Statement of Interest and Qualifications
Airport Planning, Engineering, and Consulting Services
Truckee Tahoe Airport

PRESENTED TO
Truckee Tahoe Airport District

BY
Reinard W. Brandley
CONSULTING AIRPORT ENGINEER

NOVEMBER 15, 2017
Mr. Kevin Smith, General Manager
Truckee Tahoe Airport District
10356 Truckee Airport Road
Truckee, California 96161

Subject: Request for Statement of Interest and Qualifications
Airport Planning, Engineering, and Consulting Services

Dear Mr. Smith:

In response to your Request for Statement of Interest and Qualifications for Airport Planning, Engineering, and Consulting Services for projects planned at the Truckee Tahoe Airport, we are delighted to have the opportunity to continue to work with the Truckee Tahoe Airport District on the development of this airport.

The office of Reinard W. Brandley is a consulting airport engineering office. We specialize in airport planning, design, environmental, and construction management services for all types of airport construction, including pavement reconstruction/rehabilitation, new airfield pavements, fencing and gates, airfield marking and signage, electrical and lighting improvements, drainage improvements, and hangar development.

Reinard W. Brandley has performed and supervised airport engineering design, environmental studies, and construction management services on airport development projects for the past 64 years. Our design and construction management staff consists of a team of qualified, experienced engineers and inspectors in all civil and electrical construction categories. Damon Brandley, Melissa Brandley, and Tom Steinkamp, Airport Engineers in our office, collectively have over 50 years experience in planning, design, and construction management of airport development projects.

Our approach to airport design and project management is to focus on the client’s goals and objectives to assure that the project is designed and constructed strictly in accordance with those goals. The best-qualified personnel will be assigned to specific tasks and will be committed throughout the project. Construction plans and specifications will be prepared that accurately define the details of the project and provide the contractor with specific details that allow the contractor to bid and construct a quality project on time and within budget. On your construction projects we can, at your choice, provide full service construction management including Quality Assurance testing and inspection or work with airport furnished construction engineers to provide support and coordination as needed.

Reinard W. Brandley’s overall aviation experience will ensure that your project will be completed according to FAA Standards and criteria in a timely and cost-effective manner. Our staff has an excellent and extensive knowledge of FAA procedures and regulations. This is accentuated by a close working relationship with the Northern California District Office of the FAA and with the Western Region of FAA.

We are interested in continuing to provide professional engineering services to the Truckee Tahoe Airport District for the development of the Truckee Tahoe Airport and look forward to meeting with you and your staff.

November 15, 2017
If you have any questions or need further information, please contact Reinard W. Brandley, P.E., Owner and Chief Engineer, 6125 King Road, Suite 201, Loomis, California 95650, Telephone (916) 652-4725, Email Brandley@rwbrandley.com.

Very truly yours,

Reinard W. Brandley
Owner and Chief Engineer
I. INTEREST AND QUALIFICATIONS

The Truckee Tahoe Airport District is requesting Statements of Interest and Qualifications for airport planning, engineering, and consulting services from qualified professional engineers to assist the District with the maintenance and improvement of the Truckee Tahoe Airport. The office of Reinard W. Brandley, Consulting Airport Engineer is interested in continuing to provide such services for the Truckee Tahoe Airport District in the following fields:

A. Specialized Aviation Engineering Services including engineering design of FAA-AIP funded projects, airfield pavements, AIP grant administration, Airport Capital Improvement Program (ACIP) maintenance, advanced and large project design services for both FAA grant eligible and non-FAA grant eligible projects.

B. Airport Planning Services including land use planning, Airport Master plan maintenance and updates, Airport Layout Plan services, FAA land release processing, and other airport planning tasks and functions.

The office of Reinard W. Brandley, Consulting Airport Engineer, has been a leader in airport planning and design for 64 years. Reinard W. Brandley, P.E., founded the firm in 1953. Our office is located in Loomis, California. The firm consists of 10 employees including 4 engineers, 3 drafters, and 3 administrative personnel.

The first airport engineering project performed by Reinard W. Brandley was in 1955 at the Stockton Metropolitan Airport. Since that time this office has focused on airport planning and design projects at small and large hub airports.

Brandley Engineering’s proven engineering excellence has made our quality name known throughout Northern and Central California. By focusing on airport planning and design, we can provide a high-quality plan that will meet all standards and needs of our clients and of the Federal Aviation Administration and of Caltrans Division of Aeronautics.

Our background in geotechnical engineering, pavement evaluation and design, and airport planning and engineering provides the experience and ability to make the best use of local materials and to provide a design that will create a long life, low-maintenance project at reasonable initial cost.

Our close working relationship with the F.A.A. allows us easy access to members of the staff for quick and responsive coordination and reviews of all projects. To further speed up F.A.A. approval, we will review each project with them during design so that final plans will not require detailed time-consuming reviews. This excellent relationship also enables our office to be in the unique position of being made aware of when airport improvement and planning funds are available to our clients. When funds are made available, we act quickly to coordinate with our clients on how to maximize the use of these funds and prepare applications to the F.A.A. for improvement or planning grants.

The F.A.A. Regional Office in Los Angeles and the Washington Headquarters F.A.A. office have always been very supportive of the innovative designs created by our office. They have approved funding over the years of the load-transfer devices, the zebra striping of airfield marking, the use of porous concrete, post-tensioned concrete slab design and sawing and sealing bituminous surface course pavements in mountainous regions to control thermal cracking. The confidence that top F.A.A. officials have shown in our office allows the development and use of innovative designs that lead to better quality end products constructed at more favorable costs.
The experience of Reinard W. Brandley in working with all branches of the Federal Aviation Administration over the past 64 years has enabled him to be very familiar with procedures, regulations, funding, and all other aspects pertaining to airport development. This knowledge has been passed on to all staff members and qualifies our office to provide liaison with the F.A.A. on behalf of Airports at any district or field office. All staff members are kept up to date on all F.A.A. Advisory Circulars and Design Guidelines.

The project staffing for the office of Reinard W. Brandley has been structured to utilize experienced project managers, engineers, technicians, and administrators. Personnel that will be assigned to these projects have extensive experience on projects similar in scope to those anticipated by the Truckee Tahoe Airport District. All team members to be assigned to Truckee Tahoe Airport projects have been actively involved in airfield planning, engineering design, environmental, and construction control for 10 to 35 years. The team members who will be assigned to Truckee Tahoe Airport projects are as follows:

- **Reinard W. Brandley, P.E., Owner and Chief Engineer** – Mr. Brandley has been the owner and chief engineer of this firm since 1953 and will be responsible for all project management.

- **R. Damon Brandley, P.E., Project Manager/Project Engineer/Resident Engineer** – Damon Brandley has been on staff for 24 years and will be the Project Engineer and Resident Engineer for Truckee Tahoe Airport projects.

- **Melissa Brandley, P.E., Project Manager/Project Engineer** – Melissa Brandley has been on staff for 18 years and will be the Project Engineer for Truckee Tahoe Airport projects.

- **Tom Steinkamp, E.I.T., Project Engineer/Airport Planner** – Mr. Steinkamp has been on staff for 33 years and will serve on the design team and serve as Airport Planner for Truckee Tahoe Airport projects.

- **David Baltazar, E.I.T, Design Engineer/Resident Inspector** – David Baltazar has been on staff for 13 years and will serve on the design team and inspection team.

- **Jim Wallace, Environmental Consultant** – Mr. Wallace has been providing environmental services to airports for the past 20 years and will complete all required environmental documentation for Truckee Tahoe Airport projects.

The Federal Aviation Administration requires that environmental studies meeting NEPA requirements be developed for all projects proposed for development on an airport. In many cases this requires that a Categorical Exclusion (Cat Ex) be prepared and approved by the F.A.A. prior to funding of a project. Other cases may require a Short-Form EA or a full Environmental Assessment. For these studies we will utilize the services of Jim Wallace of Wallace Environmental Consulting. Jim has been performing environmental documentation required for NEPA and CEQA on airports for the past 20 years. His expertise is in the development of practical environmental reports and mitigations on airport development projects. Wallace Environmental will team with our office on all environmental issues and requirements.

The vast experience of our office in airport planning, design, and research over the past 64 years will be utilized in the design and construction monitoring for the Truckee Tahoe Airport District.

Our extensive experience in airport planning and design throughout the United States places us in a unique position to provide in-house a complete engineering service for planning, design and construction supervision.
The Consulting Airport Engineering office of Reinard W. Brandley has long history of Engineering Design, Planning and Construction Supervision at the Truckee Tahoe Airport. This relationship started in 1971 and extends through 2017.

All work is performed out of the Loomis office of Reinard W. Brandley, Consulting Airport Engineer. Our office is located approximately 80 miles (1 hour, 20 minutes) from the Truckee Tahoe Airport. We are, therefore, in a position to attend meetings in a timely manner and/or on short notice.

The firm of Reinard W. Brandley understands and complies with the Disadvantaged Business Enterprise (DBE) Policy and Goals as established by the Federal government. Our office has established and implemented an aggressive affirmative action plan.

The experienced staff of Reinard W. Brandley, Consulting Airport Engineer, provides the Sponsor the Engineering excellence needed for the planning, design, and construction management for any airport development project.
II. APPROACH TO AND UNDERSTANDING OF TASKS

The basic design of a project can generally be prepared by any qualified engineer, but it is the details incorporated in the design that can make the difference between a short-lived, high-maintenance project and a long-life, low-maintenance project. Knowledge required to develop and incorporate the design details into a set of plans and specifications is obtained by advanced graduate schooling, experience, and research. Our office provides this knowledge and experience to all design and construction projects. From 1953 to the present the office of Reinard W. Brandley, Consulting Airport Engineer, has been providing engineering services for the type of work anticipated at the Truckee Tahoe Airport.

A. Airport Planning

The F.A.A. requires the Sponsor to have on file an approved Airport Layout Plan in order to be eligible for F.A.A. funding at an airport. Our office has prepared numerous Master Plan Studies and Airport Layout Plan Updates over the past 64 years for over 50 airports. We were involved in the original planning and development of the Sacramento International Airport in the 1960s. Our extensive experience in the preparation of Airport Layout Plans and Master Plans will ensure the development of practical airport layout plans and master plans that not only adequately serve the community, but also are economical to implement and require minimal maintenance when completed.

Our staff keeps up to date with all current F.A.A. requirements regarding master planning and airport design. The Federal Aviation Administration has developed Standard Operating Procedures (SOP) for Airport Layout Plans and Property Maps (Exhibit "A"). Our office will prepare all Master Plans in accordance with these procedures. All planning work will be in accordance with Advisory Circular 150/5070-6B, Airport Master Plans, and with Advisory Circular 150/5300-13A, Airport Design.

B. Geotechnical Engineering/Pavement Design

Reinard W. Brandley's background is Geotechnical Engineering. He was privileged to do his graduate work at Harvard University under Dr. Karl Terzaghi and Dr. Arthur Casagrande. Mr. Brandley's research work toward his doctorate at Harvard University was on airfield pavement design and evaluation. It was from this research that he developed the fatigue analysis method of design of airfield pavements. A description of this design and evaluation procedure was presented in 1975 at a Symposium on Nondestructive Test and Evaluation of Airport Pavements sponsored by the U. S. Army Corps of Engineers Waterways Experiment Station at Vicksburg, Mississippi. This fatigue analysis method of design utilizes the layered elastic theory and uses as failure criteria limiting subgrade deflection/strain under applied aircraft loadings. Each section of pavement is evaluated and designed for the forecast aircraft operations anticipated on that section of pavement. This Fatigue Analysis methodology for evaluation and design of airfield pavements has a 60-year successful performance record and has been used to evaluate and design pavements at the Truckee Tahoe Airport.

The F.A.A. requires that the Sponsor develop a Pavement Management and Maintenance Plan (PMMP) for all airports as a condition of being eligible for Federal funding of pavement maintenance, reconstruction, or new construction projects. Our office is experienced in providing the services required to develop these studies. In 2011 our office prepared a Pavement Maintenance Management Plan (PMMP) for the Truckee
Tahoe Airport. This PMMP was updated by our office in 2014. We utilized our geotechnical expertise and the Fatigue Analysis technology developed by our office, along with the Pavement Condition Index (PCI), which has provided the Truckee Tahoe Airport District with the most economical, long-life pavement design and maintenance programs for the Truckee Tahoe Airport.

Reinard W. Brandley is a member and past chairman of the Airfield Pavement Committee of the American Society of Civil Engineers, a member of the National Research Board Task Force on Nondestructive Evaluation of Airfield Pavements, and a member of the Airports Consultants Council. As a result of these activities and experience, we have extraordinary capabilities for the design and evaluation of airfield pavements.

Our background in soils engineering, pavement evaluation and design and airport engineering provides the experience and ability to make the best use of local materials and to provide a design that will create a long life, low-maintenance project at reasonable initial cost.

C. Airport Design and Construction Management

Our office has been in continuous operation under Reinard W. Brandley’s name for the past 64 years and has performed airport design work on more than 1,500 projects at more than 100 airports, ranging from the smallest airports to some of the largest, including Chicago-O’Hare International Airport; Sacramento International Airport; San Diego International Airport; United Parcel Service Air Hubs in Louisville, Kentucky and Ontario, California; Fresno Yosemite International Airport; Stockton Metropolitan Airport; Lake Tahoe Airport; Madera Municipal Airport; Visalia Municipal Airport; Watsonville Municipal Airport; Mammoth Yosemite Airport; Chico Municipal Airport; Plumas County Airports; Modoc County Airports; Alturas Municipal Airport and Truckee Tahoe Airport. Most of our work is repeat business for the same clients in which, year after year, we continue to do work for them. We make a point of limiting our workload to a select group of clients for whom we can provide a complete and effective service. In this manner, we are able to limit our staff to a workable size of qualified, experienced personnel. We are, therefore, in a position to give personal attention to all projects.

On all engineering design projects, our office prepares complete plans, specifications, Engineer’s Reports with cost estimates, Construction Management Plans, and Construction Safety and Phasing Plans. Drawings are prepared in our office on AutoCAD Release 2017. All specifications and reports are prepared on Microsoft Word. We have 10 stations capable of using AutoCAD and Office programs.

We have a unique capability of handling all phases of the work in our office or with other team members when necessary and, as a result, can provide a full service on all projects.

We know intimately the requirements and standards of the Federal Aviation Administration and of the Caltrans Division of Aeronautics and are prepared to proceed quickly with the design of all projects.

Our approach to all design and construction management projects includes the following:

→ In the Preliminary Phase of any airport design project we will coordinate with the District on the project scope, finances, schedules, operational safety and phasing
considerations, and other pertinent matters, including coordinating the project with interested stakeholders to identify potential impacts to their operations. We will employ the services of Wallace Environmental Consulting, Inc., to prepare any required environmental documents prior to submitting a project application to the FAA for grant funding. Preliminary design sketches and layouts and cost estimates will be prepared, along with the necessary applications for FAA AIP or other funding.

In the **Design Phase** we will coordinate with the District on all design matters including obtaining existing pertinent documents and attending meetings with the District staff to discuss the project. This phase will be accomplished in three separate tasks.

- **Preliminary design** – It will be necessary to develop project permitting and environmental review information including project areas of impact, biological impacts, cultural resource impacts, and other environmental impacts. It will also be necessary to develop plans for mitigation of the biological impacts. This work will be coordinated among the District, our office, and our environmental consultant, Wallace Environmental Consulting, Inc. An Engineer’s Estimate and 60% level plans and specifications will be prepared for all proposed work and submitted to the District and FAA for review.

- **Meetings and Negotiations** – As part of determining a mitigation plan for all biological impacts, it may be necessary to hold meetings with local stakeholders, permitting agencies, and agencies that consult to permitting agencies. Our office will attend these meetings and assist the District in these negotiations as needed.

- **Design Services – Construction Documents** – Once a mitigation plan has been determined, we will provide necessary surveys and geotechnical engineering and field investigations. The design will be based on information obtained from surveys, soils investigations, environmental studies, and all other data obtained in the previous phases. This phase includes preparation of design, plans and specifications, Engineer’s Report including Engineer’s Estimate, Construction Management Plan, and Construction Safety and Phasing Plan. All documents will be printed and provided to the District and FAA for 90% review. The Construction Safety and Phasing Plan will be in accordance with FAA SOP 1:00 and will be uploaded in the FAA’s Obstruction Evaluation Airport Airspace Analysis (OE/AAA) system for FAA coordination and review. Any comments and/or questions raised by jurisdictional agencies will be addressed and incorporated into the plans and specifications. Original final plans and specifications will be delivered to the District for bidding.

In the **Bidding and Contract Award Phase** we will provide the District with final plans and specifications and assist in distributing these documents to prospective contractors. We will participate in the pre-bid meeting for all prospective contractors and respond to any questions and comments from prospective contractors. Any required addenda will be prepared by our office. Once bids have been received, we will assist the District in awarding the contract including
preparation of the Abstract of Bids, evaluating the bids, and submitting required
documents to the FAA so that they can issue authorization to award the contract.

→ In the **Construction Phase** we provide the following services or coordinate with
the District’s representative to provide these services:

- Represent the District at the Pre-construction Conference and prepare the
  minutes for submission to FAA so that they can issue authorization to issue
  notice to proceed to the contractor.
- Provide consultation and advice to the District during all phases of
  construction.
- Provide complete construction management services as required, including
  providing all resident engineering, testing and inspection services and all
  required reports to the District and F.A.A. and including attendance at weekly
  construction meetings, evaluation of materials and methods of construction,
  providing flaggers, review of all mix designs, and review of contractor
  schedules.
- Provide weekly inspection reports (FAA Form 5370-1) to the Truckee Tahoe
  Airport District, including photographs.
- Maintain all records of construction.
- Review and approve all shop drawings and submittals.
- Review all materials, equipment and performance tests for compliance with
  specifications.
- Perform field and/or construction surveys if required.
- Prepare and assist in negotiating any required change orders and/or
  supplemental agreements.
- Coordination with utility companies, governmental agencies, and affected
  airport tenants.
- Preparation of payment requests for contractors and assisting the District in
  preparation of payment requests for amounts reimbursable from grant
  projects (FAA Form SF 271).
- Perform final inspection including preparation of “punch list” and a report of
  the completed project to the District.
- Conduct wage rate interviews and review contractor’s weekly payrolls for
  wage compliance.

→ In the **Project Closeout Phase** we provide the following services:

- Provide Record Drawings to the District and FAA.
- Provide Final Engineer’s Report to the District and FAA. This report will include
  a summary of all material testing (Quality Control and Quality Assurance), a
  summary of any change orders, and a financial summary.
- If a grant amendment is required, our office will prepare the grant amendment
  request to FAA and associated justification.
- Our office will obtain the releases of liens/claims from the contractors.
- If the FAA requires additional information in order to close the project out, we
  will work with them to assure they receive all data.
- Update the Airport Layout Plan to show the new development.
D. **Airport Capital Improvement Plan (ACIP) Planning and Development**

For all our clients we provide assistance in planning and development of their Airport Capital Improvement Plan (ACIP), including meeting with the client and the F.A.A. to review the desired development at the airport; preparing the ACIP including estimates of cost, program narrative, and sketch maps; and preparing project applications for specific projects.

E. **Truckee Tahoe Airport**

From 1971 to 1972 and since 2011 we have acted as airport engineer for the Truckee Tahoe Airport District for most of the airport design work at the Truckee Tahoe Airport. Work involved on this airport has included soils engineering, pavement evaluation and design, airport engineering, preparation of plans and specifications, and construction management, testing, and inspection. We prepared a Pavement Maintenance Management Plan (PMMP) for the Truckee Tahoe Airport in 2011 and updated this PMMP in 2014. The data from this plan is being used to determine the rehabilitation and/or reconstruction requirements for all pavements on the airport.

In the next five years, the District proposes several improvement projects at the Truckee Tahoe Airport, including:

- Reconstruct Taxi lane R
- Reconstruct Runway 11-29 East End Blast Pad
- Saw & Seal New Joints – Hangar Taxi lanes J & K
- Reconstruct Existing Runway 2-20, Replace VASI with New 2-box PAPI Runway 20, and Relocate Taxiway G
- Reconstruct Taxi ways A (0+00 to 28+00), B, C, and D
- Crack Repair & Reseal Existing Joints – Runway 11-29 (East)
- Reconstruct Apron A2

The District also proposes to update the Airport Layout Plan for the Truckee Tahoe Airport, including an Airport Layout Plan Narrative and Updated ALP Drawings, within the next five years.

Our office has been working with the Truckee Tahoe Airport to develop this Capital Improvement Program over the past several years. In addition, we have performed the engineering design and preparation of plans and specifications for all pavement maintenance/rehabilitation projects since 2011.

Our office has the expertise in the development of plans, specifications, and estimates required for any airfield improvement project. In addition, we have the experience and staff to supply the construction management services for these projects.

Our office is prepared to provide complete engineering consulting services to the Truckee Tahoe Airport District on all airport planning, design, and construction related matters.
III. PROJECT TEAM

The Brandley Engineering team is comprised of ten engineers, drafters, and support staff with 10 to 65 years’ experience. We employ a veteran team of individuals with demonstrated excellence in airport planning and design.

An organization chart presented below shows the proposed distribution of responsibility for the execution of projects proposed for the Truckee Tahoe Airport.

The project staffing for the office of Reinard W. Brandley has been structured to utilize experienced project managers, engineers, technicians, and administrative personnel. Personnel that will be assigned to this project have extensive experience on projects similar in scope to those anticipated by the Truckee Tahoe Airport District. No member of the project team will be substituted during the contract duration without prior written approval of the District.

Project staffing workload in our office is largely controlled by limiting the number and type of projects to which we submit proposals and by minor adjustments to staffing. Narrative description and resumes for members of the Reinard W. Brandley, Consulting Engineers, staff are presented below.

Truckee Tahoe Airport
Airport Planning, Engineering, and Consulting

III-1

Statement of Qualifications
November 15, 2017
REINARD W. BRANDLEY, P.E. – PROJECT MANAGER, OWNER AND CHIEF ENGINEER

QUALIFICATIONS AND EXPERIENCE

Mr. Brandley has been the owner and chief engineer of this firm since 1953. He is involved directly with every project. He coordinates the design of all projects and has responsibility for construction management. He has 64 years of planning, design, and construction control experience on all phases of airport development. Reinard W. Brandley will be the Project Manager and the direct main contact on all engineering projects for the Truckee Tahoe Airport District and will be responsible for maintaining the project schedule. He will devote the time required after each design or construction management contract is signed to complete the project within the time agreed.

After graduation from Harvard University Graduate School of Engineering in the field of Applied Soil Mechanics and Foundation Engineering, today known as Geotechnical Engineering, he began his career as Assistant Professor at the University of Saskatchewan in Canada. At this University he established the Soil Mechanics Curriculum and taught senior student and graduate student courses in Soil Mechanics and in the Technology of Cement and Concrete. To obtain practical experience he left the University and joined the consulting engineering firm of O. J. Porter Company in Sacramento, California, where he served for four years as Chief Engineer in charge of Geotechnical Engineering Design and the materials Testing Laboratory. In 1953 he set up his own Geotechnical Engineering, Airport Engineering, and Materials Testing Laboratory in Sacramento, California.

Since 1953 Mr. Brandley has been involved in total engineering planning and design of airports throughout the United States including master planning, pavement design, engineering design of all phases of development including electrical features, construction management, testing and inspection. He has developed many new innovative designs and facilities used today and adopted by the Federal Aviation Administration as design standards. He invented a load-transfer device for use in reestablishing load transfer capabilities across a joint in Portland cement concrete pavements and holds a patent for this device.

Reinard W. Brandley is a member and past chairman of the Airfield Pavement Committee of the American Society of Civil Engineers, a member of the National Research Board Task Force on Nondestructive Evaluation of Airfield Pavements, and a member of the Airports Consultants Council. As a result of these activities, we have extraordinary capabilities for the design and evaluation of airfield pavements.
REINARD W. BRANDLEY, P.E. – PROJECT MANAGER, OWNER AND CHIEF ENGINEER

RESUME

Education
B. Sc. in Civil Engineering, University of Alberta, Canada - 1945
M. Sc. in Civil Engineering, University of Alberta, Canada - 1946 - Thesis - Airfield Pavement Evaluation Studies
S.M. - Graduate School of Engineering, Harvard University
Completed resident requirements for degree of Doctor of Science at Harvard University, Graduate School of Engineering - 1948 - Thesis - The Evaluation of Full-Scale Load Tests for the Bearing Capacity of Airfield Pavements

Professional Registration
State of California - Civil Engineer - No. 8044 - Since 1951
State of California - Geotechnical Engineer - No. 160
Also Registered Professional Engineer in the States of:
   Nevada                           Oregon                           Kentucky
   Utah                             Tennessee                        Colorado
   Florida                          Washington                       Hawaii

Membership in Professional Societies
   American Society of Civil Engineers - Life Member
   American Association of Airport Executives - Associate Member
   California Association of Airport Executives - Associate Member
   Airport Consultants Council - Member

Technical Activities and Committee Memberships
   Member and Past Chairman, Airfield Pavement Committee, American Society of Civil Engineers
   Member, Task Force on Nondestructive Evaluation of Airfield Pavements, Transportation Research Board
   Member, Peer Review Board for New Concrete Manual prepared for U.S. Air Force
   Member, Blue Ribbon Panel charged with evaluation of consultants' studies concerning the proposed expansion of San Francisco International Airport (SFO)

Unique Design Features Development
   Fatigue Analysis methodology for identifying causes of pavement distress and remaining life of a pavement section.
   Development of load-transfer devices for re-establishment of load transfer across joints in Portland cement concrete slabs.
   Development of in-place stabilization of loose, saturated sand soils by timed rolling and resting procedures.
   Development of successful subdrainage systems for pavement sections to increase and enhance the stability and performance of a pavement section.
R. DAMON BRANDLEY, P.E.
PROJECT MANAGER/PROJECT ENGINEER/RESIDENT ENGINEER

PROFESSIONAL EXPERIENCE:
Mr. Brandley is a major partner in Brandley Engineering and is a registered Civil Engineer in the State of California (CE66558). He obtained his Bachelor of Science in Civil Engineering from Texas A&M University in May 2000 and his Master of Science Degree in Civil Engineering from the University of Illinois in December 2001.

He has been actively involved in airport and airfield pavement design and construction control for nine summers while attending school and for the past 17 years full time. He has completed a Research Assistantship at the University of Illinois in Champaign/Urbana while completing his Master’s degree. This research was conducted in conjunction with the FAA’s Center of Excellence in Airport Pavement Research. His work as a Research Assistant included airfield pavement design and testing, Super Pave mix designs, and various other research projects.

He is experienced in the planning and design of runways, taxiways, and roads, including paving, grading, drainage, lighting, utilities, etc. He has conducted construction management, testing, and inspection on several airports over the past 24 years.


Damon Brandley has been involved in the design and project management for pavement reconstruction and rehabilitation projects at Sacramento International Airport, Truckee Tahoe Airport, Chico Municipal Airport, Stockton Metropolitan Airport, Oroville Municipal Airport, Lincoln Regional Airport, Plumas County Airports, Alturas Municipal Airport, and Tulelake Airport, as well as several others.

Mr. Brandley has been lead engineer for Pavement Evaluation Studies over the past 10 years. He has been involved in all aspects of these studies including soil testing, pavement testing, pavement inspections, calculation of the remaining life of the pavements under forecast traffic, and the development of the Pavement Management Maintenance Plans (PMMP) for more than 25 airports. These reports provide detailed information on all the existing pavements at an airport, a schedule of recommended maintenance and reconstruction for each segment of pavement, and cost estimates for the recommended maintenance and reconstruction schedule.

Mr. Brandley’s experience in the evaluation of airfield pavements is invaluable to our clients in the design and construction management of pavement rehabilitation, reconstruction, and/or maintenance projects.
R. DAMON BRANDLEY, P.E.
PROJECT MANAGER/PROJECT ENGINEER/RESIDENT ENGINEER

RESPONSIBILITIES:
Mr. Brandley will be Project Engineer and Resident Engineer for the Truckee Tahoe Airport improvement projects. He will devote the time required after each design or construction contract is signed to complete the project within the time agreed.

RESUME

EDUCATION:
Master of Science in Civil Engineering, University of Illinois, December 2001.
B. Sc. in Civil Engineering, Texas A&M University, May 2000.

PROFESSIONAL REGISTRATION
State of California - Civil Engineer - No. 66558

CONTINUING EDUCATION

REPRESENTATIVE PROJECTS

DESIGN PROJECTS
- Sacramento Executive Airport – Removal of Runway 16-34 - 2017
- Sacramento International Airport – Reconstruction of Taxiway D - 2016
- Truckee Tahoe Airport, Reconstruct Apron A4 - 2015
- Lake Tahoe Airport, Reconstruction of General Aviation Apron – 2013-14
- Oroville Municipal Airport, Crack Seal and Mark Airfield Pavements, Airfield Guidance Sign Update - 2011
- Plumas County Airports – Obstruction Removal, Safety Area Grading - 2009
- Lake Tahoe Airport – Infield Grading - 2010
- Stockton Metropolitan Airport – Reconstruct G.A. Apron and Tee Hangar T/W – 2008
- Lincoln Regional Airport – North Tee Hangar Development, AWOS III - 2008
- Sacramento International Airport – Terminal “A” East Apron Expansion – 2007

CONSTRUCTION ADMINISTRATION PROJECTS
- Lake Tahoe Airport – General Aviation Apron Reconstruction Phase 3 – 2016
- Chico Municipal Airport – Reconstruct Taxiway H and Aircraft Parking Apron –2015
- Tracy Municipal Airport – Reconstruct Runways and Taxiways –2015
- Truckee Tahoe Airport – Reconstruction of Apron A4 –2014
- Lake Tahoe Airport – General Aviation Apron Reconstruction Phases 1 and 2 –2014
- Truckee Tahoe Airport – 2013 Airfield Pavement Maintenance – 2013
- Lake Tahoe Airport – Terminal Apron Rehabilitation Phase 3 – 2011
- Chico Municipal Airport – Reconstruct Phase 2B Apron Rehabilitation – 2010
- Lake Tahoe Airport – Terminal Apron Rehabilitation –2009 and 2010
MELISSA BRANDLEY, P.E.
PROJECT MANAGER/PROJECT ENGINEER

QUALIFICATIONS AND EXPERIENCE

PROFESSIONAL EXPERIENCE:

Ms. Brandley is a major partner in Brandley Engineering. She was actively involved in airport and airfield pavement design for six summers during her high school and University attendance. She has been on full-time staff for the past 12 years. She is experienced in the planning and design of runways, taxiways, and roads, including paving, grading, drainage, lighting, utilities, etc. She operates the AutoCAD system and has conducted construction management, testing, and inspection on airports over the past several years.

Melissa Brandley’s interest in airport engineering started early. As the daughter of Reinard W. Brandley, Ms. Brandley was exposed to many facets of airport engineering throughout her early life. She worked for Brandley Engineering for six summers during high school and college learning the basics of airport design and complying with FAA design standards and advisory circulars. Ms. Brandley received Bachelors & Masters degrees in Civil Engineering from Texas A&M University with an emphasis in Geotechnical Engineering. She has been a full-time staff member and major partner in Brandley Engineering since completing her university studies in 2004.

Melissa Brandley’s vast airport design experience covers every facet of airport engineering including designs of runways, taxiways, aprons, hangar developments, roads, parking lots, drainage systems, lighting systems, navigational aids and fencing. Her educational background in Geotechnical evaluation of local soil conditions ensures that each design incorporates a detailed geotechnical evaluation of local soil conditions. This experience coupled with extensive knowledge of FAA standards and advisory circulars results in a design that meets all FAA standards and addresses unique local conditions and needs of the airport.

Melissa Brandley’s airport design expertise is equally complimented with her knowledge and experience in construction management. She has been the Resident Engineer overseeing each phase of construction on most of her design projects. This unique combination of design and construction management expertise ensures that each project is designed with an emphasis on anticipating and addressing unique construction challenges in order to avoid costly change orders and delays during construction.

RESPONSIBILITIES:

Ms. Brandley will serve as Project Engineer for the Truckee Tahoe Airport improvement projects. She will devote the time required after each design contract is signed to complete the project within the time agreed.
MELISSA BRANDLEY, P.E.
PROJECT MANAGER/PROJECT ENGINEER

RESUME

EDUCATION:
Master of Science in Civil Engineering, Texas A&M University, August 2004.
B. Sc. in Civil Engineering, Texas A&M University, May 2003.

PROFESSIONAL REGISTRATION
State of California - Civil Engineer - No. 71139

REPRESENTATIVE PROJECTS:

DESIGN PROJECTS
• Tracy Municipal Airport – New 2-box PAPI Runway 30, Power Upgrades for PAPIs
Runways 12, 8, and 26, Replace AWOS – 2017
• Truckee Tahoe Airport – Reconstruct Hangar Taxi lanes – 2017
• Truckee Tahoe Airport – Executive Hangars – Buildings and Site – 2017
• Chico Municipal Airport – Reconstruct Aircraft Parking Apron Phase 3 – 2016
• Madera Municipal Airport – Reconstruction of General Aviation Apron Phase 2 – 2016
• Visalia Municipal Airport – Reconstruct Apron A2 – 2016
• Chico Municipal Airport – Reconstruct Aircraft Parking Apron Phase 5 – 2014
• Alturas Municipal Airport – Joint Seal, Slurry Seal, and Marking - 2014
• Tracy Municipal Airport – Reconstruction of Airfield Pavements – 2013-16
• Rogers Field, Chester, California – Rehabilitation of Tie Down Apron – 2013
• Chico Municipal Airport – Reconstruct Taxiway H and Holding Apron – 2012
• Madera Municipal Airport – Rehabilitation of General Aviation Apron Phase 1 – 2012
• Watsonville Municipal Airport – Reconstruct T/W C and G.A. Apron - 2010-2012
• Chico Municipal Airport – Rehabilitation of Aircraft Parking Apron (5 phases) – 2007 through 2010
• Lake Tahoe Airport – Terminal Apron Reconstruction – 2009 through 2010
• Fresno Chandler Executive Airport – Construct North Parallel Taxiway – 2009

CONSTRUCTION MANAGEMENT PROJECTS
• Visalia Municipal Airport – Reconstruct Apron A2 – 2017
• Tracy Municipal Airport – Reconstruct General Aviation Tie Down Apron – 2017
• Madera Municipal Airport – Reconstruct General Aviation Apron Phase 2 – 2016
• Tracy Municipal Airport – Reconstruct Runways and Taxiways – 2015
• Stockton Metropolitan Airport – Rehabilitate Runway and Taxiway Lighting and Signage
– 2014
• Watsonville Municipal Airport – Reconstruct T/W C and G.A. Apron Phase 1 – 2014
• Oroville Municipal Airport – North Side Apron Rehabilitation – 2013
• Visalia Municipal Airport – East Side Drainage Upgrade – 2013
• Cedarville Municipal Airport – Rehabilitate Airfield Pavement Joints, Slurry Seal Airfield
Pavements, Construct Drainage Improvements - 2012
• Rogers Field, Chester, California – Reconstruct Tee Hangar Taxi lanes – 2012
• Tulelake Airport – Rehabilitation of Aircraft Parking Apron – 2012

Truckee Tahoe Airport
Airport Planning, Engineering, and Consulting
THOMAS A. STEINKAMP, E.I.T.
PROJECT ENGINEER/ AIRPORT PLANNER

QUALIFICATIONS AND EXPERIENCE

PROFESSIONAL EXPERIENCE:

Mr. Steinkamp brings a dynamic engineering background to this firm with over 42 years of experience in engineering design. This experience began with a mechanical engineering degree and continued with 10 years of active employment with a civil engineering consulting/materials testing firm as a project designer and materials testing technician.

Mr. Steinkamp has been actively involved in airport and airfield pavement design and construction control on airports in the Western United States for the past 33 years. He has over 33 years of progressive field and office experience in design and management of airfield projects in our office. He is experienced in the design of runways, taxiways, aprons, and roads, including paving, grading, drainage, lighting, utilities, etc. He prepares plans, specifications, construction cost estimates, and operates the CAD system. Mr. Steinkamp has been responsible for construction management, testing, and inspection on several airports over the past several years.

Since 1984, Mr. Steinkamp has developed a thorough knowledge of the principles and practices of civil and airport engineering and construction management with knowledge of and experience with FAA regulations, requirements, practices, design criteria and advisory circulars.

Over the past 10 years Tom Steinkamp has been involved in the development and update of multiple Airport Layout Plans in accordance with the latest SOP's issued by FAA.

Mr. Steinkamp's design and field experience has developed a focused perspective to provide the clients of Reinard W. Brandley Engineering innovative and current solutions in the planning and design of today's airports.

RESPONSIBILITIES:
Mr. Steinkamp will serve on the planning staff and design staff for the Truckee Tahoe Airport improvement projects. He will devote the time required after each planning or design contract is signed to complete the project within the time agreed.
THOMAS A. STEINKAMP, E.I.T.
PROJECT ENGINEER/ AIRPORT PLANNER

RESUME

Education:  B. Sc. in Mechanical Engineering Technology, Oregon State University, 1979

REPRESENTATIVE PROJECTS:

DESIGN PROJECTS

- Watsonville Municipal Airport – 2-box PAPIs Runways 2 and 20 – 2017
- Bryant Field – Stock Drive Realignment - 2016
- Truckee Tahoe Airport – Apron A2 Expansion, Taxiway E Removal, Reconstruct South Jet Apron – 2015-16
- Oroville Municipal Airport – Grade Runway Safety Area and Improve Drainage - 2015
- Tracy Municipal Airport, Reconstruct Airfield Pavements - 2014
- Bryant Field, Reconstruct Runway 16-34 and Taxiway A – 2012
- Visalia Municipal Airport – Runway/Taxiway Marking Rehabilitation - 2012
- Visalia Municipal Airport – Southwest Side Development – 2011
- Madera Municipal Airport – General Aviation Apron and Access Taxiway – 2010

CONSTRUCTION MANAGEMENT PROJECTS

- Gansner Field – Quincy, California – Reconstruct Runway 7-25 and Cross Taxiways – 2017
- Chico Municipal Airport – Reconstruct Apron Phase 3 – 2016
- Chico Municipal Airport – Reconstruct T/W H and Apron Phase 5 – 2015
- Watsonville Municipal Airport – Reconstruct T/W C and G.A. Apron Phase 1 - 2014
- Madera Municipal Airport – Reconstruct General Aviation Apron Phase 1 – 2013
- Chico Municipal Airport – Remark Runways, Taxiways, and Apron - 2013
- Bryant Field – Reconstruct Runway and Taxiway, Construct New Cross Taxiway - 2012
- Madera Municipal Airport – New Taxiway Edge Light System - 2012
- Madera Municipal Airport – General Aviation Apron Expansion Phase 2B – 2010
- Madera Municipal Airport – G.A. Apron Expansion Phase 2 – 2008
- Madera Municipal Airport – Construct Hangar Apron and Taxiway, Reconstruct General Aviation Apron, Construct Road 24 & 24½ - 2005
- Visalia Municipal Airport – Construct South Side Taxiway – 2005
DAVID BALTAZAR, E.I.T.
DESIGN ENGINEER/RESIDENT INSPECTOR

QUALIFICATIONS AND EXPERIENCE

PROFESSIONAL EXPERIENCE:

Mr. Baltazar has been involved in airport design and airfield pavement testing and inspection on airports in the Western United States for the past 13 years. He has 13 years of progressive field and laboratory experience in testing and inspection of airfield projects in our office. He is experienced in the design and inspection of runways, taxiways, aprons, and roads, including paving, grading, drainage, lighting, utilities, etc.

Mr. Baltazar has developed and applied his skills for designing and inspecting airport construction projects. From the design phase to the finished construction he treats each project with respect and professionalism in the Airport’s interests, which results in a quality project that will outperform and outlast expectations.

As an Engineer David has honed and utilized his proficiency in AutoCAD R14 through AutoCAD Civil 3D 2017 to design and draft detail oriented construction plans and airport layout plans. He has been the lead designer on airfield pavement crack and joint seal projects for Lincoln and Tulelake Airports and pavement reconstruction projects for Rogers Field and Truckee-Tahoe Airport. He is capable of providing design and support wherever there is a need to maintain continuity throughout Brandley Engineering’s design process. While working on many design jobs he has become proficient in quantity takeoffs and engineering estimates that deliver accuracy and clarity for each design project. During his time at Brandley Engineering he has helped create a system to provide a reprographic and digital maintenance that creates a smooth and timely delivery of plans when needed.

Having spent a formidable period of his engineering profession performing laboratory testing, Mr. Baltazar has gained a familiarity of material testing that is the foundation of his Resident Engineer/Inspection expertise. He is familiar with and proficient in the testing and mechanics of asphalt pavement, asphalt mix designs, soils, and aggregate bases. Providing Resident Engineering services on successful construction projects, David has extensive experience in communicating with airport operators, advising, and directing contractors, coordinating airfield closures, maintaining an efficient construction schedule, and ensuring a quality finished project. He has served as a Resident Engineer/Inspector for crack seal, drainage, marking, lighting, earthwork, and pavement projects on airports throughout Northern California. When encountered with an onsite complication, David’s knowledge of materials gives him the objective confidence and steadiness to adapt and make effective modifications when necessary. He has applied his experience during construction projects at Truckee Tahoe Airport and other airports throughout Northern California.

RESPONSIBILITIES:

Mr. Baltazar will serve on the design staff and the inspection staff for the Truckee Tahoe Airport projects. He will devote the time required after each design or construction management contract is signed to complete the project within the time agreed.
DAVID BALTAZAR, E.I.T.
DESIGN ENGINEER/RESIDENT INSPECTOR

RESUME

Education: Bachelor of Science, Mechanical Engineering, California State University, Sacramento 2007

Experience: Airport Engineer/Resident Inspector for Reinard W. Brandley, Consulting Airport Engineer, 2003-Current

REPRESENTATIVE PROJECTS:

DESIGN PROJECTS
- Lake Tahoe Airport – General Aviation Reconstruction Phase 4 – 2017
- Visalia Municipal Airport – Hangar Development - Building and Site - 2017
- Tulelake Municipal Airport – Saw and Seal Joints Runway 11-29 - 2016
- Lincoln Regional Airport – Crack Seal Airfield Pavements - 2015
- Lake Tahoe Airport – Taxiway Joint Seal, Remarketing - 2014
- Tracy Municipal Airport - Reconstruction of Airfield Pavements – 2013-14
- Oroville Municipal Airport - North Side Apron Rehabilitation – 2013
- Truckee Tahoe Airport, Runway 10-20 Rehabilitation and Airfield Maintenance Projects – 2011-12
- Rogers Field – Tee Hangar Taxiway Rehabilitation – 2011
- Lake Tahoe Airport – Terminal Ramp Reconstruction - 2010

FIELD INSPECTION AND TESTING
- Truckee Tahoe Airport – Reconstruct Hangar Taxi lanes CD and DE (East) – 2017
- Alturas Municipal Airport – Construct Helicopter Parking Apron – 2016
- Rogers Field – Reconstruct Tie Down Apron – 2015
- Watsonville Municipal Airport – Taxiway C & GA Apron Reconstruction - 2014
- Rogers Field - Rehabilitate Airfield Pavement Joints, Remark Airfield Pavement Markings – 2013
- Truckee Tahoe Airport, Runway 10-20 Rehabilitation – 2012
- Oroville Municipal Airport - Crack Seal and Mark Airfield Pavements, Airfield Guidance Sign Update - 2011
- Madera Municipal Airport – General Aviation Apron and Access Taxiway – 2010
- Mammoth Yosemite Airport – Reconstruct Runway 9-27 & Taxiways - 2008
- Lake Tahoe Airport – Reconstruct Runway 18-36 - 2008
- Chico Municipal Airport – Rehabilitation of Aircraft Parking Apron – 2008 thru 2010

Truckee Tahoe Airport
Airport Planning, Engineering, and Consulting

III-11

Statement of Qualifications
November 15, 2017
QUALIFICATIONS AND EXPERIENCE

PROFESSIONAL EXPERIENCE:

Mr. Currey has over 10 years’ experience in design and engineering of civil infrastructure projects. In addition to airport-related projects, his professional experience includes large-scale residential, commercial, and mixed use land development; design of compensatory wetlands and environmental mitigation projects; drainage master plans; and public works planning, scoping, and engineering design. He is also experienced in land planning, surveying, and project scheduling.

Before joining the Brandley Engineering team, he provided AutoCAD design and training services to engineering firms.

As a project designer, his experience includes over 600 acres of development on steep-sloped hillsides and environmentally sensitive areas; a 250-acre mixed-use community that received the Envision Utah Governor’s Quality Growth Award; and the hydrologic model for storm drain master plan of a 300-acre hillside site.

Mr. Currey is an expert AutoCAD Civil 3D user, mentor, and trainer. He has helped companies successfully implement Civil 3D and trained employees to become proficient in using the software through all aspects of the design process. He also managed their AutoCAD and network infrastructure. His software competencies include AutoCAD Civil 3D, Autodesk Subassembly Composer and Part Builder for Civil 3D, Autodesk Storm & Sanitary Analysis, Microsoft Office, Microsoft Project, and Microsoft Windows networking administration.

Mr. Currey is very knowledgeable in airport design. Since joining the Brandley Engineering team he has helped increase efficiency in the design process and helped optimize construction costs using the surface modeling tools in Civil 3D. He is well-versed in FAA design guidelines, and has used AutoCAD to model aircraft turning movements to design fillets that meet new FAA taxiway fillet design standards to meet airport operators’ unique operational needs. He has been the project designer for the Sacramento International Airport East Taxiways Improvements, Gansner Field Runway 7-25 Reconstruction, and Truckee Tahoe Airport Taxiway A Reconstruction.

RESPONSIBILITIES:

Mr. Currey will serve on the design staff for the Truckee Tahoe Airport projects. He will devote the time required after the design contract is signed to complete the project within the time agreed.
RESUME-BRANDLEY ENGINEERING

REPRESENTATIVE PROJECTS:

- Chico Municipal Airport – Reconstruct Taxiway A – 2017
- Bryant Field Airport – Obstruction Evaluation – 2016
- Sacramento International Airport – East Taxiways Improvements – 2015-16
- Gansner Field Airport – Runway 7-25 Reconstruction – 2015-16
- Madera Municipal Airport – Apron Reconstruction – 2016
- Truckee Tahoe Airport – Jet Apron Reconstruction – 2015-16
- Alturas Municipal Airport – Helicopter Apron – 2016
- Truckee Tahoe Airport District – Tahoe City Helipad – 2015
- Truckee Tahoe Airport – Taxiway A Reconstruction – 2015
- McClellan Airfield – Airfield Remarking Plan – 2015
- Tracy Municipal Airport – Runway 12-30 & Taxiway B Reconstruction - 2015
- Oroville Municipal Airport - Drainage and Safety Area Improvements - 2015
QUALIFICATIONS AND EXPERIENCE

PROFESSIONAL EXPERIENCE:

Mr. Wallace brings 40 years of environmental and natural resource consulting including 20 years as an airport environmental consultant.

Since 1997, Mr. Wallace has worked with airport sponsors throughout California to comply with the National Environmental Policy Act (NEPA) as administered by the Federal Aviation Administration (FAA). He established an excellent working relationship with the FAA’s San Francisco Airport District Office’s environmental and engineering staff. That relationship fosters open communications that promote resolutions to complex environmental and planning issues.

For example, the Wallace consulting team has solved environmental issues for airports that are designated critical habitat for federally listed species (Napa County Airport and Watsonville Municipal Airport); for airports with extremely sensitive cultural resources (Tulelake Municipal Airport); for airports with sensitive surrounding land use issues (Chico Municipal Airport and Lincoln Regional Airport) and airports located in unique physical settings (Lake Tahoe Airport, Mammoth Yosemite Airport and Weaverville Municipal Airport).

Coupled with expertise with the State of California, Department of Aeronautics, California Airport Land Use Planning Handbook; Airport Land Use Commission procedures, Airport Land Use Compatibility Plans; California Environmental Quality Act; FAA Advisory Circulars and FAA Grant Assurance requirements, Mr. Wallace provides airport sponsors with decades of solution-oriented environmental experience.

Mr. Wallace’s environmental consulting includes 20 years of diverse experience with projects throughout the western United States. Those projects include environmental compliance and permitting for gravel and industrial material mines in Colorado, Nevada, and California; uranium mines in Nevada, New Mexico, Arizona, and Texas; base metal mines in Nevada, California, and New Mexico; water supply projects in Colorado, California and Washington; oil and gas exploration in North Dakota, Wyoming, Montana, Colorado, and Alaska; and airport development projects in California and Nevada.

Mr. Wallace’s consulting services are focused on natural resource and airport projects. That level of experience transfers to a sharp perspective for his private and public-sector clients and allows him to provide thorough environmental compliance and workable solutions to complex project issues.

RESPONSIBILITIES:

Preparation of all environmental documentation required for NEPA, including Categorical Exclusions, Environmental Assessments (EA) and Environmental Impact Statements, and required CEQA compliance documents.
RESUME

EDUCATION: BA History, 1974, Humboldt State University, Arcata, California
Additional major course work in Geology
Graduate Work in Natural Resource Management, 1975 – 1976,
Humboldt State University, Arcata, California

PROFESSIONAL EXPERIENCE:
Environmental Consultant, Wallace Environmental Consulting, Inc., Courtland, California,
September 1997 to Present

AIRPORT PROJECTS ~ ENVIRONMENTAL PROJECT MANAGER:
Lake Tahoe Airport ~ Since 2007 Wallace Environmental has prepared NEPA compliance
documents for 546,000 square feet of aircraft apron reconstruction; runway
reconstruction (narrowing); construction of haul road; installation of new AWOS;
expansion of the Aircraft Rescue Fire Fighting Building; retaining wall reconstruction and
prepared a Wildlife Hazard Management Plan and Biological Assessment.

Mammoth Yosemite Airport ~ Since 2004 prepared NEPA and CEQA compliance
documents for installation of obstruction lights; perimeter/security fence; runway
reconstruction.

Truckee-Tahoe Airport ~ Since 2006 prepared NEPA compliance documents for
reconstruction of aircraft parking aprons; reconstruction and relocation of taxiways and
taxiways; replace VASI's with PAPI's; pavement repairs; and new hangar construction.

Chico Municipal Airport ~ Prepared NEPA compliance documents for maintenance
projects on 180,000 square feet of aircraft apron; relocation of the AWOS; taxiway
reconstruction; managed wetland delineation and federally endangered species surveys;
predicted an Environmental Assessment for new commercial development and prepared
technical memorandum to protect airport property from inclusion in regional habitat
conservation plans.

Stockton Metropolitan Airport ~ Prepared NEPA compliance documents for arrival and
departure building expansion; reconstruction of runways, taxiways, and aircraft parking
apron; prepared technical memorandum for airport land release, prepared wetland
delineations for drainageway alterations.

Lincoln Regional Airport ~ Wetland delineation and endangered species surveys for the
entire airport; NEPA compliance documents for proposed commercial development;
runway, taxiway and aircraft apron maintenance and runway lighting upgrades.

Watsonville Municipal Airport ~ The entire airport is designated critical habitat for the
Santa Cruz tarplant, thereby requiring consultation with the US Fish and Wildlife Service
for all projects on unpaved surfaces. Since 2001 Wallace has prepared NEPA compliance
documents for taxiway reconstruction; parachute landing area; VASI to PAPI replacement;
runway, taxiway and apron upgrades and drainage improvements.

Tulelake Municipal Airport ~ The airport is located entirely within the boundaries of the
World War II-era Japanese segregation camp in Modoc County. Since 2002, Wallace has
prepared numerous cultural and archeological reports in accordance with Section 106,
National Historic Preservation Act and has prepared NEPA compliance documents for
taxiway improvements, runway relocations and wildlife exclusion fences.

Other California Airports for which Wallace has prepared NEPA compliance documents
include: Visalia, Madera, Cedarville, Alturas, Chester, Quincy, Oroville, Lakeport,
Beckwourth, Livermore, Rio Vista, and Tracy.
IV. EXPERIENCE

The office of Reinard W. Brandley has completed numerous airfield planning and design assignments for general aviation airports that directly relate to the projects proposed at the Truckee Tahoe Airport. Over the past 64 years we have provided a broad range of services to all sizes of airports throughout the United States. These services have included:

- **Planning:**
  - Site Selection Studies
  - Airport Master Planning
  - Airport Layout Plans
  - Terminal Area Plans
  - Environmental Assessments
  - Economic Evaluations and Forecasts
  - Land Use Compatibility Studies
  - Obstruction Studies
  - Noise Studies
  - Utility Master Planning

- **Scoping:**
  - Project Development
  - Airport Capital Improvement Programs
  - Grant Applications

- **Engineering:**
  - Geotechnical Studies
  - Pavement Evaluation Studies/Pavement Maintenance Management Programs
  - Drainage Studies and Design
  - Design of Airfield Pavements including Runways, Taxiways, Aprons, Roads, and Parking Lots
  - Airfield Lighting and Signing
  - Heliports and Heli pads
  - Security Fencing
  - Tee Hangar Development
  - Visual and Navigational Aids
  - Utilities
  - Aircraft Storage Hangars
  - Airline Terminal Facilities
  - Fuel Farms
  - Preparation of Cost Estimates

- **Construction Management:**
  - Assisting Clients in Award of Construction Contracts
  - Resident Engineering, Testing/Inspection, Quality Assurance Program
  - Review and Approval of All Materials Submitted for Construction
  - Administrative Services including Preparation of Change Orders, Pay Requests, etc.
  - Final Inspection and Final Approval of Projects
  - Preparation of final as-constructed plans and Final Engineer’s Report.

The projects described on the next several pages have included the types of services that will be required during the engineering consultation on the Airport Planning and Improvement Projects at the Truckee Tahoe Airport. These services include master planning; environmental studies; obstruction studies; airport layout plan development; land use planning and acquisition; engineering design of pavements, grading, drainage, utilities, pavement marking and grooving, airfield lighting, electrical improvements, security fencing, tee hangars, fueling facilities, instrument approaches, and other related design elements; and
resident engineering testing and inspection. Ninety-five percent of the work was funded by the Federal Aviation Administration.

The projects described below were of similar nature and magnitude to those anticipated for the Truckee Tahoe Airport. For all projects our office provided full grant administration services including preparation of project applications to the F.A.A., engineering design including preparation of plans and specifications, filing all bid documentation with F.A.A. in order to receive the grant and authorization to award the contract, conducting preconstruction conferences and preparing the minutes in order to obtain notice to proceed from the F.A.A., preparation of all requests for reimbursement to the F.A.A., filing all reports and submittals with the F.A.A. and State, and preparation of final reports and record drawings in order to close out the grants.

References that can be contacted on each of the projects listed below are indicated. All projects are managed by Reinard W. Brandley, P.E.

**Truckee Tahoe Airport**

For the Truckee Tahoe Airport District we provided airport engineering services for the Truckee Tahoe Airport from 1970 to 1972 and again from 2011 to present, including complete pavement evaluation studies, engineering design, and construction supervision for maintenance and improvement projects funded by the Federal Aviation Administration and by the Truckee Tahoe Airport District. Since 2011 we have completed the following projects:

- **Reconstruction of Westerly 5,000 feet of Runway 10-28 - 2011**
- **2011 Airfield Pavements Rehabilitation Program – Crack Repair, Enhancing Jointing System, Pavement Rehabilitation**
- **2012 Airfield Pavements Rehabilitation Program – Crack Repair, Pavement Rehabilitation**
- **2013 Airfield Pavements Rehabilitation Program – Mill and Fill, Supplemental Joints**
- **Reconstruction of Apron A4**
  - Award Amount: $1,188,830
  - Engineer’s Estimate: $1,314,050
  - Final Construction Cost: $1,497,822
  - Construction Period: August through September 2014
- **Reconstruction of Hangar Taxi lanes G and GH**
  - Award Amount: $933,970
  - Engineer’s Estimate: $923,180
  - Final Construction Cost: $781,441
  - Construction Period: May through July 2016
- **Apron A2 Expansion, Taxiway E Removal, Reconstruct South Jet Apron**
  - Award Amount: $1,129,560
  - Engineer’s Estimate: $1,441,080
  - Final Construction Cost: $1,077,525
  - Construction Period: July through October 2016
- **Reconstruction of Portion of Taxiway A and Taxiways F, U, and J**
  - Award Amount: $2,021,002
  - Engineer’s Estimate: $2,214,950
  - Final Construction Cost: $2,096,487
  - Construction Period: July through October 2016
Tahoe City Helipad
Award Amount: $496,455
Engineer’s Estimate: $367,985
Construction Period: Construction currently in progress

Executive Hangars – Site and Building
Award Amount: Site: $1,848,007; Building: $5,265,000
Engineer’s Estimate: Site: $1,612,750; Building: $4,700,000
Construction Period: Construction currently in progress

Saw and Seal Supplemental Joints – Runway 11-29 (East)
Award Amount: $218,433
Engineer’s Estimate: $334,800
Final Construction Cost: $223,538
Construction Period: August 28 through September 11, 2017

Reconstruct Hangar Taxiways CD and DE (East)
Award Amount: $614,520
Engineer’s Estimate: $575,690
Final Construction Cost: $406,128
Construction Period: July 11 through 28, 2017

The Pavement Maintenance Management Plan (PMMP) prepared in 2011 and updated in 2014 has been a very effective tool for the Truckee Tahoe Airport District in determining timing of required pavement maintenance and reconstruction projects.

Lake Tahoe Airport

We have acted as airport engineer for the County of El Dorado and the City of South Lake Tahoe for most of the airport design work since 1958 at the Lake Tahoe Airport. Work involved on this airport consisted of soils engineering, pavement evaluation and design, airport engineering, preparation of plans and specifications, and construction management, testing, and inspection. Work accomplished in the last three years includes:

General Aviation Apron Rehabilitation Phase 3
Award Amount: $1,355,650
Engineer’s Estimate: $1,037,300
Final Construction Cost: $1,537,485
Construction Period: July 25 through August 26, 2016

Reseal Taxiway Pavement Joints, Repaint Taxiway Marking:
Award Amount: $297,595
Engineer’s Estimate: $396,175
Final Construction Cost: $287,781
Construction Period: May 27 through June 2, 2015

General Aviation Apron Rehabilitation Phase 4
Award Amount: $1,861,755
Engineer’s Estimate: $1,429,550
Construction Period: To be constructed in the spring/summer of 2018.

All projects include topographic surveys, geotechnical studies/pavement design studies, engineering design, and complete construction management including resident engineering, testing, and inspection.
Mammoth Yosemite Airport

For the Town of Mammoth Lakes, we have provided airport engineering services for the Mammoth Yosemite Airport since 1993, including pavement evaluation studies, airport layout plan update studies, environmental studies, engineering design and construction supervision for runways, taxiways, and aprons. In the past three years we have performed the following planning and design projects at this airport:

- Terminal Area Study including site evaluation and selection, topographic surveys, geotechnical studies, terminal area facility requirements, and financial planning for a contract cost, including both engineering and architectural services - 2011 through 2017.
- Joint Seal Apron and Taxilane
  Award Amount: $331,904
  Engineer's Estimate: $346,800
  Final Construction Cost $331,773
  Construction Period September 29 through October 2, 2014
- Reconstruction of General Aviation Apron
  Award Amount: $1,578,180
  Engineer's Estimate: $1,337,950
  Final Construction Cost $1,506,871
  Construction Period May 9 through July 22, 2016
- Habitat/Security Fence – 2017
  Engineer's Estimate: $1,337,590
  Construction Period To be bid in the spring of 2018

Sacramento International Airport

On the Sacramento International Airport, we acted as the airport engineer since the first planning of this airport in 1963. We performed pavement evaluation studies, pavement design, engineering, and preparation of plans and specifications for all runways, taxiways, aprons, roads, parking lots, lighting, fencing, drainage, and all other civil works, including original construction and overlays. We have completed a Pavement Maintenance Management Program for the Sacramento International Airport, and for the Sacramento Mather Airport and Sacramento Executive Airport. Our office prepared the engineering design for the reconstruction of Taxiway D including cross taxiways and adding the infrastructure for a SMGS including centerline cans and ducts. We assisted Sacramento County with the construction management of this project and are currently preparing the final record drawings and final report for this project.

  Award Amount: $35,135,450
  Engineer's Estimate: $36,327,435
  Final Construction Cost $35,965,353
  Construction Period August 29, 2016 through May 9, 2017

Madera Municipal Airport

Since 1999 for the City of Madera we have provided airport engineering services for the Madera Municipal Airport including geotechnical and pavement design studies, engineering design and construction inspection for a 1,000-foot extension to Runway 12-30 and runway edge lighting. In the past three years we have performed the following design and construction management projects at this airport:

- Rehabilitation of the General Aviation Apron Phase 2
  Award Amount: $1,208,874
  Engineer's Estimate: $1,484,285
  Final Construction Cost $1,282,353
  Construction Period August 8, 2016 through March 24, 2017
Crack Seal of All Airfield Pavements – 2017
Award Amount: $295,469
Engineer’s Estimate: $377,800
Construction Period To be constructed in the spring/summer of 2018

On all projects we provided complete engineering design including environmental studies, topographic surveys, geotechnical studies/pavement design and construction engineering services.

Visalia Municipal Airport
Since 1999 for the City of Visalia we have provided airport engineering services for the Visalia Municipal Airport including detailed soil and pavement evaluation studies, airport layout plan updates, engineering design and construction inspection for development and improvement of runways, taxiways, aprons, parking lots, and tee hangars. In the past three years we have performed the following design and construction management projects at this airport:

Reconstruction of Apron A2
Award Amount: $1,316,535
Engineer’s Estimate: $1,803,945
Final Construction Cost $1,199,606
Construction Period July 10 through September 29, 2017

Corporate Hangars – Buildings and Site
Engineer’s Estimate: $3,313,245
Construction Period To be bid in the spring of 2018.

We performed resident engineering, testing, and inspection services for all construction projects.

Chico Municipal Airport
We have acted as airport engineer for the City of Chico at the Chico Municipal Airport since 1960. Work involved on this airport consisted of master planning, soils engineering, pavement evaluation and design, airport engineering, preparation of plans and specifications, and construction management, testing and inspection. A summary of projects performed in the last three years is shown below:

Reconstruction of T/W H and Holding Apron & Aircraft Parking Apron Rehab. Phase 5
Award Amount: $3,148,388
Engineer’s Estimate: $3,276,080
Final Construction Cost $2,323,975
Construction Period April 20, 2015 through July 24, 2015

Aircraft Parking Apron Rehabilitation Phase 3
Award Amount: $3,354,350
Engineer’s Estimate: $4,279,650
Final Construction Cost $3,361,828
Construction Period August 22 through December 1, 2016

Reconstruction of Taxiway A – Design – 2017 – Currently in the design phase of this project. This project will bid in the spring of 2018.

On all projects we provided complete engineering design including environmental studies, topographic surveys, geotechnical studies/pavement design and construction engineering services. We are currently preparing an Airport Layout Plan Narrative including Updated ALP Drawings and a Pavement Maintenance/Management Program for the Chico Municipal Airport.
Tracy Municipal Airport

We have provided airport engineering services for the Tracy Municipal Airport since 1977 including master planning, geotechnical and pavement design studies, environmental studies, engineering design and construction inspection for reconstruction of runways, construction of general aviation aprons, installation of property fence, and expansion of aprons, taxiways, and access road. In 2013 we completed a Pavement Maintenance/Management Plan for this airport and began the engineering design of the reconstruction of all pavements on the airport including runways, taxiways, aprons, and tee hangar taxi lanes. A summary of projects performed in the last three years is shown below:

- **Reconstruction of Runways and Taxiways**
  - Award Amount: $6,358,254
  - Engineer’s Estimate: $7,590,710
  - Final Construction Cost: $5,982,512
  - Construction Period: April through September 2015

- **Reconstruction of General Aviation Tie Down Apron**
  - Award Amount: $2,495,460
  - Engineer’s Estimate: $3,740,420
  - Final Construction Cost: $2,669,574
  - Construction Period: March through July 2017

- **Upgrade AWOS**
  - Award Amount: $121,300
  - Engineer’s Estimate: $130,000
  - Construction Period: Scheduled to begin construction in December 2017

- **Replace Existing VASI with PAPI, Upgrade PAPIs**
  - Award Amount: $132,722
  - Engineer’s Estimate: $119,155
  - Construction Period: Scheduled to begin construction in December 2017

The third phase of the pavement reconstruction project includes the Reconstruction of the Tee Hangar Taxi lanes, which will be bid and constructed in 2018. On all phases of this reconstruction work we provided complete construction management services to the City. We completed an Airport Layout Plan Narrative including Updated ALP Drawings for the Tracy Municipal Airport in 2014.

Alturas Municipal Airport

For Modoc County and the City of Alturas we have provided airport engineering services for the Alturas Municipal Airport since 1999, including complete pavement evaluation studies, engineering design, and construction supervision for the reconstruction of both runways, taxiways, and tie down apron and rehabilitation of the runway and taxiway edge lighting system. Work performed in the last three years included the following:

- **Rehabilitate Airfield Pavement Joints and Cracks, Slurry Seal Airfield Pavements, Remark Airfield Pavements**
  - Award Amount: $432,520
  - Engineer’s Estimate: $585,470
  - Final Construction Cost: $409,095
  - Construction Period: May 19 through June 3, 2015
Construct New Helicopter Parking Apron
Award Amount: $1,099,900
Engineer’s Estimate: $1,468,800
Final Construction Cost $1,088,599
Construction Period September 7-November 9, 2016; May 30-June 23, 2017

We recently completed an Airport Layout Plan Narrative including Updated ALP Drawings for the Alturas Municipal Airport and are currently completing a Pavement Maintenance Management Plan for this airport.

Modoc County Airports - Cedarville and Tulelake

Since 2000 for Modoc County we have provided airport engineering services for the Cedarville Municipal Airport and Tulelake Municipal Airport including complete engineering design and construction supervision.

Cedarville Municipal Airport - We have performed engineering planning and design and construction management services at Cedarville Municipal Airport including the reconstruction of the runway and taxiways. In the last three years we have prepared an Airport Layout Plan Narrative including Updated Airport Layout Plan Drawings for this airport.

Tulelake Municipal Airport - We have performed engineering planning and design and construction management services at Tulelake Municipal Airport including the rehabilitation of the runway and tie down apron.

At Tulelake Municipal Airport we are providing environmental studies and engineering design for improvements including an expanded taxiway and apron and security fencing. This project has special challenges from an environmental standpoint since it is located on the old World War II Japanese internment camp, which creates sensitivity issues for any development. Included with these environmental studies is an update of the Airport Layout Plan.

We performed the following project in the last three years:

- Saw and Seal a Joint Pattern in the pavements on Runway 11-29
  Award Amount: $119,119
  Engineer’s Estimate: $150,150
  Final Construction Cost $118,712
  Construction Period August 29 through September 7, 2016

Watsonville Municipal Airport

Since 2005 for the City of Watsonville we have provided airport engineering services for the Watsonville Municipal Airport including airport master planning, master utility and drainage planning, geotechnical and pavement design studies, engineering design and construction inspection. In the past three years we have performed the following design and construction management projects at this airport:

- Reconstruct Taxiway C and General Aviation Apron
  Award Amount: $690,101
  Engineer’s Estimate: $735,890
  Final Construction Cost $779,156
  Construction Period May 5 through August 12, 2014

- 2- Box PAPIs Runways 2 and 20
  Award Amount: $197,777
  Engineer’s Estimate: $204,850
  Construction Period Scheduled to begin construction in December 2017.
**Bryant Field, Bridgeport, Mono County, California**

In 2011 and 2012 we provided complete engineering services, including topographic surveys and final design, for the Reconstruction of Runway 16-34 and Parallel Taxiway and Construction of Connector Taxiway at Bryant Field. We also provided construction management services, including resident engineering, testing, and inspection, for this project. We recently completed an Airport Layout Plan Update for Bryant Field. We performed the engineering design and construction management plan for the relocation of a road that was an obstruction to the runway approach surfaces in 2016.

- **Award Amount:** $396,550
- **Engineer's Estimate:** $364,575
- **Final Construction Cost:** $5
- **Construction Period:** September 12 through October 11, 2016
V. SPECIAL CAPABILITIES

We have listed herewith the special capabilities possessed by our office that set us apart as the Airport Consultant for the projects planned over the next three to five years at the Truckee Tahoe Airport.

➢ The pavement design and evaluation capabilities of our office allow us to determine the remaining life of all existing pavements and the overlay and/or reconstruction requirements to extend the life of the pavements as required at the Truckee Tahoe Airport. We are also highly qualified to design new pavements that will provide a 20- to 40-year minimum life.

➢ The office of Reinard W. Brandley has performed most design engineering, planning, and construction management services for the Truckee Tahoe Airport since 2011. We also performed the engineering design of both runway extensions in 1971 and 1972. As a result, we have all base data on file on as-built conditions and future planning data for this airport.

➢ The experience and expertise of Reinard W. Brandley in soils engineering, materials testing and inspection, and airport engineering provide unmatched support to the District both during the design phase and the construction phase of these projects.

➢ Our experience and ability in construction management, including furnishing Resident Engineering, testing and inspection services, places us in a position to provide a full service to the District for these projects through design and construction.

➢ Sixty-four years of design and construction inspection of airport projects in the Northern and Central California area have provided us with a detailed knowledge of the quality of construction materials in the area and the capabilities of contractors. This knowledge places us in a position to produce projects on time and within budget.

➢ The extensive experience of our office in the preparation of Airport Layout Plans and Master Plans ensures the development of practical airport layout plans and master plans that not only adequately serve the community, but are economical to implement and require minimal maintenance when completed.

➢ The District has need for consultation and assistance in dealing with F.A.A. requirements and for expert consulting services in the preparation of grant applications, payment requests, Airport Capital Improvement Plans, and general assistance on all airport development matters. Our airport expertise and experience with the San Francisco ADO affords our office the capability of providing all required services.

➢ Our office can provide complete engineering consulting services to the Truckee Tahoe Airport on all airport design related matters. We will team with expert specialists for environmental studies, topographic surveys, and electrical engineering as required.

➢ The close working relationship with the F.A.A. offices at the District, Regional, and Headquarters level positions our office to know when and where Federal funding is available and to optimize the potential of obtaining funding for development of the Truckee Tahoe Airport and provides us with the unique capability to obtain approval to use innovative designs and to obtain quick approval of all plans.

➢ Our office and our team members are in a position from a workload standpoint to begin work immediately on the projects and complete the design in timely manner such that the construction phase of the project can fully utilize the available construction season.
The education, training, and experience of Damon Brandley, Melissa Brandley, and Tom Steinkamp assures continuity of the expertise of Brandley Engineering.

Reinard W. Brandley will be available and responsible for all design, District and F.A.A. coordination, and construction surveillance for these projects.

"YOU HIRE BRANDLEY - YOU GET BRANDLEY".