

#### RUNNING AN AIRPORT IS NOT JUST ABOUT RUNWAYS AND TAXIWAYS IT ALSO INCLUDES:

- ☑ Buildings
- ☑ Pavement Maintenance
- ☑ Stormwater Management
- Emergency Repairs
- ☑ Local Permitting

- 🗹 Parking
- ☑ Hangar Development
- 🗹 Master Planning
- ☑ Special Event Planning
- ☑ Tenant / Public Outreach
- ☑ Roadways
- ☑ Legal Descriptions (Leases)
- 🗹 Utilities
- ☑ Tenant Improvement Approval
- ☑ Many more

It is clear the **Airport needs an engineering partner with more than just aviation specific experience.** Wood Rodgers is a leading local aviation design firm, but we are also one of Northern Nevada's leading engineering firms. **You will not find a local firm with our range of local aviation and non-aviation experience**. We have completed projects ranging from runways, terminals, and parking facilities to a new high school or hospital to regional and local roadways to residential and commercial development to aerial topographic and survey mapping. This is not companywide experience; this is local Northern Nevada experience.



## **OTHER CONSIDERATIONS**

#### Local Team; Regional Experience

Wood Rodgers has a large local office in Reno ready to serve as your on-call engineer and it is important to note our aviation team is located in our Reno office (within 27miles of CXP). As shown in the figure to the right, Wood Rodgers offices have been servicing aviation clients throughout the region. We prioritize being accessible to our clients including being on property, at the project, and in-person including evening board meetings, as needed.

Virtual meetings are a valuable project tool, however there is always a time where a face-to-face meeting is not only preferred but also necessary. **Our project manager and design team are a short 30-minute drive away** from the airport putting us in a prime location for impromptu face to face meetings, a construction site visit, or daily field work.



Lastly, our northern Nevada local presence and resources are extremely valuable resource. **By partnering with Wood Rodgers, you don't just get a highly qualified aviation engineer; you get a highly qualified engineer with local connections, expertise, and skills to tackle all of your projects.** You have access to all of our in-house local staff for any as-needed services which a traditional aviation engineer may not have available. If you need a legal description for a lease agreement, we can handle that with ease. If you have drainage items which requires coordination with Carson City Public Works, we have active working relationships at the City, enabling local staff to look at the item, make a call, and solve your problem.

#### Knowledge of the Federal Aviation Administration

The Airport's airfield projects are anticipated to be funded primarily by the FAA under an AIP grant. As such, airfield projects must be designed to FAA standards to remain fundable. We are very familiar with all of the FAA Advisory Circulars that affect airfield design projects and use them on a daily basis. We anticipate the following, but not necessarily limited to, FAA Advisory Circulars (ACs) to be utilized for a typical airfield project and we have extensive experience working with each:

- 150/5300-13A Airport Design
- 150/5320-6G Airport Pavement Design and Evaluation
- 150/5340-1M Standards for Airport Markings
- 150/5370-10H Standards Specifications for Construction of Airports
- 150/5370-2G Operational Safety on Airports During Construction
- 150/5300 15A Use of Value Engineering for Engineering and Design of Airport Grant Projects

Not only do we know the FAA's standards and procedures, we have a close working relationship with the FAA staff, the Western-Pacific Region is our home. Nearly all of the aviation work completed by Wood Rodgers has been on airports located within the FAA's Western-Pacific Region. Our staff frequently participates in FAA



roundtable discussions. Our Project Manager, Brian Martinezmoles, is an active member of the Southwest Chapter of the American Association of Airport Executive (SWAAAE) and regularly serves as an organizer of such FAA discussions on industry hot topics. Our participation in the FAA's industry involvement processes keeps us well informed of not only current, but future changes and helps us ensure the latest requirements are included with each of our project.

Furthermore, our staff assigned to work on your projects have decades of experience working specifically with the Phoenix Airports District Office (ADO) – We know them, and they know us!

#### **Knowledge of the Local Standards**

Wood Rodgers staff, aviation and non-aviation staff alike, are experienced with both the Standard Specifications for Public Works Construction (Orange Book) and NDOT's Standard Specifications (Silverbook). In fact, members of our company are often asked by local agencies for participation and input on modifications to the local standards. Knowledge of local standards are important to projects at the airport because they will be necessary for Landside and Airside projects alike. The FAA allows the use of local materials in many circumstances. For example, the FAA will allow the use to local AC pavements in lieu of FAA's P-401 specification for pavements serving aircraft less than 30,000 pounds and local DOT mix for non-primary airports serving aircraft under 60,000 pounds. Carson City airport will fall under this allowance by the FAA. The use of local materials vs specialized FAA materials is important to the Airport because local specified materials are more readily available by suppliers and as a result are often cheaper. We will discuss the use of local materials on your projects and be sure to outline potential cost savings and long-term performance of such materials on a project by projects basis.





### SIMILAR EXPERIENCE

The Wood Rodgers team has completed \$3M-\$5M in fee per year for decades over a wide range of projects at airports throughout the country. The following project descriptions are a sampling of recent (within the last 3-years) projects for your review and consideration. Additional information for projects can be provided, if needed.

Nighttime Instrument Approach Feasibility Study, Carson City, Nevada Client: Carson City Airport | Corey Jenkins | (775) 841-2255 Award Amount: \$TBD | Final Construction Cost: N/A | Roles: Lean Engineering – Prime | Wood Rodgers – Sub (Survey)

Carson City Airport needed to find solutions to restore the airport's nighttime instrument approach capabilities. LEAN performed a feasibility study on behalf of the airport, which analyzed different aspects of instrument procedure development, obstacle lighting, obstruction mitigation, and innovative approach lighting solutions in a terrain-challenged environment. The feasibility report presented eight different extended approach lighting solutions, including additional consideration for applying obstacle lighting to terrain penetrations.

The feasibility report drew from extensive knowledge of the airport and included field exploration of areas where a MALSF and a runway lead-in light system (RLLS) could be installed along a 2-mile path at a 30-degree offset from the extended runway centerline. The layout of the approaching lighting solutions was evaluated to enhance existing approaches to the airport and enable new approach procedures that could be flown at nighttime and to lower minimums than currently exist at the State Capitol.

The report was reviewed with industry stakeholders, including AOPA, NBAA, and various commercial air carriers, to gather their feedback on preferred solutions that would meet their respective pilot experience levels. The report was also extensively reviewed with different groups in the FAA to ascertain their preferred solutions, funding mechanisms, and equivalent levels of safety that the proposed solutions in the report would satisfy. This included the FAA Airports Airport Office, Airports Regional Office, Flight Standards, Planning and Integration, Flight Procedures, and Tech Ops. LEAN and Wood Rodgers successfully executed an AC-150-5300-18B VGA survey for the airport in support of the project, which is scheduled to be completed in March 2022.

#### Runway 8-26 Rehabilitation, Reno-Stead Airport

Client: Reno-Tahoe Airport Authority | Gary Probert | (775) 328-6460 Award Amount: \$15.1M | Final Construction Cost: \$14.7M | Final Construction Period: 2018 Roles: Wood Rodgers – Prime | Lean Engineering – Sub (Airfield Electrical)

Wood Rodgers as prime design consultant was responsible for complete airfield engineering design and construction administration assistance for this Runway Reconstruction Project along with the majority of its connecting taxiways. This project included correcting taxiway geometry for three separate taxiways a portion of the parallel taxiway as well as full reconstruction of the primary runway. Project phasing included working around multiple taxiways providing continuous airfield access to the alternative runway and keeping complete airfield access to the BLM Air Tankers and the National Championship Air Race events in the middle of the construction season.



#### Statement of Interest & Qualifications for Airport Architectural/Engineering Services

The paving work on this project included demolition and removal of existing Asphalt Concrete Pavement, excavation and embankment, subgrade preparation, placing new asphalt concrete pavement and cement treated base. Electrical upgrades included replacing all directional signs, runway edge lights, taxiway edge lights as well as lighting vault improvements for the entire runway system. The project also upgraded portions of the Airfield Lighting Vault to accommodate the updated lighting and signage system. Additionally, the project performed infield grading and rock mulch adjustments to mitigate wildlife and dust control concerns along the entire length of the runway and several connecting taxiways.



**Project Challenge:** The Reno-Stead airport user group is very engaged and opinionated on changes and activities on their airfield. In addition, to the private tenants, the airfield is home to a BLM tanker base and the National Championship Air Races. The project included reconstruction of the preferred runway, taxiways, and in some cases access to/from the hangars and across the remaining runway. In many ways, the success of this project hinged on open and collaborative coordination with the airport user group.

The National Championship Air Race event and BLM fire tanker season fell in the middle of the construction season, ensuring construction did not impact either of these events was a critical project challenge.

**Innovative Solution:** Working with the Airport Manager, we supported the Airport with a series of coffee and doughnut meetings with the airfield user group. An engaged user group, if included, is a vital piece of a successful project. With the input of the user group, we were successfully able to mitigate their concerns and execute a plan which they helped to formulate. Following our meetings, we aided the Airport Manager with project updates included in the tenant bulletins. This project was extremely successful by not only providing the airport with a necessary capital improvement but by doing so with the full support of the airport user group.

Runway 9-27 Reconstruction and Apron ImprovementsClient: Shank n Bank Airport (Private) | Jordan Morehead| (361) 408-0793Award Amount: Unknown | Engineers Estimate: \$4.2M | Final Construction Cost: Unknown (Private Owner)Initial & Final Construction Period: 2022 | 2023 |Roles: Lean Engineering – Prime | Wood Rodgers – Sub (Airfield Civil)

Wood Rodgers and Lean Engineering together worked on this private airfield to expand the capacity of the existing runway, provide approach procedures and enhance airport NAVAIDs to accommodate expanded aircraft use at this private facility.

The project included RSA grading, expansion of an existing apron, extending the existing runway as well as obstacle mitigation along the approach path to accommodate the desired aircraft fleet mix. Electrical design included runway edge lights (MIRL) as well as consideration for AWOS at the airport. Construction of this facility expansion is currently underway.



Taxiway B/M Reconstruction & GA Run Up Area Construction, Reno, Nevada Client: Reno-Tahoe Airport Authority | Jon Lau| (775) 328-6462 Award Amount: \$10.7M | Final Construction Cost: TBD | Initial & Final Construction Period: Planned 2023 Roles: Wood Rodgers – Prime | Lean – Sub (Airfield Electrical)

Wood Rodgers is providing professional engineering services for the design, management, coordination, and preparation of documents associated with the reconstruction of Taxiway M in its entirety, Reconstruction of Taxiway B within the RSA limits of Runway 8-26 and then the construction of a General Aviation Runup area off of Taxiway C. Responsibilities include: Surveying, Geotechnical, Data Gathering, Basis of Design Report, Schematic Design, Design Development / Contract Documents, Construction Support. Lean Engineering is assisting with the electrical design portion of this project.

**Project Challenge:** Following initial planning and programming for this project, it was determined that the GA operations required a larger footprint for runup areas than originally needed years prior causing funding limitations.

**Innovative Solution:** Working with the Airport Authority, Air Traffic Control Tower, and the design team we developed a series of design considerations to keep the project within budget and allow the project to proceed without the airport having to build a new facility not meeting their needs. Cost saving measures included preparation of bid alternates, evaluating construction phasing requirements to allow the contractor to take advantage of cost saving opportunities with material usage/delivery, backhauling, and simultaneous construction between phases limited mobilization/remobilization costs.

Runway 16R/34L Pavement Rehabilitation Phase 1&2, Reno, Nevada Client: Reno-Tahoe Airport Authority | Tony Curatolo | (775) 328-6461 Award Amount: \$58.7M | Final Construction Cost: \$57.9M | Initial & Final Construction Period: 2019 | 2022 Roles: Wood Rodgers – Prime | Lean – Sub (Airfield Electrical)

Wood Rodgers was the prime consultant responsible for project management and design for airfield engineering, pavement design, airspace analysis, construction phasing as well as construction administration assistance for the removal and replacement of much of the runway pavement in addition to the paved shoulders and infield grading/rock mulch placement on Runway 16R/34L, MALSR reconstruction, shoulders on parallel Runway (16L/34R), a new lighting vault as well as a MAGVAR adjustment for the entire airfield including (3) three runways.



As part of our initial field work, Wood Rodgers evaluated every concrete panel to provide an updated PCI for each panel along the 11,000-foot runway. This pavement analysis enabled us to work with the airport authority and the FAA ADO to develop replacement limits including multiple bid alternates to meet allocated funding in addition



to position the project for potential discretionary funding. In the end, the project included the entire keel section, select areas of outboard panels, in addition to RIM mitigation on the adjacent taxiway.

Construction work included demolition and removal of existing PCCP, excavation and embankment, subgrade preparation, centerline lighting rehabilitation, placing new PCC, pavement grooving, excavation and embankment, subgrade preparation, placing asphalt treated permeable base, lighting vault construction, MALSR construction and lighting and signage revisions to accommodate the MAGVAR.

**Challenge(s):** Following completion of construction, PCCP surface issues were identified with the return of of airport operations to the newly reconstructed runway. Upon much review, study, and discussion it was determined that the runway required remediation as a result of sub-par materials provided by the contractor and/or contractor placement activities. As a result, the runway was shut down to operations.

**Solution(s):** Throughout the process, we worked with the Airport as a technical advisor and advocate to conduct site inspections, advise, and review the Contractor's proposal(s) for remedy. This process is ongoing, including further contractor mitigation and performance monitoring, we continue to stand with the airport providing the level of service they are used to over our long relationship of working together.

#### Taxiway W Emergency Culvert Repair

Client: Oakland International Airport | Tony Chu | (510) 919-2137 Award Amount: \$293K | Engineers Estimate: N/A | Final Construction Cost: TBD Initial and Final Construction Period: 2022 | 2023 | Roles: Wood Rodgers – Prime

Following a stormwater management and tidal flooding vulnerability assessment at OAK, joint separations were found within a culvert under Taxiway W, south of Taxiway W5. Working with the Port, we completed additional CCTV evaluations to determine the extent of the joint separations.

Wood Rodgers developed a PS&E package for this emergency culvert repair working with the Port and their Contractor. In addition, phasing plan, coordinated with Port Operations staff, and development of a CSPP were prepared and submitted for emergency review.



**Project Challenge(s):** Taxiway W is critical to airport operations, especially for commercial and cargo traffic. Operational constraints limited the ability for traditional approaches to repair including open trench.

**Solution(s):** Following field investigative work, Wood Rodgers developed repair alternatives including full replacement, cast-in-place joint collar, and mechanical grouting. Working with the Port and the Port's contractor, costs for each repair method were developed. It was determined that mechanical grouting was the preferred repair method as it provided the least operational impact (night work), limited risk of reopening the taxiway after single shift excavations and had a minor increase in construction cost. Phasing documents were prepared and have been approved by Airport Operations and FAA.



#### **Other Notable Projects**

#### **Engineering on-calls**

- Engineering On-Call, Kern County Department of Airports (BFL, L05, L19, L17, L73, L62)
- Engineering On-Call, Sacramento County Department of Airports (SMF, MHR, SAC, F72)

#### **Runway/Taxiway Projects**

- Taxiway C Rehabilitation, RNO
- Runway 16R-34L Reconstruction Project, RNO
- Runway 16L-34R Shoulders and ALV, RNO
- Runway 16L-34R Touchdown Areas, RNO
- Runway 7-25 Runway Rehabilitation, RNO
- Taxiway L Restoration, RNO
- Taxiway A Rehabilitation, RNO
- Runway 7-25 Insurance Investigation, RNO
- Taxiways A, G & F Improvements, Ph. I/II, VGT

#### Apron / Hangar Projects

- Mountain West Aviation Hangar Repair, TVL
- Cargo Hangar 11 refurbishment, RNO
- Phase 13 17 Apron Rehabilitation, RNO (5 projects)
- Stage 9-11 Apron Rehabilitation, RNO (3 projects)

#### **Airport Building / Terminal Projects**

- Reno-Stead Airport Terminal Project, RTS
- Reno-Tahoe Airport SRE Building, RNO
- International Arrivals Building Renovations, OAK
- Air Cargo Facility, RNO

#### **Other Notable Non-Aviation Projects**

- Plan Review Services, NV State Public Works Division
- E. 5th Street Roundabout Design Assistance & Plan Review, Carson City, CA
- Johnson Lane Park Center Road, Douglas County, NV
- Douglas County Trails Master Plan, Douglas County, NV
- Johnson Lane Doug Park, Douglas County, NV

- Engineering On-Call, City of Fresno Airports Department (FAT, FCH)
- Engineering Design Services, Reno-Tahoe Airport Authority (RNO, RTS)
- Taxiway C Reconstruction, RTS
- Runway 12-30 Overlay, OAK
- Taxiway S, S1 Rehabilitation, South Field, OAK
- Taxiway T Rehabilitation, South Field, OAK
- High Speed Taxiways Survey, South Field, OAK
- Yelland Field Apron & Taxiway Improvements, ELY
- Runway 16R-34L Reconstruction, SMF
- Phase 7,8,9 & NE Cargo Apron Rehab
- East Apron Ph. 3 Rehabilitation, So. Field, OAK
- Gate 20 Expansion, FedEx OAK
- Gate 9 Reconfiguration, FedEx OAK
  - Consolidated Security Checkpoint of the Future, RNO
  - Flight Simulator Building, Nevada Air National Guard Facility
  - Concourse Redevelopment Project, RNO
  - Terminal Expansion Project, RNO
- North Kingsbury Trailhead Improvements, Douglas County, NV
- Materials Testing and Inspection On-Call, Carson City, NV
- High School at Wildcreek, Washoe County School District, Sparks, NV
- Renown Health Specialty Care Center, Reno, NV
- Renown Health Regional Central Utility Plant Project, Reno, NV


# Brian Martinezmoles, PE

# **Project Manager & Aviation Design**

#### **PROFESSIONAL PROFILE**

Mr. Martinezmoles has worked in the field of engineering for over 18 years specializing in design and management of airside and landside aviation projects. His experience includes completion of runway, taxiway, and apron projects for general aviation and small/medium hub airports, in addition to various airside/landside projects ranging from apron parking/taxi layout to terminal utility projects to name a few. Mr. Martinezmoles is skilled in specification development, construction phasing and sequencing, and FAA ADO and local agency coordination. Mr. Martinezmoles has worked in the areas of construction inspection and surveying which only furthers his understanding of civil engineering practices.



EDUCATION B.S./2006/Civil Engineering, University of Nevada, Reno

REGISTRATIONS

Registered Professional Engineer, NV No. 021202

Registered Professional Engineer, CA No. 78603

YEARS WITH FIRM 18 years with Wood Rodgers

#### **PROJECT BENEFITS:**

- Hands-on project manager focusing on coordination, design and schedule ensuring consistency across all project elements and providing a single point of contact.
- ✓ Strong experience in construction management and executing a project from planning stages through design and throughout construction.

#### **PROJECT EXPERIENCE:**

**Runway 16R-34L Pavement Rehabilitation, Reno-Tahoe International Airport, Nevada** | Project Manager for the rehabilitation of Runway 16R-34L pavement as well as Runway 16L-34R shoulders. Project design included a full pavement reconstruction of the keel section and some outboard panels in addition to updating flight approach procedures, MAGVAR redesignation, airfield electrical, RIM mitigations, and shoulder reconstruction. During construction, provided Engineer of Record Services to monitor construction for conformance with plans and specifications including review of material submittals, construction payment requests, change orders and record drawings.

**Taxiway C Rehabilitation, Reno-Tahoe International Airport, Reno, Nevada** | Project Manager on this project consisting of shifting the taxiway to mitigate insufficient runway to taxiway separation. Prior to construction, runway operations were limited while aircraft were taxiing on Taxiway C. The scope included shifting the taxiway 23' to provide proper separation from the runway. Design included subsurface soil investigations, laboratory testing, pavement design and preparation of complete plans, specifications and engineers estimate for this work During construction Wood Rodgers provided engineer of record services to monitor construction activities including review of material submittals, construction pavement requests, change orders and preparation of record drawings.

**Runway 8-26 Rehabilitation, Reno-Stead Airport, Reno, Nevada |** Project Manager responsible for complete airfield engineering design and construction administration assistance for this Runway Reconstruction Project along with the majority of its connecting taxiways. This project included correcting taxiway geometry for three separate taxiways a portion of the parallel taxiway as well as full reconstruction of the primary runway. Project phasing included working around multiple taxiways providing continuous airfield access to the alternative runway and keeping complete airfield access to the BLM Air Tankers and the National Championship Air Race events in the middle of the construction season.



# Brian Martinezmoles, PE

# Project Manager & Aviation Design

#### **PROJECT EXPERIENCE (CONTINUED):**

**Project 2413 Taxiways A, F &F Improvements, North Las Vegas Airport, Las Vegas, Nevada** | Design Engineer on this project that consisted of subsurface soils investigations, laboratory testing, pavement design and preparation of complete plans, specifications and engineers estimate. The project consisted of miscellaneous FAA required airfield improvements including drainage improvements for much of the airfield, restriping of several taxiways and runways as well as pavement reconfiguration of 2 taxiways within the airfield to improve airfield safety. Additionally, several signage and lighting upgrades were designed to update the airfield to current FAA standards. During construction, our staff will provide Engineer of Record Services to monitor construction activities for conformance with the plans and specifications including review of material submittals, construction pavement requests, change orders and preparation of record drawings.

**Runway 9-27 Reconstruction and Apron Improvements, Shank N Bank Airport, Port Lavaca, Texas** | Project Manager on this private airfield to expand the capacity of the existing runway, provide approach procedures and enhance airport NAVAIDs to accommodate expanded aircraft use at this private facility. The project included RSA grading, expansion of an existing apron, extending the existing runway as well as obstacle mitigation along the approach path to accommodate the desired aircraft fleet mix. Electrical design included runway edge lights (MIRL) as well as consideration for AWOS at the airport. Construction of this facility expansion is currently underway.

**Taxiway C Reconstruction, Reno-Stead Airport, Reno, Nevada** | Project manager for this project which consisted of subsurface soil investigations, pavement condition surveys, laboratory testing, pavement design and complete plans, specifications, engineers estimate and FAA forms. This work consisted of pulverization and stockpiling of existing asphalt concrete, PCC pavement demolition, subgrade preparation, surface and subsurface drainage improvements, Cement Treated Base Materials, asphalt concrete pavement, marking, electrical and lighting work.

**FedEx Gate 12 OAK B777 Expansion, Oakland International Airport, Oakland, California** | Project Manager on this project responsible for civil engineering, utility mapping, pavement design, hydrant fueling, electrical design and construction administration assistance for this Gate Expansion project. Overall, this project included reconfiguring the gate position, reconfiguring the taxiway connection, fueling hydrant design, pavement design, electrical design of the overhead lighting as well as the gate control lighting and emergency shut off switches.

**Taxiway C Reconstruction, Reno-Stead Airport, Reno, Nevada** | Project Manager on this project consisting of subsurface soil investigations, pavement condition surveys, laboratory testing, pavement design and complete plans, specifications, engineers estimate and FAA forms. This work consisted of pulverization and stockpiling of existing asphalt concrete, PCC pavement demolition, subgrade preparation, surface and subsurface drainage improvements, Cement Treated Base Materials, asphalt concrete pavement, marking, electrical and lighting work.



# Mark Casey, PE

# Principal-In-Charge & QA/QC

#### **PROFESSIONAL PROFILE**

Mr. Casey has over 35 years of comprehensive experience in Civil Engineering. He has had responsibility for the design of a wide variety of airfield projects both airside and landside. He is extremely knowledgeable in the preparation of plans, specifications and construction cost estimates as well as construction management. Mr. Casey's experience has ranged from Project Manager to Designer to Construction Manager on small projects to larger construction projects with construction budgets over \$70 Million. Mr. Casey has been the liaison for public involvement for many of these projects including public meetings and coordination between multiple stakeholders for a single project.



EDUCATION B.S./1988/Civil Engineering, University of Nevada, Reno

REGISTRATIONS Registered Professional Engineer, NV No. 9997

Registered Professional Engineer, CA No. 47126

YEARS WITH FIRM 20 years with Wood Rodgers

#### **PROJECT BENEFITS:**

- Wide range of airfield project experience from wildlife mitigation to aprons to major runway reconstruction.
- *Excellent experience working with FAA and understanding of airport regulation and procedure.*

#### **PROJECT EXPERIENCE:**

Taxiway M/B and GA Runup Areas, Reno-Tahoe International Airport, Nevada | Principal-in-Charge and QA/QC Manager for the design, management, coordination, and preparation of documents associated with the reconstruction of Taxiway M in its entirety, Reconstruction of Taxiway B within the RSA limits of Runway 7-25 and then the construction of two separate General Aviation Runup areas off of Taxiway C, one north of Taxiway A and another south of Runway 7-25. Project construction and phasing will address access for the GA side of the airfield and coordination with Airport Operations and ATC to maintain separation of commercial and GA traffic to the extent possible.

**East Apron Project Phase 3, Oakland International Airport, Oakland, California** | Project Manager, responsible for civil engineering design and construction administration assistance for a 1.6 million square foot apron reconstruction project. The work involved on this project included demolition and removal of existing asphalt concrete, excavation and embankment, subgrade preparation, drainage improvements, placing new Portland Cement Concrete and asphalt concrete, excavation and embankment, subgrade preparation, placing econocrete base, placing AC Base interlayer. This project was constructed over Bay Mud, providing for challenging subgrade stabilization design.

**Nighttime Instrument Approach Feasibility Study, Carson City Airport, Carson City, Nevada** | Project Manager on this project which included the control and topographic ground survey in support of the aeronautical obstacle survey in accordance with AC150/5300-18B. This VGA compliant survey was a critical step for the airport to support the nighttime instrument approach study which evaluated 2 PAPI solution to complex surrounding terrain. Together, Lean and Wood Rodgers successfully executed this survey and supported the FAA and airport to tackle an otherwise challenging issue for the airport.



# Mark Casey, PE

# Principal-in-Charge & QA/QC

#### **PROJECT EXPERIENCE (CONTINUED):**

Taxiway C Reconstruction, Reno-Stead Airport, Reno, Nevada | Principal-in-Charge and QA/QC Manager for this project which consisted of subsurface soil investigations, pavement condition surveys, laboratory testing, pavement design and complete plans, specifications, engineers estimate and FAA forms. This work consisted of pulverization and stockpiling of existing asphalt concrete, PCC pavement demolition, subgrade preparation, surface and subsurface drainage improvements, Cement Treated Base Materials, asphalt concrete pavement, marking, electrical and lighting work.

**Mountain West Hangar, South Lake Tahoe Airport** | Project Manager, responsible for civil engineering for the Mountain West Aviation Hangar at the South Lake Tahoe Airport. This hangar was previously damaged due to fire and is being replaced by Travelers Insurance Company. Our design includes all civil engineering related to the replacement of this Hangar building including pavement design, grading, water service, sewer service and location of an electrical and gas service. Additionally, we have assisted the architect in permitting review for the City of South Lake Tahoe, TRPA, LWQCB, FAA and others. This project is currently in design and is planned to be constructed before the winter shutdown in the Tahoe Basin.

**Reno-Tahoe International Airport Wildlife Hazard Management, Reno, Nevada** | Project Manager Lead design engineer for the mitigation of the infield area at the Reno-Tahoe International Airport. Project design included infield area grading and drainage improvements in order to deter wildlife from entering the airfield area. During construction Wood Rodgers will provide Engineer of Record Services to monitor construction activities for conformance with the plans and specifications including review of material submittals, construction payment requests, change orders and preparation of record drawings.

**Runway 8-26 Rehabilitation, Reno-Stead Airport, Reno, Nevada** | Principal-in-Charge and QA/QC Manager responsible for complete airfield engineering design and construction administration assistance for this Runway Reconstruction Project along with the majority of its connecting taxiways. This project included correcting taxiway geometry for three separate taxiways a portion of the parallel taxiway as well as full reconstruction of the primary runway. Project phasing included working around multiple taxiways providing continuous airfield access to the alternative runway and keeping complete airfield access to the BLM Air Tankers and the National Championship Air Race events in the middle of the construction season.

**Stage 12 Apron Rehabilitation, Reno, Nevada** | Project manager on this project that consisted of subsurface soil investigations, laboratory testing, pavement design and complete plans, specifications and engineers estimate. This work consisted of pulverization and stockpiling of existing asphalt concrete, PCC pavement demolition, subgrade preparation, surface and subsurface drainage improvements, Asphalt Treated Permeable Base, PCC pavement, asphalt concrete pavement, marking, electrical and lighting work. This project was broken down into 11 separate phases in order to facilitate construction while minimizing the disruption of air carrier traffic at existing passenger loading gate locations. During construction, we provided Engineer of Record Services to monitor construction activities for conformance with the plans and specifications including review of material submittals, construction pavement requests, change orders and preparation of record drawings.

Snow Removal Equipment Storage Building, Reno/Tahoe International Airport, Reno, Nevada | Project Manager, responsible for civil engineering related to the development of a new Snow Removal Equipment Storage Building. Project responsibilities included overall project management and Quality Assurance for site civil improvements. This building is designed as a 10 bay building accessing both airside and landside of the airport. Included with this building is a new taxiway connector for the snow removal equipment. This project is using the Construction Manager at Risk project delivery method. As such responsibilities also include coordination with the CMAR contractor as necessary.



# Dean Schultz, AAE

# **Grant Assistance & Tenant Outreach**

#### **PROFESSIONAL PROFILE**

Mr. Schultz has over 38 years of experience devoted to the successful development and management of airports throughout the United States and Internationally. In addition to working 15 years as a consultant, he has 23 years of experience in various roles at the Reno-Tahoe Airport Authority that owns and operates a Part 139 commercial service airport and busy general aviation airport. His background includes extensive experience in airside and landside facility planning; program and project management; budget preparation and monitoring; aviation and non-aviation business development; and capital development financing. Mr. Schultz has worked side-by-side with numerous citizen groups, governmental agencies, and elected officials to reach consensus solutions on a wide variety of issues.



#### EDUCATION B.S./1984/ Air Commerce/Flight Technology (Aviation Management), Florida Institute of Technology

CERTIFICATION Accredited Airport Executive (AAE)

YEARS WITH FIRM 2 years with Wood Rodgers

#### **PROJECT BENEFITS:**

- Extensive experience working with airport tenants and airport staff on projects from planning throughout construction.
- $\checkmark$  Excellent experience working with FAA and understanding of airport regulations and procedures.
- ✓ Strong knowledge of FAA AIP grant program and process administration

#### **PROJECT EXPERIENCE:**

**Airport Master Plan Update Reno-Tahoe International Airport, Nevada** | A Master Plan update for the Reno-Tahoe International Airport (RNO) had not been completed since the 1950s because facility planning and development at the airport was being performed on an "asneeded" basis for many years. In 2016 demand was increasing rapidly and capacity deficiencies were cropping up in several different facilities. As COO of the Airport at that time, Dean and his team determined that a comprehensive evaluation of all facilities was the most appropriate approach to ensure all aspects of the airport was addressed. Dean was a critical driving force in the \$1.5 million master plan effort, which took two years to complete. Through Dean's leadership, a significant public outreach effort took place to ensure the study reflected not only all airport department needs but the community's desires as well.

FAR Part 150 Noise Compatibility Study Update, Reno-Tahoe International Airport, Nevada

With Dean's leadership, the Airport Authority proactively utilized the FAR Part 150 Noise Compatibility program to help both the Airport and surrounding community. The Airport's initial FAR Part 150 study was completed in the early 1990s and Dean lead the implementation of all of the recommendations from that first effort such that an update was necessary in 2004. The update evaluated the current and 5-year forecast impacts of aircraft noise on the surrounding land use and with that baseline information developed a new set of recommendations to mitigate noise impacts. Among other measures, the study recommended the continuation of the noise advisory panel, acquisition and installation of a permanent noise monitoring system and significant expansion of the home sound insulation program to include over 5,000 homes. All of these recommendations were fully implemented. A third of the project budget for this study was dedicated to public outreach to ensure all stakeholder concerns were considered.



# Mike Davidson, PE

# **Aviation Design**

#### **PROFESSIONAL PROFILE**

Mr. Davidson is a Professional Engineer at Wood Rodgers and has over 20 years of experience for both private and public projects. He has been involved in all aspects of project development from planning to design. Mr. Davidson's responsibilities have included development discovery and site layout, grading, working on projects located in floodplains, hydrologic and hydraulic modeling, storm sewer systems, water and sanitary sewer systems for residential and commercial projects, tentative maps, special use permits, final design preparation, utility, and roadway design. Mr. Davidson has walked many projects from discovery to construction. He has been instrumental in the overall design and layout with many of the projects he has been involved.



#### EDUCATION

B.S./2004/Civil Engineering, University of Nevada Reno

### REGISTRATIONS

Registered Professional Engineer, NV No. 19870

Registered Professional Engineer, CA No. 80243

YEARS WITH FIRM 20 years with Wood Rodgers

#### **PROJECT BENEFITS:**

- ✓ Detail oriented design background with focus on complex grading and earthwork projects.
- Proficient in FAA design standards.

#### **PROJECT EXPERIENCE:**

**RTIA Ticketing Hall Expansion, Reno, Nevada (On-going)** | Project Civil Engineer for this project that consisted of a planning study to determine the most beneficial method of expanding the available ticketing area within the existing airport terminal building. Wood Rodgers role was to review each option for civil impacts such as ADA accessibility, site grading impacts, utility design and geotechnical review. Upon acceptance of the study, we proceeded with full civil design which is expanding the available area by moving the exterior walls of the building to accommodate more room for customers as well as bathrooms and vendor areas. This project is currently under construction with Mr. Davidson providing construction support services for civil related items including attendance at meetings, field coordination, and RFI / material submittal reviews.

**Runway 16R-34L Pavement Rehabilitation, Reno-Tahoe International Airport, Nevada** | Provided design assistance during construction for this project. This work consisted of pulverization of existing Portland Cement Concrete Pavement, subgrade preparation, asphalttreated permeable base, PCC pavement, removal replacement of centerline lights and marking. During construction, aided in review design elements associated with RFIs, submittal, and other construction related questions.

**SRE Building Reno-Tahoe International Airport** | Mr. Davidson is a design engineer for this project that consists of the design and construction of a 32,300 square foot storage building for the airport's snow removal equipment (SRE) fleet. Project included complete site civil design for the 3-acre site, and the preparation of plans and specifications. During construction responsibilities included coordination, consultation, review of shop drawings/submittals, and preparation of record drawings. Wood Rodgers also performed a topographic survey and geotechnical investigation of the site.



# Luke Chou, PE

# **Aviation Design**

#### **PROFESSIONAL PROFILE**

Mr. Chou obtained his Master of Science in Civil Engineering degree from the Georgia Institute of Technology, Atlanta in 2013. In his 2 years with Wood Rodgers, he has assisted lead engineers with complex grading and earthwork modeling, utility design, pavement markings, and roadway / aviation geometric design. After completing his Civil Engineering degree, Mr. Chou worked with a couple engineering firms in Texas and Georgia where he practiced engineering in multiple fields including oil and gas, residential and public works given Luke a broad understanding of civil engineering.



EDUCATION M.S./2013/Civil Engineering, Georgia Institute of Technology, Atlanta

B.S./2011/Civil Engineering, National Taiwan University, Taipei, Taiwan

#### REGISTRATIONS

Registered Professional Engineer, NV No. 027164

Registered Professional Engineer, CA No. 94611

**YEARS WITH FIRM** 2 years with Wood Rodgers

#### **PROJECT BENEFITS:**

- ✓ Detail oriented design background with focus on complex grading and earthwork projects.
- Proficient in FAA design standards.

#### **PROJECT EXPERIENCE:**

Taxiway M/B and GA Runup Areas, Reno-Tahoe International Airport, Nevada | Provided design assistance design for this project that includes, management, coordination, and preparation of documents associated with the reconstruction of Taxiway M in its entirety, Reconstruction of Taxiway B within the RSA limits of Runway 7-25 and then the construction of two separate General Aviation Runup areas off of Taxiway C, one north of Taxiway A and another south of Runway 7-25. Project construction and phasing will address access for the GA side of the airfield and coordination with Airport Operations and ATC to maintain separation of commercial and GA traffic to the extent possible.

**RTIA Ticketing Hall Expansion, Reno, Nevada** | Provided design assistance for this project that consisted of a planning study to determine the most beneficial method of expanding the available ticketing area within the existing airport terminal building. Wood Rodgers role was to review each option for civil impacts such as ADA accessibility, site grading impacts, utility design and geotechnical review. This planning study has reviewed several options to expand the available area including moving the exterior walls of the building to accommodate more room for customers as well as bathrooms and vendor areas.

**Runway 16R-34L Pavement Rehabilitation, Reno-Tahoe International Airport, Nevada** | Provided design assistance during construction for this project. This work consisted of pulverization of existing Portland Cement Concrete Pavement, subgrade preparation, asphalttreated permeable base, PCC pavement, removal replacement of centerline lights and marking. During construction, aided in review design elements associated with RFIs, submittal, and other construction related questions.



# Megan Klingler, PE

# **Aviation Design**

#### **PROFESSIONAL PROFILE**

Ms. Klingler graduated from the University of Nevada Reno in May 2018 with her Bachelors of Science in Civil Engineering. She has four years of experience in civil and structural design, her experience includes utility layout design, roadway design, airfield design, site grading for both public and private entities. Ms. Klingler's other responsibilities have included hydrologic and hydraulic modeling, storm sewer system improvements, layout of gas/water pipelines, demolition plans, airport layout, and field investigation.



EDUCATION B.S./2018/Civil Engineering, University of Nevada, Reno

REGISTRATIONS Registered Professional Engineer, NV No. 030029

**YEARS WITH FIRM** 5 years with Wood Rodgers

#### **PROJECT BENEFITS:**

- Experienced in AviPlan design for parking position configuration, and taxi routing during construction.
- Proficient in FAA design standards.

#### **PROJECT EXPERIENCE:**

**Runway 8-26 Rehabilitation, Reno Stead Airport, Reno, Nevada |** This project that consisted of the complete airfield engineering design and construction administration assistance for this Runway Reconstruction Project along with the majority of its connecting taxiways. This project included correcting taxiway geometry for three separate taxiways a portion of the parallel taxiway as well as full reconstruction of the primary runway. Project phasing included working around multiple taxiways providing continuous airfield access to the alternative runway and keeping complete airfield access to the BLM Air Tankers and the National Championship Air Race events in the middle of the construction season.

**Runway 16R-34L Pavement Rehabilitation, Reno-Tahoe International Airport, Nevada** | Design Assistant for the design of the rehabilitation of Runway 16R-34L pavement as well as Runway 16L-34R shoulders. Project design included a full evaluation of the entire length of the runway, mapping surface distresses along the length of the runway, pavement design, electrical design, geotechnical engineering as well as project phasing. This work consisted of pulverization of existing Portland Cement Concrete Pavement, subgrade preparation, asphalt-treated permeable base, PCC pavement, removal replacement of centerline lights and marking. During construction, will provide Engineer of Record Services to monitor construction for conformance with plans and specifications including review of material submittals, construction payment requests, change orders and record drawings.

Wildlife Hazard Management Project for Reno-Tahoe International Airport, Nevada | Design Assistant for the mitigation of the infield area at the Reno-Tahoe International Airport. Project design included infield area grading and drainage improvements in order to deter wildlife from entering the airfield area. During construction, will provide Engineer of Record Services to monitor construction activities for conformance with the plans and specifications including review of material submittals, construction payment requests, change orders and preparation of record drawings.



# **Mickey Smith, PE**

# **Geotechnical Engineering**

#### **PROFESSIONAL PROFILE**

Mrs. Smith has over 30 years of professional experience in geotechnical engineering, materials engineering, and construction quality control. She has been responsible for the overview of all field exploration and laboratory testing and design services executed during performance of geotechnical investigation reports and Engineer of Record project management. Mrs. Smith is responsible for the formulation of foundation design recommendations for structures, structural pavement sections (AASHTO), public and private improvements, and mass grading operations. She is also responsible for the design and evaluation of flood retention structures and embankments.



EDUCATION B.S./1980/Civil Engineering, University of Nevada, Reno

B.S./1981/Geological Engineering, University of Nevada Reno

REGISTRATIONS Registered Civil Engineer in NV #6972

Registered Civil Engineer in CA #38777

Registered Geotechnical Engineer in CA #2892

YEARS WITH FIRM 13 years with Wood Rodgers

#### **PROJECT BENEFITS:**

- Unique local and aviation specific experience
- ✓ 30+ year of professional experience brings an understanding to handle even the most complex geotechnical conditions.

#### **PROJECT EXPERIENCE:**

**RTAA Taxiway M & Taxiway B Reconstruction, RTIA, Reno, Nevada** | Mrs. Smith was the Geotechnical Engineer for this project that consisted of providing engineering services for the design, management, coordination, and preparation of documents associated with the reconstruction of Taxiway M in its entirety, Reconstruction of Taxiway B within the RSA limits of Runway 7-25 and then the construction of two separate (north/south) runup areas off of Taxiway C. Responsibilities included geotechnical report including recommendations for subgrade preparation and subgrade CBR design values for pavement design.

**Runway 8-26 Rehabilitation, Reno Stead Airport, Reno, Nevada** | Mrs. Smith provided geotechnical services on this project that consisted of the complete airfield engineering design and construction administration assistance for this Runway Reconstruction Project along with the majority of its connecting taxiways. This project included correcting taxiway geometry for three separate taxiways a portion of the parallel taxiway as well as full reconstruction of the primary runway. In addition, a mapped fault line runs through this project. As such additional field investigation was required to locate the fault line and provide recommendations for mitigation to ensure future movement would not cause the need to close the runway or trigger future reconstruction

**Project 2413 Taxiways A, F &F Improvements, Clark County Department of Aviation | North Las Vegas Airport, Las Vegas, Nevada |** Mrs. Smith provided geotechnical services on this project that consisted of subsurface soils investigations, laboratory testing, pavement design and preparation of complete plans, specifications and engineers estimate. The project consisted of miscellaneous FAA required airfield improvements including drainage improvements for much of the airfield, restriping of several taxiways and runways as well as pavement reconfiguration of 2 taxiways within the airfield to improve airfield safety. Additionally, several signage and lighting upgrades were designed to update the airfield to current FAA standards.



# **Kevin Almeter, PLS**

# Surveying

#### **PROFESSIONAL PROFILE**

Mr. Almeter has been in the surveying field for over 22 years. He has worked on numerous survey and mapping project for both private and public sector clients. He is skilled in easement and utility research, preparing boundary and topographic maps, ALTA surveys, utility surveys, water rights and environmental surveys. He has additional experience working in the field providing construction staking, boundary surveys and control surveys for aerial mapping for both small- and large-scale projects. Mr. Almeter has working knowledge of the most recent survey and mapping technology including GPS, robotic total stations, HDS laser scanning and LIDAR surveys.



EDUCATION B.S./2003/Geomatics Engineering, The Ohio State University

**REGISTRATIONS** Professional Land Surveyor in NV #19052

Professional Land Surveyor in CA #8705

YEARS WITH FIRM 16 years with Wood Rodgers

#### **PROJECT BENEFITS:**

- Solid understanding of the range of surveying techniques and how to best apply them to projects based on their context and accuracy requirements.
- Deep experience with right-of-way mapping with over 100 maps and descriptions produced for various transportation projects.

#### **PROJECT EXPERIENCE:**

**Nighttime Instrument Approach Feasibility Study, Carson City Airport, Carson City, Nevada** | Kevin led the control and topographic ground survey in support of the aeronautical obstacle survey in accordance with AC150/5300-18B. This VGA compliant survey was a critical step for the airport to support the nighttime instrument approach study which evaluated 2 PAPI solution to complex surrounding terrain. Together, Lean and Wood Rodgers successfully executed this survey and supported the FAA and airport to tackle an otherwise challenging issue for the airport.

**Runway 16L-34R Touchdown Area Rehabilitation, RTIA, Reno, Nevada** | Project surveyor on this project that consisted of civil design of the rehabilitation of runway pavement at the touchdown and turning areas of the runway. Project design included a full evaluation of the entire length of the runway, mapping surface distresses along the length of the runway, pavement design, electrical design, geotechnical engineering as well as project phasing. This work consisted of pulverization of existing portland cement concrete pavement, subgrade preparation, asphalt-treated permeable base, PCC pavement, removal replacement of centerline lights and marking. During construction Wood Rodgers provided Engineer of Record Services to monitor construction activities for conformance with the plans and specifications including review of material submittals, construction payment requests, change orders and preparation of record drawings.

**Runway 8-26 Rehabilitation, Reno-Stead Airport, Reno, Nevada** | Wood Rodgers was responsible for complete airfield engineering design and construction administration assistance for this Runway Reconstruction Project along with the majority of its connecting taxiways. This project included correcting taxiway geometry for three separate taxiways a portion of the parallel taxiway as well as full reconstruction of the primary runway. Project phasing included working around multiple taxiways providing continuous airfield access to the alternative runway and keeping complete airfield access to the BLM Air Tankers and the National Championship Air Race events in the middle of the construction season.



# **Doron Lean, PE**

# **Electrical Engineering**

#### **PROFESSIONAL PROFILE**

Doron has over 25 years of airfield lighting and FAA NAVAID experience with over 200 projects at over 100 airports in the United States. He is an industry-recognized leader in the many disciplines associated with airfield lighting, including runway and taxiway lighting, NAVAIDs, CAT III technologies, SMCGS, vault modifications, switchgear work, ALCS, and other associated electrical infrastructure. He is a frequent contributor to FAA Briefs and Advisory Circular and has performed over 200 Navigational Aids and Airfield Lighting Projects Worldwide. He is also a pioneer of several airfield lighting innovations including the first photometric testing machine used for in-situ field testing performance. Moreover, he has extensive, unique experience in design, maintenance, commissioning, and testing of airfield electrical systems.



# EDUCATION

B.S./1996/Electrical Engineering & Applied Mathematics, University of Maryland

**REGISTRATIONS** Professional Electrical

Engineer in NV #22749

Professional Electrical Engineer in CA #19808

YEARS WITH FIRM 20 years with LEAN Engineering

#### **PROJECT BENEFITS:**

- Strong knowledge of airfield electrical & FAA requirements
- ✓ PM/Lead Electrical Engineer at over 100 airports & 200 projects

#### **PROJECT EXPERIENCE:**

**Nighttime Operation Feasibility Study, Carson City Airport, Carson City, NV** Doron assisted with this study to determine which improvements to the airport lighting and instrument procedure design could be made to overcome unique FAA flight inspection limitations preventing all nighttime instrument approach operations into the airport. The analysis involved offset instrument approach procedures, preliminary design of a Runway Lead-In Light System, consideration for a 2-PAPI system on the same runway end, virtual in cockpit simulations of the lighting solutions, and Civil Air Patrol footage combined with ADS-B data.

**Runway 8-26 Rehabilitation, Reno Stead Airport, Reno, NV** | Doron was the Principal Electrical Engineer for this reconstruction project. The tasks included replacement of runway edge light system and base cans, replacement of Runway 8 and 26 REILS with LED system, added two new current driven PAPIs to both runway ends, evaluated the benefits of LED technology versus incandescent for the light fixtures, replaced taxiway edge lights, and replaced existing airfield guidance signs.

**Crescent City Airport, New Passenger Terminal with New Airfield Lighting and Generator Vault** | Doron served as the Principal Electrical Engineer for the design of the terminal and airfield lighting vault. The project included the redesign of the power distribution system (from 480V 3 Phase 4W into Airfield Lighting Vault Room), CCRs, panelboards, generator, UPS, mechanical and architectural design, lightning risk evaluation, and protection design.

**Roosevelt Municipal Airport, Runway 07-25 Rehabilitation** | Doron was the Principal Electrical Engineer for the rehabilitation of Runway 7-25, including several electrical modifications. This included the removal of the existing stake mounted runway edge and threshold lights, runway and taxiway guidance signs, base cans with base can mounted lights and new runway and taxiway guidance signs and distance, replace REILs on both runway ends, and construction administration services.



# Paul Hannah

# Airspace Planning

#### **PROFESSIONAL PROFILE**

Paul Hannah is an Airspace and Flight Operations Engineer with extensive experience in runway length determination, runway siting, obstacle evaluation, NAVAID implementation, instrument procedure design, airspace analysis, stakeholder coordination, and FAA data management. Paul works with airports and aircraft operators to evaluate the feasibility of flight operations, the effectiveness of NAVAID/lighting investment, the cost-benefit of runway enhancements and payload-range capabilities for corporate, scheduled and military flight operations. Paul works closely with all active FAA lines of business and airports to ensure that projects occur on time, with successful enhancements to safety and operational efficiency.



#### EDUCATION

B.S./2001/Aerospace Engineering and Mechanics, Minor in Geography and Geographic Information Systems, University of Minnesota

#### Registrations

President Emeritus of Society of Aircraft Performance and Operations Engineers Airport Industry Liaison (SAPOE)

FAA Aeronautical Charting Forum & Instrument Procedure Group Participant

FAA Takeoff & Landing Performance Assessment Rulemaking committee

#### **PROJECT BENEFITS:**

- Experience with Airspace and FAA stakeholders in the California region
- ✓ Active experience with aircraft performance and emerging navigation and flight procedure technologies (ELVO, A-RNP, GBAS/WAAS)

#### **PROJECT EXPERIENCE:**

**Carson City Airport, Nighttime Operation Feasibility Study** | Paul was the Sr. Airspace Engineer for this nighttime feasibility study to determine which lighting improvements & instrument procedure design could be made to overcome unique FAA flight inspection limitations preventing all nighttime instrument approach operations. Analysis involved offset instrument approach procedures, preliminary design of a runway lead-in light system, consideration for two PAPI system on the same runway end, virtual in-cockpit simulations of lighting solutions, and Civil Air Patrol footage combined with ADS-B data. Paul led a regional & national FAA stakeholder review of proposed solutions to enhance chances of receiving FAA funds to pay for design/construction.

**Sacramento Int'l Airport – Runway 16R-34L Reconstruction** | Paul was the Airspace Planner to rehabilitate SMF's primary runway. LEAN was responsible for flight procedure and aeronautical data coordination, analyzing potential impact of increasing the height of the runway in relation to ILS CAT III procedures, and the replacement of all affected electrical fixtures on the runway. Paul was responsible for the airspace component of this project.

San Francisco Int'l Airport – RSA Phase 1 and 2 – Runways 10-28s and 1-19s | Paul was the Sr. Airspace and Flight Operations Engineer for the largest airfield project at SFO in the past 50 years, which included the relocation of all four runways. Paul analyzed several conceptual declared distances and NAVAID siting combinations to assist the project team with the phased rehabilitation and relocation of ILS components. This analysis required careful understanding of both the current NAVAID criteria, airspace changes caused by the OAPM and specific changes resulting from CSPO, SOIA and non-standard CAT II/III approach applications. The analysis provided by Paul resulted in several cost-effective solutions that permitted ideal displaced threshold locations and NAVAID/lighting installations with the lowest possible loss of capability for arriving and departing aircraft.



# Carson City Airport Statement of Interest and Qualifications for Airport Architectural/Engineering Services July 13, 2023



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# TABLE OF CONTENTS

Table of Contents	01
Cover Letter	02
Firm Profile	04
Capability to Perform	06
Environmental Impact Statement	07
Key Personnel	08
Capability to Meet Schedules and Deadlines	14
Quality of Projects Previously Undertaken	15
Capability to Complete Projects without Cost Escalations	16
Qualifications and Experience of Sub-Consultants	22
Capability of Branch Office	23
Ability to Furnish Qualified Inspectors	24
Understanding of Project's Potential Challenges	28
Degree of Interest Shown	30
Capability to Incorporate and Blend Aesthetic and Architectural concepts	31
Disadvantaged Business Enterprise (DBE) Contract Goal	32
Capability to Conduct a Value Engineering Study	32
References	33

# THANK YOU

#### for your consideration!

Dear Corey Jenkins and Selection Committee Members,

As we continue our journey together at the Carson City Airport (CXP), let us look ahead to the year 2028. The airfield pavement has undergone rehabilitation, the airport lighting has received upgrades, and the drainage system has been enhanced. Moreover, the runway has been extended, marking a significant improvement. However, the most notable advancement lies in the installation of the offset Precision Approach Path Indicator (PAPI). This installation has successfully addressed the restriction to nighttime instrument approaches, enabling legally permissible flights after sunset. These forthcoming projects are set to bolster safety measures and enhance operational efficiency, benefiting pilots, airport businesses, airport tenants, and the encompassing Carson City community.

Given the momentum that the entire project team, which includes CXP leadership, Armstrong, and Coffman, has put in motion regarding the ongoing nighttime approach procedure enhancements and runway extension efforts, we firmly believe that keeping the existing team in place will enable the airport to achieve the highest probability of success on these high priority projects.

#### **CLIENT-FOCUSED SERVICES**

For 50 years Armstrong Consultants, Inc. (Armstrong) has served our clients as an airport exclusive consulting firm, providing engineering, planning, and construction administration services. As was recently announced, Armstrong has merged with H.W. Lochner (Lochner), a consulting firm founded in 1944 specializing in surface transportation, rail, transit, and aviation. While Lochner has a broad transportation focus, Armstrong will continue to focus solely on your aviation projects and the benefit of your airport to the local and regional community. Your Armstrong team will be consistent and include the following team members:



Chris Nocks, P.E.: "My role as the Principal in Charge is to continue to ensure that CXP receives the engineering and valueadded services it needs to be successful. We are dedicated to effectively delivering our services, participating in key project

milestones, providing Quality Assurance/Quality Control (QA/QC) support, and strategic guidance as needed. Our local office is just 30 minutes north of CXP, making Armstrong a local, trusted, and stable partner committed to serving you for the long term."



Nadine Burgard, P.E.: "As your dedicated Project Manager and main point of contact, I will oversee and manage all tasks, projects, and special requests for CXP. It is both my duty and pleasure to ensure that your projects are designed and executed to the

highest quality engineering standards. Over the years, I have consistently provided you with valuable information and education, and I remain just a phone call away to address any queries or concerns that may arise regarding CXP."



Paul Kastler, P.E.: "As the Armstrong team's Design Engineer, I will lead the preparatory design aspect of your projects and serve as a valuable resource to Nadine. My six years of experience in civil design - including Department of Transportation (DOT) transit

projects, municipal work, and aeronautical projects - I will contribute as an essential team member. My experience as an Army Engineering and Civil Affairs Officer reinforces the importance I place on effective communication and timeliness to CXP projects. My certification as a private pilot will bring a user's perspective to your projects."



Mike Dikun, C.M., C.A.E.: "Your Armstrong team provides exceptional support that surpasses industry standards. In addition to delivering personalized client service of the highest caliber, we provide a comprehensive

# **PROUD OF OUR PAST.**

range of value-added services. One such service is airport management advisories. This is the area where my expertise comes into play. My extensive background in airport management, airfield maintenance, and operations has accumulated over my 33 years in the industry. As a pilot and one of three former airport managers on our team, I will continue to bring a unique perspective to CXP and offer support whenever the need arises. I am just a phone call away and can quickly be on site due to our local presence."

#### CONSISTENCY AND IN-DEPTH KNOWLEDGE

The Armstrong team has worked with CXP team since 2018. Over these past 5 years, we have completed seven projects and valued at over \$2.64 million in Airport Improvement Program (AIP) and Nevada Department of Transportation (NDOT) grant funds. Our goal is to combine our detailed knowledge of CXP and your long-term vision to help you become the airport you envision. CXP is important to Armstrong, and our team is personally invested in your success. We also know your airport needs a proactive consultant that understands State and Federal Aviation Administration (FAA) grant processes, local site conditions, and we have a proven record of accomplishments at CXP and other airports just like yours. We will continue to support CXP staff and are committed to remaining highly responsive and active in all your airport needs.

#### **EXEMPLARY SERVICE**

Beyond providing exemplary airport engineering and planning services, Armstrong focuses on providing an unrivaled level of service to our airport clients. We do this by fully leveraging the vast experience each of our team members have on a broad spectrum of airport related matters, and providing timely and time-tested solutions to whatever the issue might be. These all-inclusive services contribute to the airport's viability and alleviate the workload of the Airport staff.

Our value-added services encompass airport operations and management support, provided by our experienced team of

former airport managers. Armstrong maintains a dedicated staff to support the Airport's Disadvantaged Business Enterprise (DBE) program. This team of specialists assists in establishing DBE performance goals and maintaining an upto-date DBE plan. Armstrong possesses expertise in airport marketing and can provide marketing assistance tailored to CXP's needs. Furthermore, our team can handle the grant administration process, assist with airspace reviews for on-airport development, and provide various other airport-related services, all aimed at ensuring a prosperous and dynamic future for CXP. These unique value-added services form part of The Armstrong Advantage, where we prioritize delivering value to our clients every day. With our knowledge and capabilities, we can provide CXP with sound advice in any circumstance, guiding the CXP team towards appropriate courses of action.

Over the years we have provided you with candid guidance and honest solutions ensuring that your airport completes necessary projects on time and on budget. We are invested in the success of Carson City Airport and the greater Carson City community. Armstrong is here to support CXP's goals with integrity, expertise, knowledge, and wisdom. Our primary goal is to continue to be an extension of your staff; your Armstrong team is here for you at every step along this journey. What needs to be done will be done together. We strive to exceed your expectations.

If you have any questions about our submittal or would like further information, please contact me.

ĆHRIS NOCKS, P.E.

Principal-in-Charge | Engineering Operations Manager 751 Horizon Court, Suite 255, Grand Junction, CO 81506 (970) 242-0101 | cnocks@armstrongconsultants.com

# FOCUSED ON THE FUTURE!

# Firm Profile

1973

1985

2010

2015

2017

2018

2021

Today

Future

Armstrong Consultants

was founded in Grand

We became Aviation

Exclusive, allowing us to

become experts in our

Opened offices in

Phoenix, AZ.

Denver. CO.

Reno, NV.

Albuquerque, NM, and

Opened an office in

Opened an office in

Junction, CO.

industry.

# ARMSTRONG

### A LOCHNER COMPANY

Our story began in 1973 when Ed Armstrong founded the firm in Grand Junction, Colorado. By 1985, we became an airport exclusive consulting firm specializing in engineering, planning, and construction administration. Since then, we have become a leading firm in our industry. These 50 years have been full of growth and dedication to airports, and we are grateful to be serving communities across the United States. Entering 2023 and looking ahead to the next 50 years, we have much to celebrate. While we are proud of our past, we are focused on the future. *Your Armstrong team will provide:* 



We understand airports from the ground and from 300 feet in the air on final approach. Our team has several pilots on staff, which enables us to incorporate a pilot's perspective into every solution we develop. Our passion and enthusiasm for flying are the motivators behind our core services.



**RESPONSIVE ON-SITE SERVICE** 

We are available when you need us. Whether discussing project scoping, monitoring investigations, gathering input from the community, or delivering an airport improvement update to stakeholders, we are here for you. Your staff is supported by a team with decades of experience.



We consider not only how an airport can be utilized, but how it can be better optimized for travel. The engagement and emotional attachment someone feels towards your community begins at your airport. We will work together, combining our experience with your unique vision for Carson City Airport.



CONTINUOUS COMMUNICATION

Ongoing communication is essential for successful projects. We will maintain continuous contact with you, FAA staff, NDOT, and other project team members. We understand that communication will be the means through which we accomplish your airport goals. As we are always looking for ways to improve, we would recommend that establishing a regular meeting with the entire project team (including the Airport's Planning consultant), would further

enhance the level of service that the airport is receiving.



**Original Selection with** 

Opened offices in Las Vegas, NV, Casper, WY, and Santa Rosa, CA.

As a Lochner Company, Armstrong has nearly 60 team members across 8 offices, have worked in 10 states, and collaborate with 3 FAA regions and 5 ADOs.

**Continuing to work with you and your airport** to build your community a better future.



# OUR BUSINESS IS AVIATION. OUR PRIORITY IS YOU.

# WHY CHOOSE US?

**EXPERIENCE** – Our presence has grown from becoming airport exclusive in 1985, to having completed more than 3,000 projects at more than 130 airports across the western and southwestern United States. This means providing you with a team that has completed projects just like yours, at airports just like yours, dozens of times over. No surprises, no challenge that we can't solve!

**EXPERTISE** – Having specialized exclusively in airports for more than 35 years, we have built extensive expertise in airport planning, engineering, and construction administration serving general aviation airports, commercial service airports, and military airfields. All of our internal processes are designed to deliver airport planning and development projects in accordance with FAA and State specifications and regulations. We will apply this expertise to develop effective solutions to your challenges and to the delivery of your projects!

**SERVICE** – Our corporate culture is built on providing an exceptional level of client service. We will continue provide you with this same level of exceptional, proactive, personalized service that our current clients, some of whom have been with us for more than 30 years, have come to know and expect. This means that although our business is aviation, our priority is you...your projects, your needs, your airport!



Dedicated Airport Professionals



Years of *Aviation Exclusive* Experience



# **OFFICE LOCATIONS**

Arizona Office

2345 S. Alma School Rd., Ste. 208 Mesa, AZ 85210

**California Office** 3558 Round Barn Blvd. Ste. 200 Santa Rosa, CA 95403

Colorado Offices

751 Horizon Ct., Ste. 255 Grand Junction, CO 81506 6855 South Havana St, Ste. 635 Centennial, CO 80112 Nevada Offices 1575 Delucchi Lane Ste 219 Reno, NV, 89502

3753 Howard Hughes Pkwy, Ste. 200 Las Vegas, NV 89119

New Mexico Office 2201 Buena Vista Dr SE, Ste. 204 Albuquerque, NM 87106

Wyoming Office 330 South Center St., Ste. 414 Casper, WY 82601



Airport Projects Completed



States with Active Armstrong Clients

# Capability to Perform

Our engineers are licensed throughout the United States and are committed to engineering excellence, cost control, sponsor involvement, on-time completion, and up-to-date technology. Working with our other in-house disciplines enables the engineering team to evaluate system options in the context of the entire project, optimizing performance and minimizing cost.

Unlike most engineering and planning firms, Armstrong has worked exclusively on airport projects for more than three decades. Our firm has vast experience, knowledge, and expertise with airport development and is eager to support you. Armstrong's professional engineering portfolio provides a complete range of airport-focused design services, including:





Engineering Ops. Manager

#### AIRPORT ENGINEERING SERVICES

- Runways, Taxiways, and Aprons •
- Perimeter fence and security upgrades •
- Airfield Lighting, Signage and Visual Aids •
- Terminal and Landside Facilities •
- Snow Removal Equipment and Buildings •
- Hangar Facilities •
- Navigational Aids (NAVAIDs) •
- Contractor Bidding
- Aircraft Rescue and Fire Fighting (ARFF) • Equipment and Facilities
- Pavement Design •
- **Fuel Facilities** •
- AGIS Obstruction Surveys •
- Roadways and Parking •
- Safety and Operations Plans •
- Utility Design and Relocations •
- Geotechnical Investigation •
- Landside Development •
- Grant Administration and Funding •
- Drainage and Stormwater management •
- Airport Grading and Geometry •



DANNY REED CAD Manager

### DRAFTING/DESIGN

Armstrong's technological resources improve the quality of our clients' documentation for sponsor and public involvement programs. Our in-house design and CAD capabilities allow us to generate 3D terrain models to evaluate different design scenarios for each project. Our information technology contributes to the professional design and presentation of your key deliverables efficiently and timely.





Project Manager

Principal In-Charge

#### AIRPORT PLANNING SERVICES

- Airport Master Planning
- Airport Layout Plans (ALP) •
- Electronic ALPs (eALP)
- Airspace Obstruction Analysis
- Airport Noise Analysis •
- Analyze Thermal and Visual Plume Impacts
- Aviation Forecasting •
- **Benefit-Cost Analysis** •
- Capital Improvement Planning
- Cultural and Historical Resource Reviews •
- Environmental Site Reviews
- **Environmental Studies**
- FAA Aeronautical Surveys ٠
- **GIS** Aeronautical Data Collection
- **GIS Airport Planning Tools** •
- Government Relations Tools •
- Instrument Approach Procedure Coordination
- Land Use Compatibility Planning •
- Public Involvement/Consensus Building •

#### • Special Studies - RPZ Analysis

#### ENVIRONMENTAL SERVICES

- **Environmental Assessments**
- Categorical Exclusions •
- NEPA & State Compliance
- Noise Compatibility Studies ٠
- SWPP/SWCC Plans
- Wetland Delineation/Mitigation



#### CLIENT MANAGEMENT SERVICES

- In-person communication during onsite visits and airport meetings
- Marketing and community MIKE DIKUN, C.M., C.A.E. outreach support Western Pacific Territory Mgr.

Statement of Interest and Qualifications for Airport Architectural/Engineering Services







**Communications Coordinator** 

Copy Write

Media Kits

Earned Media

Market Research

SIERRA SEGREST Marketing Coordinator

#### AIRPORT MARKETING SERVICES

•

- Website Development
- Video & Photography
- Presentations
- Social Media Management
- Advertisement
- Branding
  - Graphic Design

#### Surveys Want to see what we can do for you?

Visit our website ArmstrongConsultants.com for examples of our exceptional marketing materials. Additional examples, including drone footage and marketing videos, can be found on the Armstrong

Consultants Facebook and YouTube pages.



ERIK VLIEK, M.B.A. Finance Director

#### **GRANT MANAGEMENT**

- Delphi Requests
- Submit Grant Applications
- •
- Complete Required State Grant Forms •



- Tenant relationships .
- Airport Operations and Safety
  - Comprehensive understanding of Airport Certification Manual requirements and development
  - Aircraft rescue and firefighting (ARFF)

JESSICA CALLOW Project Coordinator DBE Specialist

### **PROJECT COORDINATION**

- Edit technical specifications
- Assist in drafting grant applications
- Coordinate project advertising with Sponsor and newspaper •
- Upload project information to website •
- Develop and coordinate contract documents with Sponsor and Contractor
- Assist project closeout
- Assist with bidding
- Updating grant paperwork ٠

### DBE COORDINATION

- Complete yearly achievement reporting on all of our NPIAS Airports
- Regularly attend the Annual FAA Civil Rights Convention to stay on top of changes and updates to the program
- Foster a positive relationship with the FAA DBE Compliance Specialists in each Region
- Track on-going payments to DBEs on all projects
- Identify and pursue local DBE firms for participation in design, construction, and planning projects
- Review goals and accomplishments over the past three years for FAA-funded projects
- Determine availability of DBE firms in the market area and use past award information to reflect expected DBE participation
- Break out race-neutral versus race-conscious actions. This is dependent on past years' accomplishments and records.
- Review other information sources such as the state DBE Directory
  - Airport revenue generation and • expenditures, other budget/finance needs
  - Relationships and coordination with • local, state, and federal elected officials, stakeholder outreach and managing community expectations
  - Non-federal funding opportunities

### **ENVIRONMENTAL IMPACT STATEMENT**

Armstrong does not provide Environmental Impact Statement (EIS) related services. We have strategically made this decision to not offer this level of NEPA documentation services because by working on an EIS legally excludes a firm from participating in any subsequent planning, design, or construction related activities. As our primary lines of business are airport planning and engineering, we purposely do not intend to provide EIS services. We do, however, provide services for less involved levels of NEPA documentation (Categorical Exclusions and Environmental Assessments), as our participation in these forms of NEPA documentation does not exclude us from participating in related planning or engineering activities.





MIKE DIKUN, C.M., C.A.E. Airport Management Advisor

- Complete Required FAA Grant Forms
- Grant Troubleshooting

# **Key Personnel**



Kurt Haukohl State Aviation Manager

# **Planning Support**



Justin Pietz Plan. Principal-in-Charge Planning Director



Engineering

Chris Nocks, P.E.

Eng. Principal-in-Charge

Nadine Burgard, P.E. Eng. Project Manager

Engineering Ops Mgr.



**Ryan Spicer** Civil Engineer

### **Client Services**



Mike Dikun, C.M. C.A.E. Territory Mgr. | Airport Management Advisor



Paul Kastler, P.E. Airport Engineer



Sam McGovern, E.I. Airport Design Engineer

CAD Support

# **Resident Project Representative**

Danny Reed CAD Manager



**Subconsultants** 

GLEAN

Karson Farrell

Project Inspector

PK Electrical, Inc. Engineering · Design · Consulting



Joey Ganser, P.E.





Steve Villaneuva Electrical Designer

**Airfield Lighting** 

# Paul Cavin Architect LLC



Paul Cavin, AIA, NCARB Architect, Owner

# Architecture





David Crook, P.L.S. Professional Land Surveyor

Geotech/Survey/ **Municipal Engineering** 



Paul Hannah Senior Airspace & Flight **Operations Engineer** 



**Tyler Hawkins** Senior Engineer

Electrical/Approach Development



#### **YEARS OF EXPERIENCE**

20 Industry, 13 Armstrong

#### **EDUCATION**

M.S. Engineering Systems Civil Engineering

Colorado School of Mines B.S. Geological Engineering

Colorado School of Mines USAF Civil Engineer

Officer Training Air Force Institute of Technology

#### **LICENSES**

Professional Engineer: CA, CO, ID, MT, ND, NE, **NV** (21564), UT, WY

#### **AFFILIATIONS**

American Society of Civil Engineers - Member

Society of American Military Engineers - Member

Nevada Aviation Association - Member

#### **CONTACT ME**

(970) 255 2015 751 Horizon Court Suite 255 Grand Junction, CO 81506 cnocks@ armstrongconsultants.com As your Principal-in-Charge and Engineering Operations Manager, I am responsible for providing training, guidance, and direction to our engineering staff. I ensure that our engineers' individual strengths are assigned to a team that aligns with the unique needs of our clients. Based on the City and CXP's unique needs, I have assigned Nadine Burgard, P.E. to continue serving as your project manager. Her vast experience working for airports across Nevada, including CXP, and completing projects like those upcoming in the City makes her the ideal person to manage your projects. In addition to continuous project design and oversight, I will continue to focus on your strategic planning and offer creative problem solving to CXP. For your upcoming projects, I will work closely with Nadine and our design engineers by providing quality control and quality assurance, as well as insight and support to complex projects. I have had the opportunity to serve CXP since being selected in 2013 and have worked on each of your previous airfield improvement projects during our partnership. My knowledge of your facilities, vision, and goals will allow me to continue to seamlessly guide our team and establish successful, high-quality project results. As such, I am always available to you for any requests, questions, or concerns you have about your projects.

My passion for aviation began when I was a child and eventually led me to seeking a commission in the US Air Force through the ROTC program at Colorado School of Mines. In the Air Force I served as a Captain and Civil Engineer Officer. Twice during my career I deployed in support of Operations Iraqi and Enduring Freedom, my first deployment was as a Project Manager on 28 projects valued at over \$6 million at AI Dhafra Air Base, United Arab Emirates. During my second deployment, I served as the Military Construction Program Manager for U.S. Forces - Afghanistan for six months during my deployment and developed a construction program worth over \$8 billion to support current and future mission requirements in Afghanistan. Once my time in the Air Force was complete, airport consulting became the best way for me to continue to stay involved in aviation and airport design and construction.

I look forward to guiding your engineering team as we continue to strive for new heights at CXP. The projects shown in this Statement of Qualifications demonstrate our successful teaming experience, both as a core project team as well as working with the subconsultant firms presented to CXP.

Throughout my career, I have completed the following projects:

16











#### YEARS OF EXPERIENCE

8 Industry, 2 Armstrong

#### **EDUCATION**

B.S., Civil Engineering, University of Nevada, Reno

M.B.A. University of Nevada, Reno

#### LICENSES

Professional Engineer: CA, NV (25193)

#### **AFFILIATIONS**

Association of California Airports Nevada Aviation Association (NVAA) American Society of Civil Engineers - Member

#### **CONTACT ME**

(775) 346 3011 1575 Delucchi Lane, Suite 219 Reno, NV 89502 nburgard@ armstrongconsultants.com



2021 Southwest AAAE Corporate Excellence Award Nadine's Role: Project Manager

As your Airport Engineering Project Manager located at our Reno office, I will continue to provide high-level personalized client service to the City and CXP and will have in-depth involvement throughout each project. As shown on the organizational chart, I will continue to work in tandem with Chris Nocks, P.E. to build upon our teams' foundational knowledge of your goals and further ensure your needs are being met by our team throughout all your upcoming projects. Since joining Armstrong, I have had the opportunity to work on CXP projects including the recent design and pending construction of the SRE building, the relocation of the AWOS, and acquiring SRE equipment.

In this role, I enjoy interacting with airport managers and airport operations staff to understand their vision for the design and functionality of their facilities. It is also rewarding to see my projects advance from design through construction to completion. Having numerous clients in the area, we are fortunate to be within an hour drive from most of them. Our proximity to our Nevada clients not only allows us to visit on site during construction projects, it also reinforces the relationships we have developed in our local airport community. I continue to gain vast industry knowledge everyday – from the best construction materials to use while building a runway, to how evolving aircraft technology can influence the design of an airport. It is exciting to be part of this industry and contribute to the ever-evolving growth and impact on our communities.

I oversee engineering design work, prepare construction project management documents, plans and specifications, build cost estimates, compile project design reports and final reports, and manage client grant applications. My experience includes project management of multi-disciplinary projects, technical engineering design, budget estimates and construction schedule management.

I look forward to managing your engineering projects as we continue to strive for new heights at CXP. The projects shown in this Statement of Qualifications demonstrate our successful teaming experience, both as a core project team as well as working with the subconsultant firms presented to CXP.

Throughout my career, I have completed the following projects:





1





**YEARS OF EXPERIENCE** 10 Industry, New to Armstrong!

#### **EDUCATION**

B.S. Civil Engineering, University of Colorado

**LICENSES** Professional Engineer: CO, **NV**, WY, WA

#### CERTIFICATION

Private Pilot

**AFFILIATIONS** 

Colorado Airport Operators Association (CAOA)

Aircraft Owners and Pilots Association American Society of Civil Engineers

**CONTACT ME** (303) 309 8046

6855 South Havana Street Ste 635 Centennial, CO 80112

pkastler@armstrongconsultants.com

I look forward to continuing to serve CXP by providing quality design and construction administration for assigned engineering projects. I will work closely with your project manager, Nadine, our design engineers, and our team of airport planners. Not only am I an experienced engineer, but I am also a pilot. With several pilots on your team, we will analyze your projects from a user's perspective.

During my time at Armstrong, I've had the opportunity to assist on a number of airport projects across the state of Nevada. These opportunities have given me valuable insights into the unique requirements and distinctive features of airports in Nevada. As a result of this experience, I have acquired a deeper understanding of the intricacies involved in working on Nevada-based projects.

Though I am a new team member to Armstrong, I have 10 years of experience as an engineer. During my time as a civil engineering student at University of Colorado, I interned at the City of Lafayette. This introduction to engineering gave me broad experience from popping manhole covers to construction management. After graduation, I joined the U.S. Army. I was excited to serve, have new experiences, and expand my knowledge as an engineer. I served for five years as an Engineer Officer and qualified parachutist where I worked throughout the United States and abroad on airfields, roadways, and infrastructure. I learned unique engineering and leadership practices during my time in the Army and I have utilized this knowledge and experience in all my projects throughout my career.

More recently, I worked at an engineering firm in Seattle in the transportation sector. During this time, I worked on a broad range of infrastructure projects with local municipalities, state agencies and private clients. I quickly progressed in the company and became a leader as Design Lead and Construction Manager on roadway, mass transit and active transportation projects This is where I learned the importance of relying on people around me who are each essential to a successful project.

Aviation has always been a passion of mine and that is why Armstrong is a perfect fit for me and my career goals. My father was a commercial pilot and flew in the military, so I grew up around airplanes and airfields. I was lucky enough to complete my flight training in an aerobatic tail dragger. I feel at home in the aviation world, and I look forward to feeling at home at CXP.











#### **YEARS OF EXPERIENCE**

33 Industry, 5.5 Armstrong

#### **EDUCATION**

B.A. Economics Muhlenberg College

#### **CERTIFICATIONS**

Certified Member (C.M.) American Association of Airport Executives Certified Airport Executive (C.A.E.) Southwest Chapter AAAE Private Pilot

#### **AFFILIATIONS**

American Association of Airport Executives Association of CA Airports Southwest Chapter AAAE Board of Directors 2010-2016 Nevada Aviation Association

Past President 2016-2018

#### **CONTACT ME**

(775) 346 3010 1575 Delucchi Lane, Suite 219 Reno, NV 89502 mdikun@armstrongconsultants. com

# RECENT AWARD

2021 Southwest AAAE | Corporate Excellence Award | Mike's Role: Armstrong Airport Mgmt. Advisor I have had the privilege of serving CXP for the past five years and I will continue to be available to you as Armstrong's Western Pacific Territory Manager and Airport Management Advisor.

As the Pacific Territory Manager, I will ensure you continue to receive the service, communication, and support necessary to accomplish your aviation goals. Armstrong offers support beyond engineering and planning, and I serve as the liaison to that support. The City and CXP have unique needs, and I will work to ensure you continue to receive tailored services to meet your goals.

I am one of three former Airport Directors on staff providing our clients with the unique value-added service of Airport Management Advisory. In this role, I provide insights and support from 27 years of airport management experience working at Reno-Tahoe International (RNO), Reno-Stead (RTS), South Lake Tahoe (TVL), Adirondack Regional (SLK), and Bozeman-Yellowstone International (BZN). From providing sound advice on airport management and operations related items, to assisting with staff training and recruitment, I will continue to support your staff by helping to find creative solutions to any aviation related issue.

I worked with CXP airport staff during the recent snow removal equipment procurement. Based on staff input, I worked with Armstrong and FAA staff to specify the appropriate equipment, identify various resources able to meet airport and FAA purchasing requirements, secure the grant and complete the procurement process.

Throughout my career I have remained active in the aviation community, serving as a board member on both regional and statewide aviation organizations. I served as President of NVAA from 2016-2018. I am proud to continue to support the NVAA team in our mission to promote and support airports and aviation in Nevada. I am committed to advancing aviation in Nevada and to continue contributing to your success in the Carson City community.



# KARSON FARRELL Resident Project Representative

**YEARS OF EXPERIENCE** 5 Industry, New to Armstrong!

#### **EDUCATION**

B.S. Business Marketing and Economics, University of Nevada Reno

#### **CONTACT ME**

(702) 677-1140 1575 Delucchi Lane, Suite 219 Reno, NV 89502 kfarrell@armstrongconsultants. com My career in construction administration has been a journey fueled by passion and a strong work ethic. Before joining Armstrong, I played a crucial role in helping developers build ranches and equestrian properties. My responsibilities encompassed project management, payroll administration, subcontractor coordination, and ensuring successful project completion. I also excelled at managing client relationships and driving the progress of design discussions.

Joining Armstrong aligned perfectly with my love for construction administration and career goals. Completing a project, seeing it smoothly constructed, and witnessing the pride it instilled in everyone involved is my ultimate goal. I find satisfaction in being actively involved in projects from start to finish.

As a proud native of Boulder City, Nevada, now residing in Reno, Nevada, I I have a strong understanding of Nevada's operational dynamics and the local soils and native landscapes.Being located in Reno provides the advantage of being in close proximity to our clients throughout Nevada, including Carson City. I am readily available to provide on-site support, ensure efficient construction management, and foster the continued growth of our connections within the airport community at the Carson City Airport.

My dedication to my craft is unwavering. I have found fulfillment in bringing projects to completion and leaving a lasting impact on the physical landscape. With each new endeavor, I carry my passion, experience, and commitment to excellence, ensuring that every airport I contribute to would stand as a testament to Nevada's remarkable progress.

# Capability to Meet Schedules and Deadlines

Budget and schedule are the two most critical factors associated with any airport construction project. The ability to effectively manage both is vital to achieving successful results, and Armstrong is proud of our results managing on-budget/on-schedule project completions over the last few decades. While our stats speak for themselves, our in-house processes behind the results are important differentiators between us and our competitors. *You will find examples of our project budgets on pages 16-21*. Below are some key items that we have mastered that have led to our tremendous success on this front:



#### **ROBUST DESIGN PROCESS**

Nothing has a greater impact on cost and schedule during construction than "unforeseen" conditions that drive costly change orders and cause schedule slippage. Our design process, which starts with a detailed site investigation, includes multiple trips to the field by our design staff, and culminates in a thorough, in-house quality control program, produces designs that are clear, concise and accurate. Our plan quantities undergo a three-level review to ensure accuracy, which virtually eliminates uncertainties concerning quantities during construction. Our time-tested design techniques are frequently lauded by contractors because we have evolved these techniques to produce high quality results with minimized complexity. In a low price, technically qualified bid environment, these design techniques are critical in ensuring the Sponsor gets the results they expect in every project. Finally, we implement the latest in CAD and design software, and our staff are expert technicians in the software's use.

#### **CONSTRUCTIBLE PLANS**

Through experience gained from decades of airport construction projects, as well as numerous staff members with past construction industry experience, our construction plans are thoroughly vetted for constructability. While we are constantly developing innovative designs, we do not tweak designs just to try something different. We take a very conservative approach to implementing new design alternatives. While we are constantly looking for ways to improve project outcomes and finished product longevity, we undergo a multilevel review of any new/untested design techniques to ensure the technique is constructible, and, if it is constructible, it can be accomplished in a more timely manner than the original technique. Having constructible plans provides a very sound assurance policy against schedule and budget slippage.

### **EFFECTIVE PHASING PLANS**

In addition to our engineers and planners, we have experienced former airport managers on our staff to help us improve a variety of the services that we offer as a firm. One of those services is developing very thorough and effective Construction Safety and Phasing Plans (CSPP). Our design staff works closely with our on-staff airport managers to develop CSPPs that strike the perfect balance between minimizing impacts to airport operations and maximizing construction output. By providing a CSSP that has been thoroughly reviewed and vetted by experienced airport managers and engineers, Armstrong hopes to reduce the time required for full review and approval of the final plan. Our CSPPs leave nothing to the imagination and provide exacting detail work phasing and work area delineation. Not only does this maximize operational safety during construction, but it also eliminates contractor uncertainty and provides a solid foundation for the contractor to base their detailed work schedule on. These efforts result in on time completions with no contractor or Sponsor surprises. A thorough CSPP also provides information to inform airport tenants of all potential impacts of the project on airport operations.

# REAL TIME CONSTRUCTION PROGRESS MONITORING

Our Project Managers and on-site Resident Project Representatives (RPR) are continuously monitoring the progress of construction projects to ensure that the contractor is staying on-track with quantities and schedule. Our RPRs check in with the contractor's on-site superintendent daily to track quantity progress and to verify the contractor is staying on schedule with the day's planned work. Our staff conducts weekly meetings with the contractor and Sponsor to go over the progress over the past week and look forward at the upcoming scheduled milestones. Through this robust process, we are able to detect any issues that may cause schedule and/or budget slippage and proactively address these issues before passing the point of no return. By getting out in front of these potential issues, our Project Managers and RPRs are able to develop alternative strategies and avoid budget and schedule impacts.

# Quality of Projects Previously Undertaken

A high-quality project is a direct result of having a highly experienced team with unwavering dedication to your airport's success. Achieving the highest quality project outcome requires choosing the right solution for your airport and community vision, then skillfully executing that vision. Quality and client satisfaction go hand in hand; without one, the other is minimized. The quality of a project goes beyond a successful final product. Below are various aspects in which we are dedicated to provide the highest quality to our clients:



# **AVIATION KNOWLEDGE**

### We have the highest quality of people

Our staff of industry experts have dedicated their careers to the development and advancement of aviation. We focus exclusively on airports and we have the experience and knowledge to design and manage your projects. Additionally, Armstrong fosters ongoing education for employees to keep up to speed on the latest technologies and standards for airports.



### PERMANENT SOLUTIONS

### Solutions that stand the test of time

We have clients that have been with us for over 30 years. They continue to choose Armstrong because they know we provide innovative ideas and permanent solutions. We build airports that last, which will save your community money and allow funds to be reallocated towards other airport goals.



# UNDERSTANDING FAA

#### Innovative planning and effective design

We have serviced 130 airports with over 3,000 capital improvement projects. This experience demonstrates that we are more than familiar with FAA requirements. With this unparalleled knowledge, we provide our clients a design that meets all FAA requirements, resulting in a project that is ontime and on-budget. We serve as an FAA liaison for our clients to free up airport staff to tend to daily operations.



# WINNING PROJECTS

### Reflection of our attention to detail

Armstrong has been privileged to receive numerous awards for high quality airport improvement and planning projects. These awards are not only a representation of our work, but also reflect the attention to detail and exceptional level of customer service we offer our clients. Please visit our website for a full list of awards.



### We are here to listen

Your vision for your airport matters to us. We tailor our services to meet the needs of each of our clients. For example, we have staff to assist you with marketing, DBE, securing funds, management advisory, and more. We are your partner in making your vision a reality.



#### Realistic and accurate plans

We prioritize your goals by providing the best solutions for each project. Through our in-house departmental collaboration, we create realistic, and accurate plans while paying close attention to each detail. We want our first draft to be as close to the final product as possible, saving you time and frustration. Ongoing communications with airport staff allows for the most comprehensive service and maximum return on investment for the Airport.



### **EXCEPTIONAL CLIENT** SERVICE

# We do not nickel and dime you

Contact us with any question; request any of our services at any time. In addition to your project team, we offer a myriad of value-added services with staff that are available for any request. Armstrong is a one stop shop with a full team of specialists dedicated to every angle of your success. We believe this is the best way to provide responsive assured quality to our clients.



# FEEDBACK FROM YOU

### We want to know how we are doing

Ensuring the highest level of quality service requires feedback from our clients. The best way for us to find areas of improvement or continue successful service is to consistently gather client feedback. We want to hear it all. We value an in-person relationship, constant, open communication, and are dedicated to providing continuous and exceptional service as an extension of your staff.





#### FOUR CORNERS REGIONAL AIRPORT | FARMINGTON, NM ARC Upgrade Runway 2/23, Taxiways and Runway Safety Area Improvements

Four Corners Regional Airport (FMN) is a commercial service airport that has served the Farmington, New Mexico and Four Corners Region for over 50 years. The Airport has been served by various airlines including Frontier, Mesa, and Great Lakes Airlines. In late 2018, the airport had airline service exclusively with Great Lakes Airlines. However, due to corporate issues, Great Lakes Airlines suddenly pulled out of FMN, leaving FMN without a scheduled airline service for the first time in decades. Shortly after Great Lakes airlines left FMN, SkyWest Airlines expressed interest in providing scheduled service to FMN. However, this would require FMN to accommodate regional jet aircraft. This could not be accomplished with the airport's B-II runways. FMN was required to complete an upgrade to their Airport Reference Code (ARC) from B-II to C-II if SkyWest or any other similar airline was to start service.

Armstrong worked with the airport, the FAA, and the State to quickly analyze what it would take to upgrade at least one of the runways to an ARC C-II classification, the minimum required to allow for regional jet aircraft such as the 50-passenger CRJ-200. Armstrong's planners and engineers were able to efficiently evaluate the possibilities of what needed to be done as well as what options the airport had. Layout alternatives and corresponding cost estimates were put together and presented and evaluated with the involved parties. It was decided that to upgrade Runway 5/23 was the best solution for the airport that would allow the airport to meet the short term needs as quickly as possible as well as position them to be successful in the long term. Working with the airport, FAA, and the State, the support and approximately \$3 million in funding was gained to design and construct a Runway Safety Area (RSA) improvement project and remark of Runway 5/23. This project also included replacement of the entire airfield lighting system and modifying and updating and the drainage system associated with Runway 5/23. This would allow the airport to meet the

#### **PROJECT SCHEDULE - RUNWAY**

Start date: September 30, 2019 Scheduled Completion Date: November 18, 2019 Actual Completion Date: May 17, 2020 (Project suspended for winter) With the sponsor's approval, no liquidated damages were assessed.

#### PROJECT BUDGET

Engineer Estimate: \$6,168,526 Awarded Bid: \$6,215,720 Final Cost: \$5,791,256

#### CLIENT CONTACT

Mike Lewis, Airport Manager (505) 599-1462 mlewis@fmtn.org

#### **PROJECT HISTORY**

Terminal Building Evaluation Study, Pavement Maintenance, Rehabilitate Taxiway A, Relocate Taxiway B and G

#### TEAM ROLES

Chris Nocks, P.E. - QA/QC Justin Pietz - Planning Director

requirements of ARC C-II, while utilizing their existing runway infrastructure to the greatest extent possible. In the spring of 2020 construction was completed for the RSA improvement project of Runway 5/23.

Following the Runway 5/23 RSA upgrade project completed in 2019, in 2021 Runway 5/23 was rehabilitated to include an asphalt mill and overlay, removing the existing porous friction course and replacing it with a grooved pavement surface. This project wasn't given a green light until March of 2021. However, the Armstrong team dedicated the required in-house resources to quickly complete the design and get the project bid in order to meet tight FAA deadlines and prepare the project for construction in the same calendar year. The Armstrong team is also working on completing a design to relocate Taxiways B and G in order to meet C-II standards.



#### CANYONLANDS REGIONAL AIRPORT | MOAB, UT Reconstruct Taxiway A and Commercial Aircraft Parking Apron

Canyonlands Regional Airport (CNY) recently underwent an Airport Reference Code update for Runway 3/21, upgrading the runway from a B-II to a C-II facility. This upgrade was primarily aimed at restoring commercial air service to CNY following SkyWest's retirement of the EMB-120 Brasilia aircraft, which had previously provided service and was replaced with CRJ-200 aircraft in SkyWest's fleet. While the runway and connector taxiways were widened and strengthened to accommodate the larger/heavier jet traffic, the existing parallel taxiway, Taxiway A, and commercial aircraft parking apron were not improved due to budgetary and construction period limitations. As such, upon commencement of commercial jet service at CNY, the existing 15 year-old pavement's wear was significantly accelerated by the daily use of aircraft that exceeded the original design. While a future project to replace both pavement areas was programmed for CNY, the project was not scheduled to happen soon enough to address the rapid degradation of the existing pavements. When the FAA announced the availability of Supplemental AIP funding, Armstrong assisted the Sponsor in applying for the funds, which included close coordination with FAA staff so that they were fully aware of the situation at hand with the existing taxiway and apron. CNY was one of three airports in the State of Utah to receive funding in the second wave of supplemental AIP funding. The airport received \$4.75M in supplemental AIP funding to address the issues on Taxiway A, and received a discretionary grant in the amount of \$4.52M to reconstruct the commercial aircraft parking apron. This allowed the airport to bid and complete these projects together, resulting in a quicker and less expensive completion.

This project included the full depth reconstruction of the existing asphalt pavement on Taxiway A, and the replacement of the existing asphalt pavement with concrete on the commercial aircraft parking apron. The project included extensive phasing to allow for commercial and general aviation aircraft operations throughout the project, with any required runway closures happening at night between scheduled flights. The pavement geometry was altered to comply with current FAA design guidance for C-II sized aircraft, and miscellaneous

#### **PROJECT SCHEDULE - TAXIWAY**

Start date: March 2, 2020 Scheduled Completion Date: June 25, 2020

Actual Completion Date: June 27, 2020 (two additional days were requested). With the sponsor's approval, no liquidated damages were assessed.

#### PROJECT BUDGET

Engineer Estimate: \$8,245,702 Awarded Bid: \$8,914,011 Final Cost: \$8,375,750

#### **CLIENT CONTACT**

Tammy Howland, Airport Director 435-259-4849 airport@grandcountyutah.net

#### **PROJECT HISTORY**

Apron Hardstand, Perimeter Fence, Terminal Building Study, SRE Building and Equipment

#### TEAM ROLES

Chris Nocks, P.E. - QA/QC Justin Pietz - Planning Director

project elements included safety area grading, stormwater grading and infrastructure, and subsurface drains. This project was complicated by the extremely weak subgrade conditions, which necessitated the use of geosynthetic stabilization fabric and additional subbase course thickness. The project was completed in 117 calendar days, which was 2 days longer than anticipated; however, the Contractor was granted 2 additional contract days due to abnormal weather conditions and no liquidated damages were assessed.







#### HAWTHORNE INDUSTRIAL AIRPORT | HAWTHORNE, NV Taxiway A Reconstruction

An important recent step towards helping the Hawthorne Industrial Airport achieve their goals for the airport was the completion of the Taxiway A reconstruction project. This project had been on the Airport Capital Improvement Plan for several years. Armstrong worked hard with Mineral County to build a strong justification for this project and we were successful in obtaining FAA Supplemental AIP funding for the project, which provided 100% FAA funding. Without this 100% funding, Mineral County would have struggled to afford their local match for the project. This project included the reconstruction of the partial parallel Taxiway A. In addition to reconstructing the failing pavement, the taxiway was shifted farther away from the runway in order to meet the current FAA design standards. The project also included extensive grading and drainage improvements and new lighted guidance signs. In addition to the portion of the project that was constructed, the design for this project also included an additional portion of taxiway that would make Taxiway A a full parallel taxiway. This portion was bid with the project that was recently constructed, however due to limited available funds, it was not awarded. This portion of the project will be carried forward and will be held in reserve until another 100% funded grant opportunity is available.

In addition to this project, we have helped the County develop a logical and impactful 5-year plan that includes pavement maintenance aimed at preserving the investments made in the airport pavement, electrical updates that include modernizing the airfield lighting vault and installing a new rotating beacon on a tip down tower, construction of a new north hangar taxilane, construction of a box hangar, and major rehabilitation of Runway 10/28. All of these projects are aimed at continuing to improve and preserve the airport to help ensure that the airport will continue to serve Mineral County and be a valuable asset to the community.

#### **PROJECT SCHEDULE - TAXIWAY**

Start date: July 6, 2020 Scheduled Completion Date: August 30, 2020 Actual Completion Date: August 27, 2020

#### **PROJECT BUDGET**

Engineer Estimate: \$2,756,273 Awarded Bid: \$2,859,133 Final Cost: \$2,706,743

#### CLIENT CONTACT

Eric Hamrey, Public Works Director (775) 945-3897 pwdirector@mineralcountynv.org

#### **PROJECT HISTORY:**

Electrical Updates, Pavement Maintenance, Sidewalks, Wildlife Fencing, PAPIS REILS, AWOS, ALP Update

#### **TEAM ROLES**

Nadine Burgard, P.E. - Project Manager Justin Pietz - Planning Director Chris Nocks, P.E. - QA/QC

#### Electrical Updates

Armstrong collaborated with the airport on a significant project to replace their electrical vault and associated equipment, including the vault, beacon, tower, PAPIs, and REILs. The existing equipment had reached an age where failure was imminent, and its maintenance had become a recurring issue. For instance, airport staff had to manually climb the beacon to conduct repairs instead of utilizing the more efficient tip-down method available with modern equipment.

Given the magnitude of this upgrade, meticulous planning and effective management of grant funding were crucial. Armstrong took on the responsibility of ensuring that the project was carefully coordinated and executed, adhering to all necessary guidelines and regulations.







#### SILVER SPRINGS AIRPORT | SILVER SPRINGS, NV Apron Reconfiguration and Expansion

Silver Springs Airport is preparing for significant growth attributed to the completion of USA Parkway, a roadway connecting Interstate 80 and the Tahoe Reno Industrial Center. This industrial center is home to Tesla's Gigafactory and other major distribution and data centers, and it now links to US Highway 50 near the airport. To accommodate this anticipated growth, the airport embarked on a project to expand the aircraft parking apron.

The project involved expanding the existing west aircraft parking apron and reconfiguring the apron layout to ensure adequate wingtip clearance around the nested aircraft tie-down parking spots. Additionally, the construction encompassed the installation of two new drop inlets and the associated culvert pipe, as well as the implementation of a new valley gutter pan. Furthermore, crack repairs and a rejuvenating fog seal were applied to the existing portion of the apron.

Armstrong played a pivotal role in this undertaking by providing construction monitoring and management services, overseeing material acceptance testing, and ensuring the project adhered to the designated 30-day construction schedule. Remarkably, the project was substantially completed within the allotted time frame and under budget, coming in \$10,000 below the \$530,000 budget. Furthermore, Armstrong was responsible for the design and engineering services related to this project.

#### PROJECT SCHEDULE

Start date: September 28, 2020 Scheduled Completion Date: October 27, 2020 Actual Completion Date: November 13, 2020

#### **PROJECT BUDGET**

Engineer Estimate: \$689,142 Awarded Bid: \$1,068,000 Final Cost: \$455,106

#### CLIENT CONTACT

Chris Austin, Airport Manager (775) 686-0126 silverspringsairport@gmail.com

#### **PROJECT HISTORY:**

Pavement Maintenance, Install AWOS and Terminal Area Fencing, Airport Master Plan

#### TEAM ROLES

Nadine Burgard, P.E. - Project Manager Justin Pietz - Planning Director Chris Nocks, P.E. - QA/QC Mike Dikun, C.M., C.A.E. - Airport Management Advisor



#### LINCOLN COUNTY AIRPORT | PANACA, NV Rehabilitate Runway

Lincoln County, Nevada serves as the airport sponsor for two FAA-funded airports, namely Lincoln County Airport and Alamo Landing Field. The County has enlisted the services of Armstrong to oversee various aspects of airport management, including capital improvement projects, active participation in airport board meetings, and overall administration. Our collaboration with Lincoln County has proven to be highly successful for both airports. By devising joint 5-year capital improvement plans, we have effectively managed limited funding resources, enabling significant development projects to move forward at both airports. This has been achieved by strategically allocating FAA funding between the two airports to meet the financial requirements of larger undertakings.

The Lincoln County Airport, located in a remote region of Nevada, plays a crucial role in connecting the local community to the rest of the world. With the presence of the Bureau of Land Management's (BLM) single engine air tanker (SEAT) base, which actively combats wildfires during the summer, as well as its emergency medical flights, the airport serves as a lifeline for the region.

Recognizing the urgent need for runway rehabilitation, the airport has undertaken a project to reconstruct a significant portion of the southern 500 feet of the runway. The plan includes applying a leveling course followed by a final layer of 2 inches of asphalt. This project aimed to ensure the airport's continued operation and enhance its capabilities for the community it serves. Construction for this project is expected to commence in the late summer or early fall of this year.

#### PROJECT SCHEDULE

Start date: TBD Scheduled Completion Date: TBD Actual Completion Date: TBD

#### PROJECT BUDGET

Engineer Estimate: \$1,791,130 Awarded Bid: \$2,724,706 Final Cost: TBD

#### CLIENT CONTACT

Wendy Rudder, Lincoln County Airport Authority (702) 449-2418 wendyrudder.laigroup@gmail.com

#### PROJECT HISTORY

Airfiled Pavement Overlay, Seat Base, Construct Fuel System, REplace Beacon, Fuel Farm Fence

#### **TEAM ROLES**

Nadine Burgard, P.E. - Project Manager Justin Pietz - Planning Director Chris Nocks, P.E. - QA/QC Mike Dikun, C.M., C.A.E. - Airport Management Advisor



#### CANYONLANDS REGIONAL AIRPORT | MOAB, UT Focused Planning Study and 25% Design

Armstrong collaborated closely with the management of Canyonlands Field to cultivate support from the FAA, State, and local authorities for the ARC Upgrade project, which spanned multiple years and phases. Once the necessary support and funding were secured, Armstrong proceeded with a 25% Runway Design. Given the project's extensive scope, it was crucial to conduct thorough preliminary investigations such as geotechnical assessments and surveys. These upfront efforts enabled the engineering team to make informed decisions, provide more accurate cost estimates, and establish a robust plan before advancing further.

Armstrong also undertook a comprehensive environmental assessment, which included hosting town-hall meetings to gather public input. Recognizing the pressing need to establish jet service, the project, including the Airport Master Plan, Environmental Assessment, and Design, was executed with an accelerated timeline. Remarkably, despite the airport's proximity to two National Parks, this entire sequence of projects was completed in an unprecedented 2 ½ years.

The runway design was successfully finalized within the accelerated timeframe, allowing bidding to occur prior to the grant season's closure and ensuring construction could commence as initially scheduled during Moab's slower tourist season.



#### SHOW LOW REGIONAL AIRPORT | SHOW LOW, AZ Focused Planning Study and 25% Design

Armstrong engineering staff, in collaboration with a team of environmental consultants and planners, will undertake a comprehensive Focused Planning Study that encompasses a 25% Design and Environmental Assessment (EA). The primary objective of this project is to evaluate the construction of a crosswind runway and gain a more precise understanding of the design aspects in order to better define the environmental impacts of the project. Notably, the completion of this project requires a substantial amount of fill, approximately 40-60 feet, and the sources for that fill will also have to be evaluated for environmental concerns.

The Focused Planning Study will aim to answer critical questions regarding the alignment of the runway and the acquisition of fill material required for the project. By conducting this study, we will gather crucial information that will contribute to a more informed decision-making process and minimize potential challenges in the future for the Environmental Assessment. This comprehensive approach ensures that all necessary details are considered, leading to a smoother and more successful implementation of the Environmental Assessment.

# Qualifications and Experience of Sub-Consultants



Lumos was established in 1978 and has over 100 employees across four office locations. Designing projects that improve and enhance the quality of life for generations to come, is what inspires our team at Lumos to tackle the day. Our team of professionals incorporate their skills, passion and dedication to the community they serve and create new and innovative solutions for our clients. Lumos fosters a work culture where problem solvers flourish, accomplishing their **ASSOCIATES** best work; the end result being a project that achieves the established goals.

Inspired problem solvers building a legacy of excellence in our communities. Through civil engineering, structural engineering, surveying, geotechnical, and construction management services, we, together with our clients improve the communities where our families live, work and play.

Lumos was founded in Nevada's capital, Carson City, with offices in Reno, Fallon, and Lake Tahoe. We serve clients throughout the Western United States in both rural and urban settings and employ over 100 highly-skilled professionals.

#### **Projects with Armstrong and Lumos**

- Minden-Tahoe Airport | Relocate Bliss Road
- Minden-Tahoe Airport | Rehabilitate Taxiways
- Carson City Airport | Construct SRE Building



**EDUCATION** BS, Civil Engineering. Arizona State University,

**AFFILIATIONS** Federation (WEF). Member American Water Works Association (AWWA), Member

REGISTRATIONS California #84438 Nevada #22326

# Water Environment

### JONATHAN LESPERANCE, P.E. **Engineering Group Manager**

Jonathan is a Group Manager in the Lumos Engineering Division in our Carson City Office. Over the last two years Jonathan has transitioned into the role of Eureka County Engineer, having taken over this important responsibility for Lumos COO and former Eureka County Engineer, Michael Bennett. Jonathan has 13 years of diverse engineering experience with an emphasis in public work, especially pertaining to water and wastewater systems. As County Engineer, Jonathan provides ongoing engineering consultation and oversees County projects, including projects at the Eureka County Airport, from planning through design and engineering services during construction.

#### **PROJECT EXAMPLES**

- East Line Street, Bishop, California
- Eureka County Engineer, Eureka County, NV
- Douglas County, Airport Lift Station, Douglas County, NV
- Eureka Airport Snow Plow Purchase, Eureka County, NV



REGISTRATIONS Professional Land

Surveyor: Nevada #10836 Certified Environmental Manager: Nevada #982

#### **AFFILIATIONS**

American Congress on Surveying and Mapping National Society of Professional Surveyors Nevada Association of Land Surveyors Lahontan Chapter -Past President

### DAVID CROOK, P.L.S., WRS **Professional Land Surveyor**

David Crook serves as one of the Project Managers in our Survey Division and acts as the Computer Systems Administrator for the company. Mr. Crook became a licensed Professional Land Surveyor in 1994 and possesses over 37 years of surveying and mapping experience. David specializes in survey mapping for land divisions, engineering design surveys and topographic mapping, digital terrain modeling and volume analysis, ALTA/ACSM Land Title Surveys, boundary resolution, cadastral retracement surveys and route

surveying. David has worked on right-of-way engineering mapping for State Route 28, U.S. Highway 50, Interstate 80, Interstate 580, U.S. Highway 395 and U.S. Highway 95.

#### **PROJECT EXAMPLES**

- 2020 Eureka Road and Airport Maintenance, Eureka County, NV
- NAS Fallon, NV, Design Build P-111 Relocation of Naval Operational Support Center, Fallon, NV
- NAS Fallon, NV, P-420 Air Wing Training Facility, Construction Staking
- NAS Fallon, NV, Waste Water Treatment Plant Construction Surveying



Lean Engineering (LEAN) offers a full range of electrical, airspace, and flight operation engineering services. Within our practice, we specialize in airfield lighting, NAVAIDs, aircraft performance, flight procedures, and safety risk management, and our expertise in our field has gained the company international recognition. Since its inception over 15 years ago, LEAN has performed over 200 electrical and airspace projects at 100 major hub and

regional airports, including SFO, OAK, LAX, TUS, DEN, SLC, and SMF. Our vast experience at multiple airports proves that we can deliver large-scale projects in a timely, cost-effective manner.

Projects with Armstrong and Lean

- Carson City Airport Nighttime Approach Procedure Development
- Rifle Garfield County Airport Approach Procedure Enhancements
- California Redwood Coast Humboldt County Airport RW 14/32 Lighting System Replacement
- California Redwood Coast Humboldt County Airport Airfield Lighting Vault Replacement
- Murray Field and Rohnerville Airport Airfield Lighting System Study



**EDUCATION** BS, Aerospace Engineering and Mechanics, Minor in Geography and Geographic Information Systems, University of Minnesota

#### **PAUL HANNAH** Senior Airspace and Flight Operations Engineer

Paul is an Airspace and Flight Operations Engineer with extensive experience in runway length determination, runway siting, obstacle evaluation, NAVAID implementation, instrument procedure design, airspace analysis, stakeholder coordination and FAA data management. Paul works with airports and aircraft operators to evaluate the feasibility of flight operations, the effectiveness of NAVAID/lighting investment, the cost-benefit of runway enhancements and the payload-range capabilities for corporate, scheduled and military flight operations. Paul has recently been involved with the TUS airport and TAA during the 11L/29R rehabilitation project during both design and construction ensuring that all FAA, airline and 3rd party aeronautical stakeholders shared the same understanding of the design and construction on a monthly, weekly and even daily basis. Paul works closely with all active FAA lines of business, the airport and the LEAN team to ensure that each project occurs on time, with successful enhancements to safety and operational efficiency.



#### EDUCATION

BS, Aerospace Engineering, University of Minnesota-Twin Cities

Aerospace, Aeronautical and Astronautical Engineering, University of Miami

#### TYLER HAWKINS Senior Engineer

Tyler Hawkins has over ten years of experience in the aviation industry. He has extensive experience in airspace and aircraft performance analysis, which includes takeoff/landing performance analyses and historical environmental analyses used in support of planning and design. From his experience supporting live airline operations, he has the ability to work effectively under extreme time restraints and to express solid engineering judgment in ambiguous circumstances.

#### **PROJECT EXAMPLES**

- Taxiway D and T Realignment, San Francisco International Airport
- PIDS Infrastructure, San Francisco International Airport
- Runway 35-17 Overlay, Salt Lake International Airport
- CEWA Vault Reconstruction. Salt Lake International Airport
- Runway 10r ILS Enhancements for Vault Sizing, Monterey Regional Airport

REGISTRATIONS

MuleSoft Certified

-Integration and

MuleSoft, License

**API** Associate

Developer


#### **EXPERIENCE & QUALIFICATIONS**

PK Electrical, Inc. is a woman-owned electrical engineering firm providing complete design for normal and emergency power, lighting and controls, technology/communications, and medium voltage distribution systems. Services also include utility coordination, onsite inspections and surveys of existing systems, feasibility studies, energy audits, plan reviews, construction administration, cost estimating, electrical system load, coordination and fault studies, grounding and lightning protection, site planning, special use permit and arc flash analysis.

PK Electrical has extensive experience designing lighting and power systems for airport projects ranging from small to medium airfield and landside general aviation airport repairs and new construction to complex terminal renovation projects at large, international hubs. General aviation airside experience includes, but is not limited to, runway and taxiway lighting, guidance signage, wind cones, PAPIs, REILs, AWOS, lighting vaults, fuel systems, gate relocations, and auxiliary buildings including hangars and snow equipment removal buildings. PK Electrical is headquartered in Reno, Nevada.

#### Recent Project Experience with Armstrong and PK Electrical

- Hawthorne Industrial Airport | Hawthorne, Nevada
- Winnemucca Municipal Airport | Winnemucca, Nevada
- Alamo Landing Field | Alamo, Nevada
- Yuma Airfield | Yuma, Arizona
- Owyhee Airport | Owyhee, Nevada • SRE Building and Electrical Upgrades
- Window Rock Airport | Window Rock, Arizona Airfield Electrical Lighting
- Woodhouse Field / Spanish Fork | Springville, Utah
- Minden Tahoe Airport | Minden, Nevada
- Ely Airport | Ely, Nevada
- Derby Field Airport | Lovelock, Nevada
- Silver Springs Airport | Silver Springs, Nevada
- Carson City Airport | Carson City, Nevada
- Blake Field | Delta, Colorado
- Springfield Municipal Airport | Springfield, Colorado •
- Sterling Municipal Airport | Sterling, Colorado New Fuel System and Electrical Upgrades
- Mineral County Memorial Airport | Creede, Colorado
- Fremont County Airport | Canon City, Colorado
- Burlington Airport | Kit Carson, Colorado
  - Kremmling McElroy Airport | Kremmling, Colorado
    - Runway Rehabilitation and Electrical Upgrades
- Holyoke Airport | Holyoke, Colorado
  - Runway Rehabilitation and Electrical Upgrades



**EDUCATION** B.S. Electrical Engineering Rochester Institute of Technology

## REGISTRATIONS

- Nevada #21011



**EDUCATION IBEW** Journeyman Wireman

#### REGISTRATIONS NV Journeyman Inside Wireman

#### JOEY GANSER, P.E. **Project Manager**

Mr. Ganser began his career as a designer and estimator for a large electrical contractor. In 2007, he joined PK Electrical as an electrical designer. Joey was first promoted to Engineering Operations Manager, and now serves as the Principal of Engineering for the firm. In this role Joey provides QA/QC services, stamps and signs electrical engineering drawings, and designs and manages his own projects.

#### PROJECT EXAMPLES

- Snow Removal Equipment Building, Carson City Airport
- Snow Removal Equipment Building, Reno-Tahoe International Airport
- Taxiway C Reconstruction, Reno-Tahoe International Airport
- 16R Airfield Lighting Vault Building, Reno-Tahoe International Airport

#### **STEVE VILLANEUVA Electrical Designer**

Steve spent 15 years in the field as an electrical apprentice, journeyman, foreman, and general foreman as well as spent two years estimating and project managing. He transitioned into design in 2012 where his primary experience lies in healthcare, commercial, industrial, K-12, higher education, military, and residential projects.

#### **PROJECT EXAMPLES**

- Fencing Project, Minden-Tahoe Airport
- Airport Lighting System, Minden-Tahoe Airport
- Jet Bridge Power and Metering Upgrade, Reno-International Airport

Paul Cavin Architect LLC was established in 2013 in Washoe County, Nevada. Paul has over 28 years of experience in the Architectural Paul Cavin Architect LLC profession and comes from a diverse Architectural background with project experience in eight western states. Paul began working in professional Architecture firms in 1995; he has worked in small firms,

large firms, and national sized firms. His 28+ years of experience includes work in the following categories: K-12 Education, Higher Education, Institutional, Medical, Government, Military, Multi-Family Housing, Single Family Housing, Commercial, Tennant Improvements, Industrial, Maintenance, LEED, and Historic Preservation. He is also familiar with different project delivery methods including Construction Manager at Risk (CMAR), Design-Bid-Build, Design-Build, Design-Assist, and Negotiated Construction Contracts. Paul Cavin is currently registered as an Architect in the State of Nevada and maintains reciprocity through the National Council of Architectural Registration Boards (NCARB), he is also a current, local and national member of the American Institute of Architects (AIA). Paul strives to provide outstanding customer and professional service for all clients and all projects.

You will find that Paul Cavin Architect LLC is committed to you and your projects, and your project goals. We will strive to provide excellent professional services and a comprehensive design process.

Paul Cavin has teamed with Armstrong on several projects across Nevada, including the previously presented Carson City Airport SRE Building project. They have also been involved in numerous projects where PK Electrical was also providing services. Our team, including subconsultants, all have experience completing highly successful projects together.



**EDUCATION** Bachelor of Science, Architecture, University of Nevada, Las Vegas Master of Architecture, University of New Mexico

#### **REGISTRATIONS**/ **CERTIFICATIONS**

State of Nevada #6284 NCARB Certificate #66385

#### PROFESSIONAL **AFFILIATIONS**

National Council of Architectural Registration Boards American Institute of Architects (AIA) #38310017

## PAUL CAVIN, AIA NCARB

#### Architect, Owner, Principal in Charge

Paul Cavin is a Northern Nevada native who grew up in Carson City, Nevada. Upon graduation from Carson High School, Paul left the region to start and complete his architectural education. Paul returned to Northern Nevada in 2004 where he finished is architectural training and started his own firm in 2013. Paul has over 28 years of experience in the architectural profession, beginning in 1995. Since returning to Northern Nevada, Paul has performed a multitude of projects ranging from very small remodel projects, to large and complex remodels, and new buildings and structures. Paul is familiar and competent with different project delivery methods including: Construction Manager at Risk (CMAR), Design-Bid-Build, Design-Build, and Design-Assist.

#### **PROJECT EXAMPLES**

Reno-Tahoe Airport Authority | Reno, Nevada | Multiple Projects

- Federal Inspection Services Facility Improvements •
  - Scope of Services: Design, Construction Documents, Bidding Assistance, **Construction Administration**
  - Project Size: 15,000 square feet •
  - Project Construction Cost: \$3,000,000
- TSA Operations Space Improvements
  - Scope of Services: Design, Construction Documents, Bidding Assistance, Construction Administration
  - Project Size: 5,000 square feet
  - Project Construction Cost: \$800,000
- Air Communications Center Replacement Project
  - Scope of Services: Design, Construction Documents, Bidding Assistance, **Construction Administration**
  - Project Size: 5,000 square feet
  - Project Construction Cost: \$3,200,000
- Automated Exit Lane Program Study
  - Scope of Services: Design, Construction Documents, Bidding Assistance, **Construction Administration**
  - Project Size: 1,300 square feet •
  - Project Construction Cost: \$800,000

## Capability of a Branch Office

With over 30 years of experience serving the Western Pacific Region, we have established a strong presence in this area. Nadine Burgard, P.E., along with our Reno team, will continue to be readily available to assist you, conveniently located just a 30-minute drive from the airport. In addition, they will be supported by our teams in Grand Junction and Denver, CO. Our dedicated staff, in collaboration with our trusted teaming partners, will closely collaborate with CXP throughout every stage of the project, from its inception to its successful completion.



## Ability to Furnish Qualified Inspectors

Armstrong provides comprehensive services to its airport clients from conceptual design through project design, construction administration, and inspection. Our firm brings unique expertise and capabilities to each project, including an excellent track record in the following service areas:

- Full-Time Resident Inspection
- Testing Requirements
- Contractor Pay Requests
- Safety and Operation Plans
- Final ReportsProject Closeouts

Many projects have unique design requirements because of challenging soil conditions, topography, and other constraints. These types of projects require innovative design and construction management techniques at which our engineers excel. We will pay strict attention to design and closely monitor construction activities to ensure FAA specification compliance.

The construction phase of a project requires on-site control of scheduling, costs, and quality to ensure progress and successful completion. The resident inspection team at Armstrong offers an unparalleled level of expertise and experience with FAA AIP funded projects. George Saltzman and Charles Shortman, our Field Engineering Supervisors, lead a growing team of 10 resident inspectors, who have performed inspection on hundreds of AIP projects. Our inspectors have a variety of technical backgrounds, including surveying, electrical, materials testing and construction, which we leverage to the maximum extent possible. All of our inspectors have the training and experience necessary to be successful on any type of AIP project, however we prioritize our inspector assignments to ensure that we put the inspector with the most direct experience on each project. For instance, if the project entails a significant amount of electrical work, we assign Jon Thompson to the project as he was a licensed electrician prior to joining the Armstrong team. Carl Rawlin was a licensed surveyor, Doug Fassbinder was previously in the construction industry, and Charles Shortman has extensive material testing experience.

In addition to our resident inspectors, who are on-site throughout all aspects of construction, our engineers and project managers are fully engaged throughout construction. Through regular and timely site visits and daily, sometimes hourly, conversations with the inspectors, our engineers and project managers provide the leadership and direction needed for project success. The result of this unique combination of experience, up-to-date knowledge of AIP processes, and direct involvement of the engineers and project managers is a project inspection team that produces high-quality, on-budget, on-time projects.

	ARMSTRONG INSPECTOR	YEARS EXPERIENCE	YEARS WITH ARMSTRONG	HIGHLIGHTED PROJECT
	George Saltzman	10	4	Ely Airport (Ely, NV) - Runway 18/36 and Taxiway A Reconstruction
	Charles Shortman	11	3.5	Show Low Regional Airport (Show Low, AZ) - Runway 7/25 Rehabilitation
	Doug Fassbinder	40+	13	Winnemucca Municipal Airport (Winnemucca, NV) - Expand Apron
	Jon Thompson	30	11.5	Hawthorne Industrial Airport (Hawthorne, NV) - Taxiway A Relocation
$\bigcirc$	Carl Rawlin	40+	8.5	Logan-Cache Airport (Logan, UT) - Runway 17/35 Rehabilitation
	Lowell Watkins	20	3.5	Roswell Air Center (Roswell, NM) - Taxiways A and J Reconstruction
	Kara Neff	4	1	Blake Field (Delta, CO) - Pavement Maintenance
	Anthony Novela	5	New to Armstrong	New to Armstrong, Nevada Project Inspection
	Kandice Beerbower	3	New to Armstrong	New to Armstrong, Utah Project Inspection
	John Wright	38	New to Armstrong!	New to Armstrong, Wyoming Project Inspection
	Karson Farrell	5	New to Armstrong!	New to Armstrong, Nevada Project Inspection

## Understanding of the Project's Potential Challenges



#### **Construct Snow Removal Equipment Building**

The design of the Airport's Snow Removal Equipment (SRE) Building project was completed in 2021 and the construction portion has yet to be funded by a federal grant due to funding constraints. When the project underwent the first round of bidding, there were no bids submitted and then in the following year, the full amount needed for construction was not available from federal grant funding. While the Airport has faced these challenges with the project in the past, Armstrong continues to coordinate with the Federal Aviation Administration (FAA) to explore all funding opportunities and continuously communicates the status of the Airport's options for funding. Another aspect of this project is the Airport's requirement to obtain a Special Use Permit from the City. This included a lengthy planning application process and discussion with the Carson City Planning Commission, with major focus on the requirement for the Airport to extend a municipal water main for future off-airport development. Armstrong made the case that use of airport funds for non-airport use violated FAA Grant Assurances. Armstrong's assistance to the Airport Manager and Authority Board members throughout the process resulted in a waiver of the permit's requirement and final approval of the permit.



#### Install Approach Lighting

This project was initiated after the nighttime instrument approach was suspended at the Airport in 2015. In the following years, the Airport has taken several steps to reestablish the approach and further ensure its safety standards. Armstrong's development of this project started with an aeronautical study and obstacle survey with the assistance of Lean Corporation (Lean). The design solution to reestablish the nighttime instrument approach is to install a dual/offset Precision Approach Path Indicators (PAPI) and Medium Intensity Approach Lighting System with Sequenced Flashing Lights (MALSF). One notable concern from the Airport was the potential construction costs of installing the MALSF system, due to the vast amount of earthwork required to construct the towers. Through coordination with the Airport, Lean, and the FAA, it was decided that the initial phase of construction would be to install the PAPI and revisit the MALSF installation once a flight check could be completed. Though the construction of the dual/offset PAPI system will require a runway closure, Armstrong will work with the awarded contractor on the most appropriate phasing schedule to minimize the impact to operations on the Airport during installation of the PAPI.



#### Runway Safety Areas (RSA) Drainage and Improvements

The natural terrain and vegetation along the runway and taxiways has become a maintenance priority of the Airport. This project will address the Airport's concerns surrounding excessive growth of shrubbery and instability of the existing shoulder materials within the Runway Safety Areas (RSA) and Taxiway Safety Areas (TSA). Armstrong intends to facilitate an RSA inventory as part of this project development, which will formulate the improvement plan. As part of the inventory, all existing drainage structures and features will be identified along with any additional needs to accommodate runoff on the Airport's pavement areas. One particular concern of the Airport includes which materials are best to use as RSA and TSA shoulder stabilization. Armstrong can evaluate and recommend the best solution for these areas, considering cost and availability of local materials and suppliers. Minimal disturbance and impact on all other native areas of the Airport will also be considered as part of the design for improvements to the RSA and TSA.

#### **Replace Taxiway Lighting**

The current taxiway lighting system along Taxiway A and Taxiway D is outdated and due for upgrade and replacement. Given the high usage of the Airport and the growing number of users, it is an obligation of the Airport to ensure the lighting system in place is current and maintainable. Potential challenges that the Airport may see during the design of this project include dealing with an old electrical system which may not have a recorded history of location and installation methods. During project development and design, Armstrong will be able to identify and locate all existing electrical components and determine the best solution for replacing each lighting system component as needed. Another potential challenge of this project involves the required closures during construction and the impact on taxiway and runway access for airport users. As with all projects Armstrong facilitates, the most appropriate work phasing schedule will be established with the contractor to limit disruption to Airport operations as much as possible.



#### Extend Runway 9/27

The Runway Extension project has been a high priority of the Airport for many years and the first planning stages of the project are underway. In formulating a focused planning study, the major initial step for Armstrong is to assist the Airport with justifying the need for the extension and confirming the constraints of the natural landscape of the property. The unique and restrictive terrain of the area surrounding the existing Runway will be challenging to accommodate throughout the design and construction. Among the main concerns of the Airport are the necessary and lengthy closures of the runway and many areas of the airfield during certain design phase investigations and during construction.



#### Potential for Passenger Air Service

The Carson City Airport is located 4 miles from the State Capitol. The possibility for passenger air service to and from Las Vegas – especially during the biennial legislative session – has real potential. The legislative session is 120 days (about 4 months) long and begins on the first Monday in February, every other year. The next session is in 2025. JSX operates 30-seat Embraer 135 and already operates from Las Vegas and Reno. Armstrong has experience at other client airports (Taos, NM, Moab, UT, and others) with JSX and other air service providers and could provide guidance to develop future passenger air service.

## Degree of Interest Shown

The Armstrong Team has been walking in lock step with the Carson City Airport Authority for the past five years to help improve the airport. Our airport knowledge and familiarity with the details of the airport's operations, goals, and objectives is extremely high. This has been demonstrated in our administrative support to the airport manager through grant management and execution. The Armstrong Team supports the Airport Authority Board by attending monthly Board meetings. Armstrong staff also supports the Carson City Airport Authority by coordinating with Carson City Planning and attending Planning Commission meetings. The Armstrong Team has also assisted by reviewing tenant improvement permit requests and airspace analysis for projects on or near the airport.

The Armstrong Team is incredibly supportive of the airport manager, assisting in research and helping fill in gaps in information available to the new manager. During the change in airport management in 2021, the Armstrong Team served as liaison for the acting manager assisting him and the Airport Authority Board through briefings and other administrative support. The Armstrong Team has been mindful of the airport's priority to mitigate the nighttime instrument approach restriction. This has been a multi-year effort that is culminating in multiple, approved FAA grants towards installing an airport NAVAID (PAPI) and lighting solution (MALSAF) to solve the airport's limitation to allow IFR aircraft to operate at the airport after sunset. The Armstrong Team has shepherded the airport through multiple AIP grant projects including runway pavement rehabilitation, an AWOS upgrade and relocation, acquisition of snow removal equipment, and the design and future construction of a snow removal equipment building.

The Armstrong Team believes that we are in the best position to help the airport with the future design and construction of a new terminal and a runway extension to support future airport expansion. We have the experience and knowledge to help the airport through the design and construction processes. We are confident that our team can provide the necessary support to continue the airport's success.



## Capability to Incorporate and Blend Aesthetic and Architectural Concepts



As can be seen in the completed design and construction plan for the Snow Removal Equipment (SRE) Building project, Armstrong, with the help of Paul Cavin Architect, has fully incorporated the Airport's existing aesthetic and architectural style. The SRE building was designed with functionality, safety, and feasibility in mind to support the Airport's best interests. With the upcoming delivery of the Airport's snow removal equipment, it is a priority of Armstrong to see the project through from conception and design to construction completion. Additionally, Armstrong understands the importance of accommodating the Airport's aesthetic standards in accordance with the comprehensive requirements of the City. Our staff has been and will continue

to be available for all Planning Commission and Board of Supervisors meetings as needed to make sure all projects are well-developed and achieve streamlined approval by the City.

In order to satisfy project aesthetics, concepts, requirements, function, safety, and efficiency, a multi-phase process is recommended. From an architectural perspective, some of the basic phases of design are outlined below:

- 1. Programming
- 2. Conceptual Design
- 3. Schematic Design
- 4. Design Development

**Programming Phase:** The Programming process is typically centered on the design team's review of the initial project scope as well as a collaborative review with the Sponsor, airport users, stakeholders, design team, and other necessary persons identified by the Sponsor. Programming typically identifies project goals, aesthetics, requirements, functions, relationships, schedules, budgets, and other important items related to the project. Most of the aforementioned items will be created as diagrams, spread sheets, narratives, material selections, product information sheets, code requirements, local requirements, etc. and included in a formal programing document. A comprehensive scope of work will be developed and created from the programming efforts and used for the design and construction documentation for the project. Solid programming documents are important to the success of a project and these documents are the foundation for design and design decisions.

**Conceptual Design:** Conceptual Design is the process of taking the programming documents and making them three dimensional. This is the phase where a basic site plan and basic floor plans are developed, exterior elevations are created, and 3-dimensional models and conceptual renderings are generated. It is also possible to create virtual reality experiences and animation at this phase. During this process the Sponsor and design team can review aesthetics, materials, functionalities, and other facets of the project in 3-dimensional visual form.

**Schematic Design:** The Schematic Design phase will start with the completion of the final program document and successful completion of Conceptual Design. The

following tasks will ensue during the Schematic Design phase: Continued review of existing drawings and existing conditions of the buildings and the site, development of drawings based on those existing drawings and conditions, initial design work for all design disciplines to include incorporation of the program elements, code analysis, continued development of site plans, floor plans, reflected ceiling plans, schedules, sections, exterior elevations, interior elevations, etc., selection of systems and components such as heating, ventilation, air conditioning, fire suppression, fire alarm, security, and lighting, selection of interior finishes, selection of equipment, and the development of project specific specifications. Internal design meetings and reviews will occur for coordination between design disciplines and design meetings with the Sponsor will occur as needed. A Schematic Design submittal will be prepared and presented to the Sponsor in a collaborative meeting setting. At this meeting project aesthetics, concepts, requirements, function, safety, and efficiency can be reviewed and discussed to their satisfaction. Typical deliverables include Schematic Design drawings, specifications, product information sheets, and updated renderings.

**Design Development:** The Design Development phase will follow the acceptance of the Schematic Design deliverables. Design Development will be a continuation and refinement of the Schematic Design documents. The Design Development documents will further detail and identify all components, equipment, systems, finishes, etc. that are to be incorporated in the project. Internal design meetings and reviews will occur for coordination between design disciplines and design meetings with the Sponsor and other entities will occur as needed. A Design Development submittal will be prepared and presented to the Sponsor in a collaborative meeting setting. At this meeting project aesthetics, concepts, requirements, function, safety, and efficiency can be reviewed and discussed to the satisfaction of the Sponsor. Deliverables will include Design Development drawings, specifications, and product information sheets.

## Disadvantaged Business Enterprise (DBE) Contract Goal

Armstrong currently serves 54 Airports with Approved DBE Programs in place. We will coordinate your FAA-mandated Disadvantaged Enterprise (DBE) program. We will:

- Complete yearly achievement reporting on all of our NPIAS Airports.
- Regularly attend the Annual FAA Civil Rights Convention to stay on top of changes and updates to the program.
- Foster a positive relationship with the FAA DBE Compliance Specialists in each Region
- Track ongoing payments to DBEs on all projects.
- Identify and pursue local DBE firms for participation in design, construction, and planning projects.
- Review goals and accomplishments over the past three years for FAA-funded projects.
- Determine availability of DBE firms in the market area and use past award information to reflect expected DBE participation.
- Break out race-neutral versus race-conscious actions. This is dependent on past years' accomplishments and records.
- Review other information sources such as the state DBE Director.

#### MEETING THE DBE CONTRACT GOAL

We are excited to include PK Elecrical, a women-owned DBE firm, on our team. PK will provide the resources necessary to meet and exceed the DBE goals of the project. PK is an experienced electrical engineering firm with roots in Reno. As a fully participating member of the team, PK will enable Armstrong to meet or exceed all DBE goals, and as a subconsultant will aid in providing evidence and documentation that the team is easily meeting the DBE goal. Armstrong will manage PK as a subconsultant through regular communication. Nadine Burgard, P.E. will directly manage the work of the subconsultants, providing a single point of contact for the airport.

## Capability to Conduct a Value Engineering Study

Value Engineering can be viewed in two primary contexts, thus offering direct and indirect engineering solutions and cost benefits. The first perspective is the way Armstrong incorporates value engineering principles into our project delivery, production, and quality review processes, for every one of our design projects. The second perspective is the formal Value Engineering Study that is required by the FAA for new primary airports and complex design projects, with prior FAA prior approval.

Because of our specialization and expertise in airport and aviation design, and because we utilize multiple project teams to complete dozens of projects every year across three FAA regions, five Airport District Offices and eight states, we utilize a collaborative approach to design development and delivery, incorporating Value Engineering principals, into the scoping, design and quality review processes for each and every project. Blending information shared at corporate lessons learned workshops, internal project team scoping and project kickoff meetings which include airport planning staff as well as construction administration, drafting and engineering staff, and pre-design conferences which include the Sponsor, FAA and State staff, we are able to develop a project-specific scope of work and initial design concept that will accomplish the design objective in the manner that will bring the greatest value in term of cost, useful life, and operational efficiency. Additional engineering peer reviews at key project milestones continuously validate the design concept and ensure the approach is consistent with the defined project objects.

The result of the VE work generally delivers a project with fewer changes, fewer delays during construction, and greater functionality for the sponsor. Furthermore, we have found that by incorporating value engineering into our design and construction process our final engineering product has reduced construction or life-cycle costs, fewer design complications or change orders, and favorable product functionality.

In addition to our culture of designing value into our ongoing projects, Armstrong is fully capable to conduct a complete formal Value Engineering (VE) Studies as defined in Advisory Circular 150/5300-15A. With our in-house expertise and proven track record of implementing value engineering principles into every complex and unique project feature, we are perfectly suited to provide Carson City with a Value Engineering Study.



CXP will have a dedicated DBE specialist to assist you in meeting your DBE requirements.

## References

The reputation of Armstrong and its staff is highly regarded among airports throughout the western United States. We are known for providing an exceptional level of client service, and for identifying and resolving complex issues before they impact the timing and budget of your airport projects. Our ongoing working relationships with NDOT and FAA representatives strengthens with the onset and completion of each project.

Consistent delivery of high quality projects and client service are key benefits of partnering with Armstrong on your airport improvement projects. Examples of our exemplary work and commitment to quality are presented throughout this Statement of Qualifications. The FAA has consistently commented on the exceptional quality of our planning documents and engineering plans. In an increasingly competitive marketplace, maintaining a strategic advantage, a strong corporate culture, and optimum client satisfaction requires top-notch talent, breakthrough ideas, and exceptional client service.

As a privately-held airport consulting firm, Armstrong takes pride in the fact the entire organization is personally invested in taking the airport you have and making it the airport you want it to be.

We encourage you to contact the following Armstrong Airports to inquire about our ability to deliver the highest level of planning, engineering, and construction administration.











MIKE LEWIS | Airport Manager Four Corners Regional Airport | Farmington, NM 505.599.1462 | mlewis@fmtn.org Project History: Terminal Building Evaluation, Land Acquisition, Taxiway Reconstruction, Slope Stabilization, Runway Safety Area Improvements

WENDY RUDDER | Lincoln County Airport Authority Lincoln County Airport | Panaca, NV 702.449.2418 | wendyrudder.laigroup@gmail.com Project History: Airfield Pavement Overlay, Construction Fuel System, Replace Beacon, Fuel Farm Fence

**ERIC HAMREY** | Public Works Director Hawthorne Industrial Airport | Hawthorne, NV 775.945.3897 | pwdirector@mineralcountynv.org Project History: Reconstruct Taxiway A, Install Wildlife Fencing, Upgrade AWOS and Install Supplementary Wind Cone, Replace PAPIs and REILs, ALP Update

LARRY RACKLEY | Pershing County Commissioner 775.442.1975 | Irackley@pershingcounty.net Project History: Apron Reconfiguration and Expansion, Install AWOS, Terminal Area Fencing, Pavement Maintenance, Airport Master Plan

TAMMY HOWLAND | Airport Director Canyonlands Regional Airport | Moab, UT 435.259.4849 | airport@grandcountyutah.net Project History: Airport Master Plan, Drainage Study, Environmental Assessment, ARC Upgrade, ARFF Building

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Statement of Interest and Qualifications for Airport Architectural/Engineering Services
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compete for the contract.

	Coffman & Assoc.
Selection Criteria	Score
1. Capability to perform all or most aspects of the project	
and recent experience in airport projects comparable to the proposed task.	5
2. Key personnel's professional qualifications and experience	
and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.	5
6 6 71 7 1	
3. Capability to meet schedules or deadlines.	5
4. Quality of projects previously undertaken and capability to	
complete projects without having major cost escalations or overruns.	5
5. Qualifications and experience of sub-consultants regularly	
engaged by the consultant under consideration.	5
6. Capability of a branch office that will do the work to	
perform independently of the home office, or conversely, its	
capability to obtain necessary support from the home office.	
The use of geographic location may be a selection criteria	5
provided its application leaves an appropriate number of	
qualified firms, given the nature and size of the project, to	

Coffman & Assoc.

	Comman & As
Selection Criteria	Score
7. Ability to furnish qualified inspectors for construction inspection if applicable.	5
8. Understanding of the project's potential challenges and the sponsor's special concerns.	5
9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.	5
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	5
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)	5
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)	5
12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.	5

Selection Criteria	Armstrong Score	Wood Rodgers Score
1. Capability to perform all or most aspects of the project and recent experience in airport projects comparable to the proposed task	4	5
<ol> <li>Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.</li> </ol>	4	5
3. Capability to meet schedules or deadlines.		
4. Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.	4	5
5. Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.	5	5
6. Capability of a branch office that will do the work to perform independently		
of the home office, or conversely, its capability to obtain necessary support		
from the home office. The use of geographic location may be a selection criteria		
provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.	4	5

Selection Criteria	Armstrong Score	Wood Rodgers Score
7. Ability to furnish qualified inspectors for construction inspection if applicable.	4	5
8. Understanding of the project's potential challenges and the sponsor's special concerns.	4	5
9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.	4	5
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	5	3
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)	5	4
12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.	5	3
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	Coffman & Assoc.
Selection Criteria	Score
1. Capability to perform all or most aspects of the project and recent experience in airport projects comparable to the proposed task.	5
2. Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.	5
3. Capability to meet schedules or deadlines.	5
<ol> <li>Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.</li> </ol>	5
5. Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.	5
6. Capability of a branch office that will do the work to perform independently of the home office, or conversely, its capability to obtain necessary support from the home office. The use of geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the	5

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Selection Criteria	Score
<ol><li>Ability to furnish qualified inspectors for construction inspection if applicable.</li></ol>	5
<ol> <li>Understanding of the project's potential challenges and the sponsor's special concerns.</li> </ol>	5
<ol><li>Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.</li></ol>	5
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	5
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal,	

evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)

11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)

12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.

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1 G JULZOZZ	Armstrong	Wood Rodgers Score
<ol> <li>Capability to perform all or most aspects of the project and recent experience in airport projects comparable to the proposed task.</li> </ol>	3	5
<ol> <li>Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.</li> </ol>	4	5
3. Capability to meet schedules or deadlines.	3	5
<ol><li>Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.</li></ol>	3	5
<ol><li>Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.</li></ol>	4	5
6. Capability of a branch office that will do the work to perform independently of the home office, or conversely, its capability to obtain necessary support from the home office. The use of geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the	3	5
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19 JUL2023	Armstrong	Wood Rodgers
Selection Criteria	Score	Score
7. Ability to furnish qualified inspectors for construction inspection if applicable.	4	5
8. Understanding of the project's potential challenges and the sponsor's special concerns.	5	5
9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.	3	5
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	4	5
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)	5	5
12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.	3	5
studies.	44	60

Tim Puliz Submission	Coffman & Assoc.
Selection Criteria	Score
1. Capability to perform all or most aspects of the project and recent experience in airport projects comparable to the proposed task.	5
2. Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.	5
3. Capability to meet schedules or deadlines.	5
<ol> <li>Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.</li> </ol>	5
5. Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.	5
6. Capability of a branch office that will do the work to perform independently of the home office, or conversely, its capability to obtain necessary support from the home office. The use of geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to	5

compete for the contract.

#### Coffman & Assoc. Score

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#### **Selection Criteria**

7. Ability to furnish qualified inspectors for construction inspection if applicable.

8. Understanding of the project's potential challenges and the sponsor's special concerns.

9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.

10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.

11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)

12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.

Tim Puliz submission Selection Criteria	Armstrong Score	Wood Rodgers Score
1. Capability to perform all or most aspects of the project and recent experience in airport projects comparable to the proposed task.	4	4
2. Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.	4	4
3. Capability to meet schedules or deadlines.	4	4
4. Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.	4	4
5. Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.	4	4
6. Capability of a branch office that will do the work to perform independently of the home office, or conversely, its capability to obtain necessary support from the home office. The use of geographic location		
may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.	4	4

Selection Criteria	Armstrong Score	Wood Rodgers Score
7. Ability to furnish qualified inspectors for construction inspection if applicable.	4	4
8. Understanding of the project's potential challenges and the sponsor's special concerns.	4	4
9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.	4	4
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	4	4
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)	4	4
12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.	4	4
	4	8 4

Selection Criteria	Coffman & Assoc. Score
1. Capability to perform all or most aspects of the project and recent experience in airport projects comparable to the proposed task.	4
2. Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.	4
3. Capability to meet schedules or deadlines.	5
4. Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.	4
5. Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.	4
6. Capability of a branch office that will do the work to perform independently of the home office, or conversely, its capability to obtain necessary support from the home office. The use of geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.	4

<b>Selection Criteria</b> 7. Ability to furnish qualified inspectors for construction inspection if applicable	Score 4
8. Understanding of the project's potential challenges and the sponsor's special concerns.	4
9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.	4
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	5

11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)

11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)

12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.

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	Armstrong	Wood Rodgers
Selection Criteria	Score	Score
1. Capability to perform all or most aspects of the project and recent experience in		
airport projects comparable to the proposed task.	2	5
2. Key personnel's professional qualifications and experience and availability for the		
proposed project; their reputation and professional integrity and competence; and their	2	-
knowledge of FAA regulations, policies, and procedures.	5	5
3. Capability to meet schedules or deadlines.	1	5
4. Quality of projects previously undertaken and capability to complete projects without		
having major cost escalations or overruns.	2	5
5. Qualifications and experience of sub-consultants regularly engaged by the consultant		
under consideration.	4	5
6. Capability of a branch office that will do the work to perform independently of the		
home office, or conversely, its capability to obtain necessary support from the home		
office. The use of geographic location may be a selection criteria provided its application		
leaves an appropriate number of qualified firms, given the nature and size of the		-
project, to compete for the contract.	4	5

Selection Criteria	Armstrong Score	Wood Rodgers Score
7. Ability to furnish qualified inspectors for construction inspection if applicable.	4	4
8. Understanding of the project's potential challenges and the sponsor's special concerns.	3	5
9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.	3	5
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	3	4
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)	5	5
12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.	3	5
	3	7 58

Rick Lee Submission	Coffman & Assoc.
Selection Criteria	Score
1. Capability to perform all or most aspects of the project and recent experience in airport projects comparable to the proposed task.	5
2. Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.	5
3. Capability to meet schedules or deadlines.	5
4. Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.	5
5. Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.	5
6. Capability of a branch office that will do the work to perform independently of the home office, or conversely, its capability to obtain necessary support from the home office. The use of geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the	5
project, to compete for the contract.	

### Coffman & Assoc.

Selection Criteria	Score
7. Ability to furnish qualified inspectors for construction inspection if applicable.	5
8. Understanding of the project's potential challenges and the sponsor's special concerns.	5
9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.	5
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	5
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)	5
12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-	F

10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.

	Armstrong	Wood Rodgers
Selection Criteria	Score	Score
1. Capability to perform all or most aspects of the project		
and recent experience in airport projects comparable to the proposed task.	5	5
2. Key personnel's professional qualifications and experience and availability for the proposed project; their reputation and professional integrity and competence; and their knowledge of FAA regulations, policies, and procedures.	5	5
3. Capability to meet schedules or deadlines.	4	5
4. Quality of projects previously undertaken and capability to complete projects without having major cost escalations or overruns.	4	5
5. Qualifications and experience of sub-consultants regularly engaged by the consultant under consideration.	4	4
6. Capability of a branch office that will do the work to perform independently of the home office, or conversely, its capability to obtain necessary support from the home office. The use of geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.	5	5

	Armstrong	Wood Rodgers
Selection Criteria	Score	Score
7. Ability to furnish qualified inspectors for construction inspection if applicable.	5	5
8. Understanding of the project's potential challenges and the sponsor's special concerns.	5	5
9. Degree of interest shown in undertaking the project and their familiarity with and proximity to the geographic location of the project.	5	5
10. Capability to incorporate and blend aesthetic and architectural concepts with the project design while accomplishing the basic requirements that transportation facilities be functional, safe, and efficient.	5	5
11. In meeting the Disadvantaged Business Enterprise (DBE) contract goal, evidence documenting that the consultant met the DBE goal, or by documenting that it made adequate good faith efforts to meet the DBE goal. (See 49 CFR, § 26.53)	5	5
12. Capability to conduct a Value Engineering (VE) study for projects that are particularly complex or have unique features. Order 5100.38, Chapter 3, Subsection 3-57; AC 150/5300-15, Use of Value Engineering for Engineering and Design of Airport Grant Projects; and AC 150/5370-10, Standards for Specifying Construction of Airports, contain additional guidance on VE studies.	5	5