

Statement of Qualifications

*General Engineering Services
Truckee Tahoe Airport District*

November 15, 2017



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AUERBACH ENGINEERING CORPORATION

CIVIL ENGINEERING • LAND SURVEYING • ENVIRONMENTAL PLANNING

November 15, 2017

Kevin Smith, General Manager
Truckee Tahoe Airport District
10356 Truckee Airport Road
Truckee, CA 96161

**RE: TRUCKEE TAHOE AIRPORT DISTRICT
REQUEST FOR STATEMENT OF INTEREST AND QUALIFICATIONS
GENERAL ENGINEERING SERVICES**

Dear Kevin,

Auerbach Engineering Corporation is pleased to provide you with the attached Statement of Qualifications for General (local) Engineering Services, to assist the District with various engineering tasks and miscellaneous improvements at the Truckee Tahoe Airport.

Our firm has the local engineering expertise and the accessibility that the District is looking for. AEC is a Tahoe City based civil engineering consulting firm with a deep history of working with the local special districts and regulatory agencies on a wide array of project types. We also have long time relationships with a number of other consultants who have been involved with airport work over the past several years, including Holdrege & Kull, Gabbart & Woods, Ward Young Architects, SA Engineering, Mark Schlosser of Sugar Pine Engineering, and Prosser Building and Development. Our airport engineering experience goes back to the 1980s with senior staff, and encompasses the recently completed Office/Warehouse (Clear Capital) Building.

AEC's qualifications, proximity, and understanding of local conditions, regulations, and requirements make us well-suited to provide on-call engineering consulting services to the Airport District. Included in this SOQ is our experience with local projects from inception through construction. We look forward to the opportunity to work with you.

Please review the attached, and let me know if you have any questions.

Sincerely,

AUERBACH ENGINEERING CORPORATION



Walter R. Auerbach, P.E.
President

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Contact for more Information:

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AUERBACH ENGINEERING CORPORATION (AEC) was established in 1998 in Tahoe City, California by Walter R. Auerbach, PE. AEC is now an established consulting firm providing Civil Engineering, Land Surveying, and Environmental Planning services to local government and private sector clients throughout the region. Our work is currently focused on the Tahoe-Truckee region, where we have a large repeat client base. We pride ourselves in the degree to which our relationships and customer service have resulted in successful projects for our clients and the community at large.

It is with this experience and local presence that we believe AEC is a reliable choice to fulfill the general engineering services described in the RFQ. AEC has extensive experience with federal, state, and local government projects, many of which are grant-based due to the environmental, recreational, or transportation related value. To our understanding, the services that TTAD requires include:

- Airport Engineer – Provide on-call engineering services and representation
- Assistance with local, state, and federal regulatory agencies for small and large airport projects
- Project management for varying types of projects
- Update and manage Capital Facility Maintenance Plan and budgets
- Review adjacent development plans for land use compatibility and cost sharing opportunities
- Perform plan and project feasibility analyses
- Provide infrastructure assessment and design services

The AEC staff has managed projects from start to finish, beginning with due diligence through the design process to bidding, construction management and project closeout. AEC has acted as lead consultant quite often, as well as a subconsultant to other engineering firms or architects. We select firms based on local experience and knowledge, and past working relationships with our firm and the client. For the sake of brevity, other consultant qualifications are not included in this SOQ, but they include: Holdrege & Kull Geotechnical (now NV5, with whom we also have a prior working relationship); Gabbart & Woods for structural engineering; Ward Young Architects; SA Engineering for electrical design; and Sugar Pine Engineering for mechanical.

AEC also provides services related to project permitting, and helping clients meet regulatory requirements, including CEQA assistance. We work with a number of subconsultants that assist us with resource evaluations for various projects, including biological, arborist, cultural and historical resources, visual, air quality, and noise. Understanding when and how to deploy these services is critical to project success.

The following pages provide a summary of key AEC personnel.



Walter R. Auerbach, PE | President



19 years w/AEC (since establishment)
37 years total experience

BS Civil Engineering
University of California at Berkeley, 1979

California – RCE No. 34303
Nevada – RCE No. 07011

QSD/QSP Certified #00888

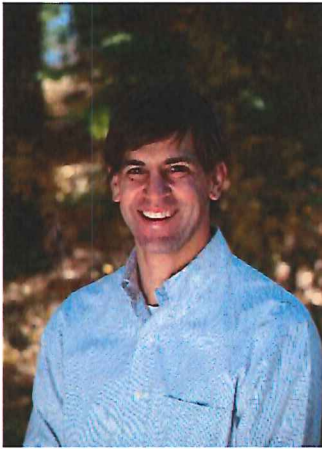
Mr. Auerbach provides overall support to the team, including quality assurance/control, and strategic assistance in project design. He has 37 years of experience which encompasses everything from planning, public participation, design, and regulatory process to construction support and inspection; with nearly all of his professional experience associated with local area projects. He has won recognition for outstanding projects such as the Tahoe City Downtown Beautification, Commons Beach Public Access Facility, and the Tahoe City Lakeside Trail. Walter has provided District Engineering services for the Glenshire Mutual Water Company, the Northstar Community Services District, and the Tahoe City PUD, where he regularly interacts with elected officials and board members. He has been actively involved in the North Lake Tahoe community on a number of local boards and committees including the Tahoe Truckee Community Foundation, the North Lake Tahoe Resort Association Board of Directors, and the Tahoe City Recreation Association Board of Directors. The following list is representative of projects in which Walter either had direct oversight or provided engineering design.

- TTAD, **Airport Projects**- reconstruction of Taxiway “A”; miscellaneous hangar projects; and other surveys and design projects (pre-AEC between 1985 and 1999)
- WRNS Studio and Placer County DPW, **Tahoe City Transit Center** civil design and regulatory management
- North Tahoe Fire Protection District and Ward Young Architects, **Station 51 Relocation** design, regulatory permitting, and wetland mitigation
- Tahoe City Public Utility District, **Tahoe City Lakeside Trail** design, wetland mitigation, and regulatory permitting including 100-year floodplain analysis
- Ward Young Architects, **Clear Capital Airport Building** design and permitting support
- Tahoe Truckee Unified School District, **Transportation Maintenance & Operations Facility** site design and drainage

Mr. Auerbach as well as senior staff at AEC were involved in the design of the reconstruction of Taxiway “A” and miscellaneous hangar projects at TTAD over the years. Further, AEC merged with a firm in 1999 (Hale-Tippin Consultants) that had performed surveys and design projects for TTAD since the late 1980’s including for the maintenance building, septic systems, and numerous control and boundary surveys.

Walter will be the primary AEC representative to TTAD for all projects and on-call services.

Nathan Chorey, PE, LEED AP | Project Manager and Senior Engineer



8 years w/AEC
12 years total experience

California – RCE No. 71807
Nevada – RCE No. 19484

BS Civil Engineering
Colorado State University, 2003

MS Civil/Environmental Engineering
Colorado State University, 2004

Serves as Project Manager for private and public projects in Tahoe, Truckee and Nevada for the past twelve years. Mr. Chorey joined AEC in 2009, and is responsible for design and management of commercial and utility infrastructure projects from inception through construction. Nathan has extensive experience in land development and water resources, including site opportunity and constraints investigation, cost analysis, and site design including: geometry, grading and utilities, 3D site modeling, and hydrologic evaluation, and an extensive background in “green” design and LID technologies.

Recent experience includes Project Engineer and Manager for the Clear Capital Airport Building. Services included reconfiguration of the existing airport long-term parking area; circulation and access improvements; storm drainage and water quality treatments; sidewalks; roadway improvements; SWPPP development; and construction phase services. The following list are projects that Nathan has had direct engineering and Project Management

- Placer County Department of Public Works, **Kings Beach Commercial Core Improvement Project** design, and regulatory permitting
- Northstar Community Services District (NCS), **Martis Valley Trail** design, EIR and NEPA support
- Tahoe Truckee Unified School District, **Truckee High School Track and Field** access, drainage, and DSA approval
- Northstar at California, **Zephyr Lodge** LEED site design certification
- North Tahoe Fire Protection District and Ward Young Architects, **Station 51 Relocation** design, and LEED site design certification
- Tahoe City Public Utility District (TCPUD), **Multiple Waterline Replacements** project design, and construction phase services
- **Fernley Travel Center** complete site and Interstate 80 ramp design

Mr. Chorey currently serves on the Tahoe Basin Design Review Committee as well as the North Tahoe Public Utility District’s Recreation and Parks Commission.

Nathan will act as Project Engineer for all tasks related to this assignment including engineering design, estimating, and construction.

Ryan Decker, PE | Project Engineer



2 years w/AEC
9 years total experience

California – RCE No. 85431

BS Civil Engineering
University of California, Irvine, 2006

MS Civil Engineering
University of Colorado, 2013

In his time with AEC, Mr. Decker has been responsible for site layout and design, drainage analysis and reports, site grading, utility layout, cost estimating, specification development, bid assistance, and construction phase services. Prior to joining AEC in 2015, Ryan spent 6 years as an officer in the Navy Civil Engineer Corps using technical civil engineering skills to manage contingency construction and large-scale public works projects around the world. His experience with construction engineering and management, and well-rounded background in civil design, has proven to be an asset to the company and the projects he has worked on to date. The following list are projects that Ryan has worked or is currently working on as Project Engineer.

- Placer County, **Martis Valley Trail** Phase 3B initial layout and design and NEPA support
- NCS D, **Martis Valley Trail Phase 1B** layout, design, drainage analysis, and construction phase services
- **Resort at Squaw Creek** road, infrastructure, and drainage improvements
- **Truckee-Tahoe Lumber BMP** design and TRPA site assessment
- **Palisades Planned Development** site design

As design engineer for the Truckee-Tahoe Lumber BMP Design and Site Assessment, Ryan was responsible for completing BMP design and a Stormwater Technical Memorandum as part of a proposed remodel of the Tahoe City store. Close coordination with Caltrans and Placer County Department of Public Works was required in assessing the existing and proposed offsite water quality treatment.

Ryan will provide assistance to the engineering team with facility inventories, cost estimating, and construction management.

Peter Calhoun, EIT | Staff Engineer & Stormwater Compliance



2 years w/AEC
2 years total experience

BS Civil Engineering
University of New Hampshire, 2012

BA International Affairs
University of New Hampshire, 2012

Prior to joining AEC in 2015, Peter spent 3 years in the construction industry. This experience along with Peter’s technical knowledge and AutoCAD Civil 3D know-how allow for an enhanced and holistic approach to civil design. Peter’s ability to visualize the end product has proven extremely valuable in site layout, and implementation of low impact drainage design. Mr. Calhoun has been responsible for layout and design, drainage analysis and reports, site grading, and utility layout. Peter has completed stormwater technician duties for many projects, which involve stormwater compliance, monitoring and testing. The following is a partial list of projects that Peter has provided engineering and/or stormwater monitoring services.

- Tahoe Truckee Unified School District (TTUSD), **Alder Creek Middle School** parking lot redesign
- Placer County, **Squaw Valley Pickleball Courts** site design
- TTUSD, **Sierra Expeditionary Learning School Site** grading, drainage design, and stormwater compliance
- **Pinyon Creek Subdivision** SWPPP
- **Schaffer’s Mill Planned Residential Development** SWPPP
- TTUSD, **Tahoe Lake Elementary Parking Lot/Playground Improvement Project** SWPPP

Recent experience includes grading and drainage design for the Alder Creek Middle School redesigned parking lot. Peter worked closely with the architects and the school district project manager. Design conformed to all ADA requirements and provided alternative designs to allow budgeting flexibility for the school district.

Peter will provide engineering support for facility improvement projects.

Keith Masuda, PE, PLS | Survey Project Manager



14 years w/AEC
20 years total experience

California – RCE No. 53439
California – PLS No. 6819

BS Civil Engineering
Sacramento State University, 1986

Mr. Masuda has worked on projects throughout the Tahoe-Truckee area for the past 15 years. Mr. Masuda joined AEC in 2003, and brings 20 years of land surveying experience to the team. Keith Manages field surveys, data collection and mapping, and preparation of legal descriptions and plats for easements. Keith has worked on large sites, mapping above ground and sub-surface utilities, storm drainage and water quality treatment systems, and other key resources. He has extensive survey experience in the Martis Valley, providing alternative trail alignment and resource survey services for the Martis Valley Trail, beginning back in 2007. In addition, the AEC survey team has provided survey and resource mapping for Northstar California in preparation of the Northstar Master Plan update and simultaneous EIR. The following listed projects represent Keith's survey experience in the Truckee Tahoe Airport vicinity.

- Truckee Tahoe Sanitation Agency (TTSA), **District Boundary Map**, yearly mapping services, 2003 - 2013
- Teichert, **Teichert-Boca Quarry**, survey, design, and EIR support services
- Northstar California, **Northstar Mountain Master Plan**, survey and engineering support services
- NCSD, **Martis Valley Trail**, aerial planimetric and contour mapping, topographic surveys, and resource mapping
- **Schaffer's Mill Planned Residential Development**, base mapping, Final Maps, and construction staking
- Truckee River Watershed Council, **Middle Martis Wetland Restoration**, highway, and creek cross-section surveys, and floodplain mapping
- Truckee River Watershed Council, **Elizabethtown Meadow Restoration**, boundary and topographic surveys, and construction staking

Mr. Masuda will provide survey services, as needed.

Lydia Altick | Environmental Planner



6 years w/AEC
19 years total experience

BS Geography & Urban Planning
University of Nevada, Reno, 1991

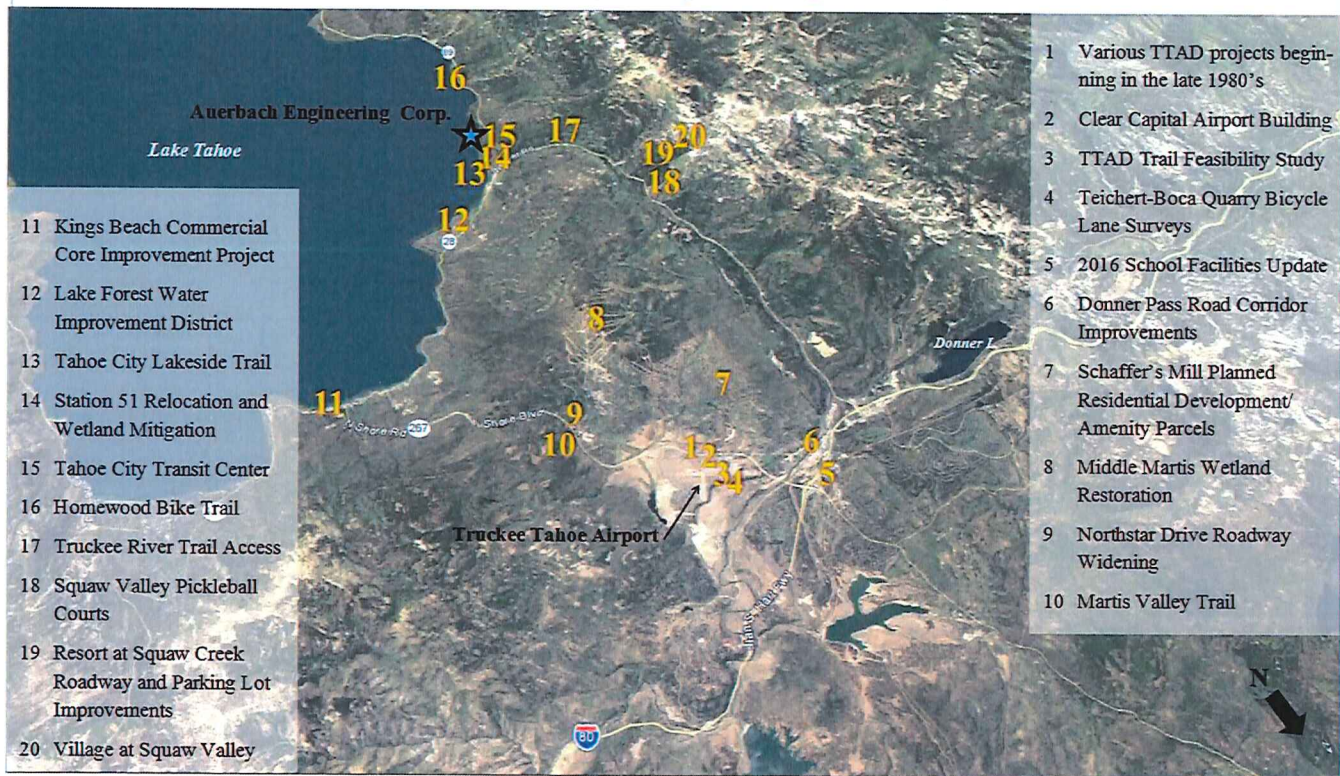
Ms. Altick has worked on projects both large and small in the Reno-Tahoe area for the past 19 years. Lydia joined AEC in June 2011, bringing planning and construction industry experience to the firm. As an Environmental Planner, Lydia navigates regulatory compliance with regional, county, city, state and federal agencies. Lydia has completed air quality, VMT (vehicle miles traveled), and scenic analyses as part of CEQA and TRPA compliance. A partial list of her project experience is provided below.

- TCPUD, **Tahoe City Winter Sports Park Ice Rink and Snowmaking** CEQA Initial Study, Placer County and TRPA approvals
- Dokken Engineering, **Kings Beach Commercial Core Improvement Project** regulatory permitting with Placer County and TRPA
- Ward Young Architects, **Clear Capital Airport Building** air quality modeling for CEQA compliance
- New Martis Partners, **Schaffer's Mill Workforce Housing** development feasibility
- TCPUD, **West Shore Export Truckee River Crossing** regulatory permitting with TRPA, USFS Special Use Permit, Lahontan RWQCB 401 WQC, CDFW Streambed Alteration Agreement, Caltrans coordination
- Dokken Engineering, **Homewood Bike Trail** regulatory permitting with TRPA and Caltrans coordination
- TCPUD, **Lake Forest Boat Ramp Rehabilitation** CEQA Categorical Exemption, CDFW Lakebed Alteration Agreement, California State Lands Lease Amendment
- Homewood Villas, LLC, **Homewood Shore Planned Development** regulatory approvals
- **Numerous Lake Tahoe Site Assessments** for land capability and land coverage verification

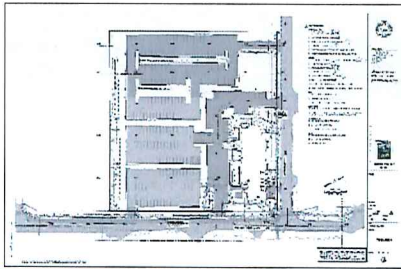
Ms. Altick will provide assistance with project regulatory compliance and approvals.

Strong knowledge of local conditions and regulatory requirements is essential to successful positioning of projects. Our team is well versed on the local and regional issues and potential solutions for many complex problems. We have made our lives and raised our families here and are dedicated to our community. Our resources are readily available to our clients with a phone call and we are often available for meetings or discussions on short notice. The following map represents AEC's proximity to and familiarity with the TTAD and environs.

AEC Local Project Experience (partial list)



The following pages summarize relevant experience over the past 3+ years. The projects represent airport experience as well as experience managing large public projects with multiple consultants, stakeholders, and agencies. AEC projects often include either construction phase services including bid support and engineering consultation, or comprehensive construction management.



CLEAR CAPITAL AIRPORT BUILDING

Truckee, CA

Ward Young Architects

Reference: Larry Young, Principal, Phone 530.587.3859

Peter Beaupre, Project Manager, Phone 530.401.6085

Status: April 2015 to February 2017

Budget: \$97,000; Billed Amount: \$79,725



AEC was involved with the civil design for the 12,840 square foot modern steel office structure. AEC tasks included reconfiguration of the existing airport long-term parking area, circulation and access improvements, storm drainage and water quality treatments, utility extensions and relocations, and sidewalk and roadway improvements. AEC also provided CEQA and permitting support including air quality and VMT projection modeling.

Key Services

- Civil Engineering Design
- Air Quality Modeling for Construction and Operations
- Drainage Report
- SWPPP Development
- Construction Phase Services

TRUCKEE TAHOE AIRPORT DISTRICT TRAIL FEASIBILITY

Truckee, CA

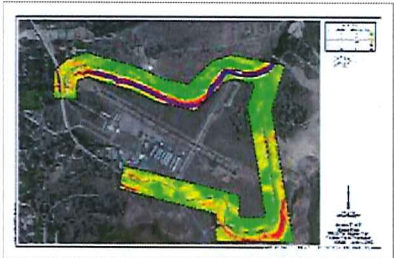
Truckee Trails Foundation

Reference: Allison Pedley, Executive Director, 530.587.8214

Status: June 2016

Budget: \$1,000; Billed Amount: \$997

At the request of the Truckee Trails Foundation, AEC reviewed the TTAD's Trail Master Plan and prepared a concept-level construction cost estimate for approximately 25,400 linear feet of paved multi-use trail. AEC utilized existing LiDAR data to determine the terrain and slope conditions in order to gain a general understanding of potential vertical alignments, drainage structures, bridges, and grading requirements.



Key Services

- Feasibility Analysis
- Cost Projection Estimate
- Slope Mapping
- Trail Profile



KINGS BEACH COMMERCIAL CORE IMPROVEMENT PROJECT

Kings Beach, California

Dokken Engineering

References: Brian Stephenson, PE, Dokken Project Manager, 916.505.0045

Dan LaPlante, PE, Placer County DPW Project Manager, 530.581.6231

Status: June 2011 to October 2017

Budget: \$248,326; Billed Amount: \$185,196

The KBCCIP involves redevelopment of the urban core of Kings Beach with curb and gutter, sidewalks, street furniture and storm water quality improvements. As planned, the project has rejuvenated Kings Beach. State Route 28 now functions more as a town main street than as a limited access highway. In the conversion of the highway to three lanes, street parking needed to be moved from the side of the highway to separated parking lots. AEC planned, designed and permitted 4 separate public parking lots, approximately 20-30 spaces each. AEC worked closely with Placer County DPW during the land acquisition process conducting background review, and feasibility analyses.

Parking lot design included the implementation of pervious concrete, lighting, bike racks, signage, drainage facilities, and sidewalks.

Key Services

- Civil Engineering Design and Cost Estimating
- Boundary Line Adjustments
- Easement Plats and Descriptions
- Pre-Acquisition Services
- Regulatory Approvals
- Caltrans and Utility Coordination

2016 SCHOOL FACILITIES PROGRAM UPDATE

North Lake Tahoe & Truckee, California

Tahoe Truckee Unified School District & Ward Young Architects

References: Rob Koster, TTUSD Facilities Manager, 530.582.2542

Larry Young, WYA Principal, 530.587.3859

Combined Budgets: \$413,678; Combined Billed Amount: \$389,935

AEC provided topographic design surveys, mapping, and site plans for the purpose of modernizing and upgrading site facilities for each of the following schools:

- Alder Creek Middle School
- Truckee High School Track and Access
- Sierra Expeditionary Learning School
- Glenshire Elementary

Each site was unique in design and requirements. AEC provided civil design services needed to improve pedestrian safety and vehicle access. Tasks included development of alternatives, and final design of ramps and railings to facilitate pedestrian movement. Improvements included new and reconfigured parking lots, new access paths, new student drop off zones, and much needed drainage improvements throughout.



Key Services

- Civil design and Cost Estimating
- Alternative Site Analysis Evaluation
- Utility Design and Relocation Coordination
- Regulatory Permitting
- Division of State Architect Compliance
- Waterline Easement
- Construction Staking

MARTIS VALLEY TRAIL, PHASES 1A, 1B-1, 3B

Martis Valley, California

PHASES 1A, 1B-1: Northstar Community Services District (NCSD)
Reference: Mike Staudenmayer, NCSD General Manager,
530.562.0747

Status: March 2007 to October 2015

Budget: \$317,188; Billed Amount: \$318,700

PHASE 3B: Placer County DPW

Reference: Greg Keaveney, Placer County Project Manager,
530.581.6232

Status: Phase 3B is currently in design, awaiting NEPA completion

Budget: This project is currently under budget

Martis Valley Trail is a paved, multi-use recreational trail, that, when fully constructed, will connect the communities of Truckee and Northstar, and ultimately the Lake Tahoe Basin. The 9+ mile trail begins near the southern limits of the town of Truckee, crosses through Martis Valley, and ends near Sawmill Flat Reservoir at a junction with Forest Route 73 (AKA the Fiberboard Freeway), allowing connection to Tahoe's north shore.

AEC worked with the environmental consultant to complete an equal-weight CEQA analysis of two project alternatives. Multiple resource areas required bridge/boardwalk crossing evaluations to minimize impacts. The EIR was certified in October of 2012, and the project is being developed in phases as funding allows.

AEC has continued its role as the prime consultant from the trail's inception, through the current Phase 3B. Tasks include overall project management, including coordination with multiple subconsultants, NCSD, and Placer County.

AEC is currently designing Phase 3B. The 6,600 LF trail traverses through six private, county, and state-owned properties. Phase 3B is a federally funded project being completed by Placer County.

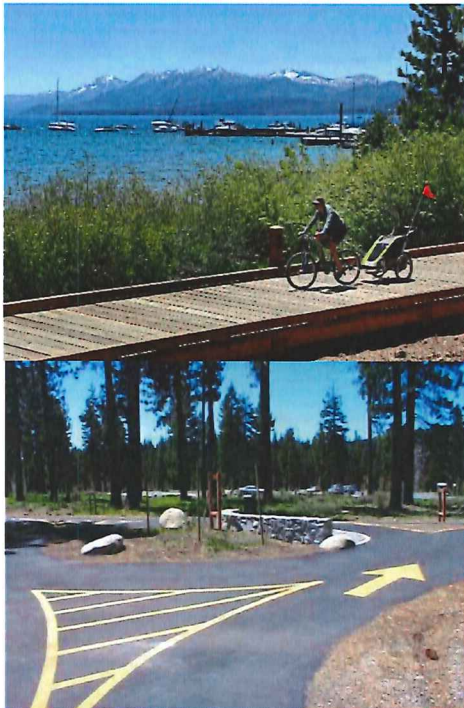


Key Services

- Ground Control for Aerial Mapping
- Aerial Planimetric and Contour Mapping
- Topographic Base Map
- Resource Map
- Historic Property Evaluation
- Conceptual Plans for Alternatives
- Alternative Alignments Impact Evaluation
- Grant Funding Support
- Civil Design and Cost Estimate
- Coordination for EIR and NEPA compliance
- Caltrans LAPM compliance
- Entitlement/Permit Processing
- Stormwater Management & Water Quality Plan
- Public Communication/Outreach
- Easement Plats and Legal Descriptions
- Technical Specifications in CSI Format

Key Subconsultants

- Marvin E. Davis Associates
- Gabbart & Woods
- LSC Transportation Consultants
- Dokken Engineering



TRPA Environmental Improvement Project - EIP No. 03.01.02.0014

TAHOE CITY LAKESIDE TRAIL

Tahoe City, California

Tahoe City Public Utility District (TCPUD)
Reference: Matt Homolka, PE, Assistant General Manager,
530.583.3796

Status: 2008 to June 2012

The Lakeside Trail is the final one-mile segment in the largest paved trail system at Lake Tahoe; a 19-mile network connecting the North Shore, West Shore, the Truckee River and Squaw Valley. This is the most difficult section of the entire TCPUD trail network as it exhibits a high level of conflicting uses, rights-of-way, infrastructure, and environmental sensitivity. This segment of the trail is in close proximity to the Truckee River and Lake Tahoe and was developed in seven phases due to its complexities. Water quality and coverage mitigation strategies were successfully implemented throughout the trail and allowed for enhanced restoration of areas that had been previously disturbed. Managed public access and friendly barrier features have kept users on the trail and away from sensitive areas. Major utility upgrades and relocations as well as storm water treatment facilities and source control measures on and off site were key benefits of the trail.

AEC's role as the prime consultant on this project was critical through all aspects of planning, design and construction including: EIR support services; subconsultant coordination; regional, state, and federal regulatory processing; public communication and facilitation; construction-phase engineering; and construction management.

This project was exceedingly complex in the level of coordination required with State, Federal and local agencies including TRPA, Lahontan Regional Water Quality Control Board, US Army Corps of Engineers, US Bureau of Reclamation, California Tahoe Conservancy, California State Parks, Division of State Architects, Caltrans, and Placer County.

Despite the additional environmental benefits of the trail in so many areas, the project was held to very high mitigation standards in terms of land coverage, scenic quality, Stream Environment Zone restoration, and wetland mitigation.

Key Services

- Boundary and Topographic Surveys
- Base Mapping/Digital Terrain Model
- Civil design and Cost Estimating
- Drainage Report
- Extensive Regulatory Processing
- Support for Grant Funding
- Facilitating public participation regarding design and construction impacts
- Easement Plats and Descriptions
- Construction Staking
- Construction Management

Key Subconsultants

- Marvin E. Davis Associates
- Gabbart & Woods
- SA Engineering
- Landesign

MIDDLE MARTIS CREEK WETLAND RESTORATION

Martis Valley, CA

Balance Hydrologics

Reference: David Shaw, 530.550.8760

Truckee River Watershed Council

Reference: Beth Christman, TRWC Manager 530.562.0747

Status: Completed Summer 2017

Budget: \$24,126; Billed Amount: \$21,501

The project restores a portion of creek flow to the north side of Highway 267, while maintaining sufficient flow on the south side to sustain existing wetlands and riparian habitat. AEC provided design for the Highway 267 Martis Creek crossing modification and diversion structure. Design aspects of the project will decrease erosion in Middle Martis Creek, improve fish passage, and protect infrastructure including Hwy. 267, maintenance access roads, an existing trail, and the Northstar Golf Course.

AEC was able to utilize existing LIDAR, aerial topography, previous maps, surveys, reports, studies and assessments to create a complete, comprehensive base map. Channel and road surveys were conducted and blended with existing aerials for project analysis and design.

In addition, AEC provided road design to USFS standards for 3,500 LF of Waddle Ranch access road as part of the Restoration Plan Set. AEC also provided bid and construction support services.



December 20, 2016



January 8, 2017

Key Services

- Topographic Channel Surveys and Mapping
- Road/Culvert Design
- Construction Cost Estimate
- Construction Staking
- Construction Phase Services



LAKE FOREST BOAT RAMP REHABILITATION

Tahoe City, CA

Tahoe City Public Utility District

Reference: Matt Homolka, Assistant General Manager

Status: January 2013 to July 2015

Budget: \$214,142; Billed Amount: \$214,130

AEC was the prime consultant providing overall coordination for the rehabilitation project. Services included design and regulatory permitting for the replacement and widening of the boat ramp in accordance with the California Department of Boating and Waterways' design standards, and dredging of lake access to the previous dredged elevation of 6219' to enable boat operation at lower lake levels.

AEC provided Construction Management including water quality monitoring and compliance with Lahontan RWQCB and TRPA.

Key Services

- Engineering Consultant
- Project Management
- Funding Support
- Topographic Surveying/Mapping
- Regulatory Processing
- Construction Management

Our Ideal Working Relationship with TTAD is businesslike, professional, and based on mutual respect and understanding of each-others' capabilities. It is founded in the agreements made in the consulting services contract.

A project work plan will vary greatly depending on the size and complexity of the project. The following scope of work provided here demonstrates the organization of tasks for a typical design/bid/build project outside the Tahoe Basin.

Task 1.0 Project Management

1.1 Meetings and Coordination with Client. AEC will meet with Client and Client's representatives involved with the project to discuss the project progress, schedules, design, roles and responsibilities, and other matters that relate to the progress of the work. This task excludes specific meetings described elsewhere, and includes all regular communications and coordination via phone and email.

1.2 Project Administration. Administrative functions for orderly execution of the work and tracking and reporting of work progress shall be conducted.

1.3 Subconsultants/Other Consultants Coordination. Efforts to coordinate the work with other consultants are included in this subtask.

Task 2.0 Background Review

2.1 Background Information Review. AEC will assemble and review relevant background information including prior plans for the roadways and parking lots, existing drainage and utility systems, surveys, drawings, maps, relevant geotechnical information, improvement drawings, title report, easement deeds referenced in the title report, prior record maps and survey control.

2.2 Field Investigations. AEC will walk the project site and perform a reconnaissance-level review of the project area and conditions. Photographs will be taken to document the surface condition of the pavements, and to identify various features (utility boxes/vaults, drainage features, etc.) that may be important to design.

Task 3.0 Utility Coordination

3.1 Initial Utility Coordination. AEC will coordinate with existing utilities to identify any utilities in the roadway reconstruction corridor and in the parking lot. This task will involve delivering exhibits and documentation to utility providers, and following up with documentation after their initial review.

Task 4.0 Surveys and Mapping

4.1 Field Surveys and Base Map Preparation. Topographic field surveys will be conducted in the project area.



The base map will be prepared at 2-foot contours with spot elevations as necessary. All visible features important to the design will be located including building finish floor elevations and outline, utilities, edges of pavement, etc.

Task 5.0 Utility Coordination

5.1 Utility Coordination. We will contact all utility providers in this task and request mapping and documentation for any existing utilities that could influence design. If specific issues become apparent at this point, there may be follow up with that specific utility for more detail. This data will be supplemented in later stages in the project base map with the results of visual review and field surveys.

Task 6.0 Geotechnical Engineering

6.1 Geotechnical Report. Geotechnical engineering services will be provided by Holdrege & Kull in accordance with their scope of work.

Task 7.0 Construction Documents

7.1 50% Design Progress Submittal. Three (3) sets of 50% plans and cost estimate for the project will be submitted to the TTAD for review and approval. The 50% plan set will include plan-view layout of all primary project elements. A 50% design submittal meeting will be held to review the package with TTAD staff.

7.2 90% Design Progress Submittal. AEC will prepare a 90% construction document package to include graphics depicting the limits of work, cross sections of the proposed pavement sections, details for utility box adjustments, a construction phasing plan, and specifications for the required work. A cost/quantity estimate will be prepared based on the 90% package. The 90% package will be prepared for submittal to the County and/or Town for permits and approvals, if needed.

7.3 100% (Final) Design Submittal. AEC will complete 100% plans, specifications and estimates for the project, ready for distribution to potential bidders.

Task 8.0 Approval Processing.

All projects are different in terms of the required permits and approvals necessary to implement them. The following represents a scope of work for each of the agencies that may have some regulatory input on a project within the District.

8.1 Nevada County. AEC will process the construction document package with Nevada County Community Development. It is anticipated that the District will require an encroachment permit for work in the right-of-way (if any), and a grading permit for the proposed pavement reconstruction.

8.2 California Regional Water Quality Control Board (Lahontan or Central Valley). 401 Water Quality Certification, Floodplain Prohibition Exemption; National Pollutant Discharge Elimination System (NPDES) and Waste Discharge permits and compliance monitoring will be completed by AEC, as needed.



- 8.3 Caltrans.** An Encroachment Permit will be obtained for work within the highway right-of-way.
- 8.4 California Department of Fish and Wildlife (CDFW).** AEC will prepare and process the 1602 permit for Streambed or Lakebed Alteration (if required). Resource work, if required, will be provided by subconsultants as necessary.
- 8.5 CEQA.** The size and location of the project determines the level of CEQA analysis. The District would be the Lead Agency under CEQA. AEC will assist CLIENT with information related to the project for that purpose. A Categorical Exemption is anticipated.
- 8.6 US Army Corps of Engineers.** Final permitting under the 404 Clean Water Act (Nationwide Permits, or letters of approval) will be completed under this subtask by AEC for work affecting Waters of the US.
- 8.7 US Forest Service.** If the project will cross USFS lands, a Special Use Permit will be required, and the project will be subject to NEPA environmental review. The USFS would be the Lead Agency under NEPA. In most cases, a Categorical Exclusion would apply.

Task 9.0 Bid Phase Services

AEC will provide the following assistance to the CLIENT during the period of time between advertising and receipt of bids for the Project to be constructed.

- 9.1 Assistance during Bidding.** CONSULTANT shall provide assistance, as required, to the CLIENT during bidding of the project. The work shall include assisting the CLINET in soliciting bids, answering questions from prospective bidders, and providing ongoing consultation and interpretation of the construction documents. Care shall be taken to insure that all information provided to bidders is clearly reflected in the plans and specifications.
- 9.2 Assist CLIENT with Recommendations of Contract Award.** CONSULTANT will provide comments and assist the CLIENT with the evaluation of the bidders. A recommendation will be made regarding apparent successful bidder.

Task 10.0 Record Drawing Preparation. AEC will prepare record drawings utilizing the Contractor’s notes and change orders. Record drawings will be prepared in digital and hard copy format, and submitted to TTAD.

Task 11.0 Deliverables:

1. One set of 11x17 record drawings signed by the Engineer responsible for the preparation of the plans (pdf format and AutoCAD Civil 3D 2017 or newer design files that include 3D model, sheet layouts, and all supporting files).



As a local firm, our commitment to the local community and our environment is apparent in the work that we do. Our experience with County, State, Regional, and Federal agencies in all our projects has generated a level of expertise within our staff that will benefit TTAD's projects.

The following matrix demonstrates AEC's experience working with government and special districts:

CLIENT/SERVICES PROJECT MATRIX

Public/Non-Profit Clients in Prior 10 Years (Partial List)	# Projects
Tahoe City Public Utility District (Client and Owner)	53
Northstar Community Services District	20
Tahoe Truckee Unified School District	8
Placer County Department of Public Works (Client and Owner)	6
Truckee Sanitary District	4
Placer County Redevelopment Agency (Client and Owner)	4
South Tahoe Public Utility District	8
North Tahoe Public Utility District	4
United States Forest Service	7
Squaw Valley Public Services District	3
North Tahoe Fire Protection District (Client and Owner)	3
State of California Department of General Services	2
North Lake Tahoe Resort Association	2
Tahoe Truckee Sanitation Agency	2
California Wildlife Conservation Board (Owner)	2
Squaw Valley Mutual Water Company	2
Truckee Donner Public Utility District	1
United States Coast Guard (Owner)	1
Tahoe Rim Trail Association	1
Town of Truckee	2
Truckee Donner Recreation and Park District (Owner)	1
Truckee River Watershed Council	1
Truckee Tahoe Airport District	1

Civil Engineering Design	Land Surveying	Local/Regional Regulatory Assistance and Environmental Review	Caltrans Design and/or Coordination	County LDM & SWMM Design	Site Planning	Roadways, Parking Lots	Bike Trails, Recreation and Parks	Storm Water Collection and Treatment, BMP Design	Sewer, Water and Utilities	Bidding Assistance	Construction Support
Types of Projects											
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Several specific projects that highlighted AEC's cost and scheduling proficiency are as follows. References are included:

Client: Tahoe City PUD
Reference: Matt Homolka, PE, Assistant General Manager, Phone 530.580.6042
Project: Grouse Drive/Upper Ellis Waterline Replacement
Contract Fee: \$145,129
Actual Fee: \$144,789
Contract Schedule: Overall schedule called for construction completion in 2014.
Actual Schedule: Project completed 2014
Engineers Estimate: \$727,319
Contract Bid Price: \$711,520

AEC was tasked with not only water system analysis but final design for waterline replacement, extensions, and new hydrants for the area, which is located in steep, forested terrain on Tahoe's west shore. This project was successfully completed and constructed within project goals and schedules established at the front end of the project.

Client: Ward Young Architects - Tahoe Truckee Unified School District (TTUSD)
Reference: Rob Koster, TTUSD Facilities Manager, Phone 530.582.2542
Project: Truckee High School Track and East-West Road Design
Contract Fee: \$105,810
Actual Fee: \$102,507
Contract Schedule: Construction completion in August 2016
Actual Schedule: Completed August 2016
Engineers Estimate: \$1,882,638
Contract Bid Price: \$1,946,007

This fast-tracked project included improving pedestrian access, road connections, and upgrading drainage design for the new track at Truckee High School. Design, permitting, and construction documents were completed within 6 months, including Division of State Architect approval (required for K-12 schools, and state-owned and leased facilities). Construction was completed before the 2015/16 school year began.

Client: Placer County
References: Tim Arndt, Placer County Senior Project Manager, Phone 530.886.4994
Andy Fisher, Placer County Senior Parks Planner, Phone 530.889.6819
Project: Squaw Valley Pickleball Courts
Contract Fee: \$27,192
Actual Fee: \$27,021
Contract Schedule: Overall schedule called for construction completion in 2016.
Actual Schedule: Project completed 2016
Engineers Estimate: \$228,172
Contract Bid Price: \$219,700

This project was successfully completed and constructed within project goals and schedules established at the front end of the project.



Experience

Years of Experience:

Principal, Auerbach
Engineering: 19 years (since
establishment)

Education

BS Civil Engineering
University of California
Berkeley, 1979

Registration

California – RCE No. 34303

Nevada – RCE No. 07011

QSD/QSP Certified #00888

American Water Works
Association (AWWA)

American Society of Civil
Engineers (ASCE)

California Land Surveyors
Association (CLSA)

Expertise

Engineering Consulting

Communication and Public
Outreach

Special District Advocacy

Land Development

Mitigation and Restoration
Planning

Summary of Professional Experience

The founder of Auerbach Engineering Corporation with experience working in Tahoe-Truckee region for 37 years serving all levels of production, administration and management. Mr. Auerbach has an extensive background in the local and regional environmental and political issues affecting all types of land development and public works projects. He has won recognition for outstanding projects such as the Tahoe City Downtown Beautification, Commons Beach Public Access Facility, and the Lakeside Trail in Tahoe City. He has participated in a long list of private and public site development projects, primarily in the Tahoe-Truckee region. Walter has been actively involved in the North Lake Tahoe/Truckee community on a number of local boards and committees.

General Project Experience

Land Development - Preliminary investigations of development feasibility for minor and major land development projects, planning and layout of commercial, residential and industrial sites, entitlement processing, and project and district representation at the advisory review and governing body level.

Infrastructure - Master utility, water, and sewer system planning; financial and feasibility evaluations. Construction documentation for utility layout, geometrics and rehabilitation /financing plans, highway frontage, landscaping projects, sewage collection and transmission, water storage and supply.

Drainage and Erosion Control – Nearly all of Walter’s civil engineering experience has been in the design of drainage and water quality improvements in high-alpine environments, where erosion control requirements are intensified due to steep or environmentally sensitive lands and/or regulatory controls.

Institutional Projects - Corporation yards and maintenance facilities for cities, counties, and special districts, transportation-related site planning, and design.

Recreational Facilities - Walter has provided planning, design, and construction management services for numerous public and private recreation projects such as ski resorts, bicycle trails, parks, shoreline access, boat launching, and marina facilities.

Examples of relevant projects for which Walter has had key responsibilities are:

TTAD Airport Projects – Truckee, CA. Senior staff at AEC were involved in the design of the reconstruction of Taxiway "A" and miscellaneous hangar projects at TTAD over the years. Further, AEC merged with a firm in 1999 (Hale-Tippin Consultants) that had performed surveys and design projects for TTAD since the late 1980's including for the maintenance building, septic systems, and numerous control and boundary surveys.

NORTHSTAR COMMUNITY SERVICES DISTRICT – District Engineer Consultant.

GLENSHIRE MUTUAL WATER COMPANY – District Engineer Consultant.

TAHOE CITY PUBLIC UTILITY DISTRICT – Providing engineering consultant services to the District Engineer, and TCPUD Board since 1990.

TRANSPORTATION MAINTENANCE AND OPERATIONS FACILITY**Tahoe Truckee Unified School District, Truckee, CA**

Project management and design oversight for construction of this 11-acre bus parking and maintenance facility. This project included roughly 700 feet of roadway frontage improvements.

TAHOE CITY TRANSIT CENTER,**WRNS Studios & Placer County DPW, Tahoe City, CA**

Project management and design oversight for this 131-space parking lot and bus transfer station. The project included over 1,600 LF of multi-purpose trail design, extensive storm water treatment, new access road, and Caltrans authorized highway frontage improvements.

STATION 51 RELOCATION**WYA Architects & North Tahoe Fire Protection District, Tahoe City, CA**

Project management and design oversight for this 20,000 square foot public safety center including roadway improvements to Fairway Drive, parking, utilities and a storm water collection and treatment system. This project included construction phase services.

SCHAFFER'S MILL PLANNED DEVELOPMENT AND AMENITY PARCELS**New Martis Partners, LLC, Martis Valley, CA**

Project Principal-in-charge working directly with Nathan Chorey, Project Manager, of coordination with the architectural team, Placer County, and PCWA through all phases of design. AEC provided improvement plans for the amenity parcels consisting of a clubhouse, restaurant, cart barn and sales center, and 123-space parking lot; and 100+ residential sites which included field surveys, and easement preparation, water, sewer, and dry infrastructure, roadway, lot, and drainage design.

This effort included a number of revisions to the site plan during design to accommodate limited bank funding. As the project progressed, a number of additional tasks were included which also had to be absorbed into the project delivery schedule. AEC was able to support these changes, and delivered the improvement plans and all associated County approvals in a manner that allowed the project to stay on a tight schedule for construction start.

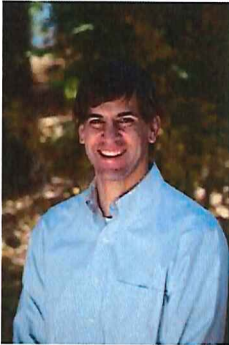
THE RESORT AT SQUAW CREEK**Squaw Creek Associates, Olympic Valley, CA**

Project Manager and Engineer responsible for the design of this 450-unit destination resort development from initial conception through to project completion and operation over a ten-year period. The project included downhill skiing, an 18-hole championship golf course, 48-lot single family lot subdivision, over 7,500 lf of multipurpose recreational trails, conference and commercial center, condominium/hotel, and a recreation plaza including pools and skating rink. Walter was responsible for all design of the primary roadways, drainage systems and utility infrastructure for the project, and assisted the developer with construction phase services throughout construction. Later, Walter was retained as project manager in the design of the Health and Fitness Center expansion, and in 2006, he coordinated civil and final mapping services for Phase 2 of the project. Currently, AEC is completing civil design for construction of Phase 2A, which includes 18 townhomes and associated improvements.

SQUAW VALLEY ROAD WIDENING**Intrawest Squaw Valley Corporation, Olympic Valley, CA**

Project Manager in providing construction documents for widening of Squaw Valley Road to accommodate three travel lanes. Approximately 1.25 miles of roadway edge was reconstructed to achieve the necessary width in accordance with Placer County requirements. This involved detailed pavement surveys to evaluate the condition of the shoulder and road edge, and to establish sawcut limits for the project.

Nathan Chorey, P.E. Project Manager



Experience

Years of Experience: 12

Project Manager, Auerbach
Engineering: 8 years

Education

MS Civil/Environmental
Engineering, 2004
BS Civil Engineering, 2003
Colorado State University

Registration

California – RCE No. 71807

Nevada – RCE No. 19484

LEED® Accredited
Professional

QSD/QSP Certified #23295

CSI – Certified Construction
Documents Technologist

Caltrans – Resident Engineer
Academy

NASSCO's Inspector Training
and Certification Program

Expertise

Project Management

Land Development

LID Technologies

Transportation Design

Construction Administration

Water Resources

Summary of Professional Experience

Serves as Project Manager and Project Engineer for private and public projects in Tahoe, Truckee and Nevada for the past eleven years. Mr. Chorey joined AEC in 2009, and is responsible for design and management of commercial and utility infrastructure projects from inception through construction. Nathan has extensive experience in land development and water resources, including site opportunity and constraints investigation, site design including: geometry, grading, and utilities, 3D site modeling, and hydrologic evaluation, and an extensive background in "green" design and LID technologies.

Key Project Experience

CLEAR CAPITAL AIRPORT BUILDING

Ward Young Architects, Truckee, CA

Project Manager tasked with optimizing the roadway and parking lot design. Compatibility uses were studied to capitalize on the shared use design. The project's multiple uses (large regional employer, car rental, and long term parking) presented an exceptional opportunity for site and roadway design.

KINGS BEACH COMMERCIAL CORE IMPROVEMENT PROJECT

Dokken Engineering & Placer County DPW, Kings Beach, CA

Project Manager for design and development of four separate public parking lots. Highway improvements required conformance to 2010 Caltrans Standard Plans in incorporating frontage design.

TRUCKEE High School 2015 TRACK AND FIELD PROJECT

Ward Young Architecture & Tahoe Truckee Unified School District, Truckee, CA

Project Manager for this fast tracked project to improve pedestrian access, road connections, and upgrade drainage design for the new track at Truckee HS. Design, permitting, and construction documents were completed within 6 months, including DSA approval. Construction was completed before the 2015/16 school year began.

MULTIPLE WATERLINE REPLACEMENT PROJECTS

Tahoe City PUD, North Lake Tahoe, CA

Project Manager for these projects consisting of hydraulic modeling, design, construction documents and estimates, and construction phase services. Some projects involve highway crossings and coordination with Caltrans regarding construction methods. All the waterline replacement projects require easement acquisition, and property owner coordination in accordance with District requirements.

NEVADA BEACH DAY USE PARKING LOT & BMP RETROFIT

USDA Forest Service, Zephyr Cove, NV

Project Engineer for all elements of this project which consists of reconstructing three individual parking lots and retrofitting the site with BMP's that utilized LID techniques. The Project included redesigning the existing day use area to increase the number of parking stalls to 160 plus parking for RV's and buses.



Ryan Decker, P.E. Project Engineer



Experience

Years of Experience: 9

Years with Auerbach Engineering: 2

Education

MS Civil Engineering
University of Colorado,
Boulder, 2013

BS Civil Engineering
University of California, Irvine,
2006

Registration

California – RCE No. 85431

American Society of Civil Engineers (ASCE)

Society of American Military Engineers (SAME)

Expertise

Construction Engineering

Drainage Studies and Design

Grading and Site Design

Erosion Control

Summary of Professional Experience

Mr. Decker joined AEC in April 2015, and has been responsible for site layout and design, drainage analysis and reports, site grading, utility layout, cost estimating, specification development, bid assistance, and construction phase services. Prior to joining AEC, Ryan spent 6 years as an officer in the Navy Civil Engineer Corps using technical civil engineering skills to manage contingency construction and large-scale public works projects around the world. His experience with construction engineering and management, and well-rounded background in civil design, has proven to be an asset to the company and the projects he has worked on to date.

Key Project Experience

RESORT AT SQUAW CREEK PHASE 2A

Squaw Creek Associates, LLC, Olympic Valley, CA

Developed improvement plans for construction of 18 townhomes and associated improvements at the Resort at Squaw Creek including design of grading, utilities, drainage, roadway, and parking lot layout. Ryan was also responsible for the analysis of an updated study data to delineate floodplain limits, and design of a new section of cart path for access to the modified golf course.

THE PALISADES PLANNED DEVELOPMENT

Palisades Development, LLC, Olympic Valley, CA

Design Engineer responsible for developing preliminary grading, drainage, and utility plans for a 63-unit planned residential subdivision in Olympic Valley. Work includes background review of existing conditions, development of a preliminary drainage report, design and layout of access roads and driveways, and design of storm water and other utilities leading to initial approval processing and the development of construction documents and future construction.

MARTIS VALLEY REGIONAL TRAIL PHASE 1B-1

Northstar Community Services District, Martis Valley, CA

Project Engineer responsible for civil design of 3,750 LF segment of multi-use trail system including the design and construction of a paved, multi-use, ADA accessible path, wildlife viewing structure, and a wetland crossing boardwalk. Directly involved in planning, design, environmental review and support, permitting, development of construction plans and specifications, bidding assistance, and construction phase services.

TRUCKEE-TAHOE LUMBER BMP DESIGN AND SITE ASSESSMENT

Truckee-Tahoe Lumber Company, Tahoe City, CA

Design Engineer responsible for completing BMP design and a Stormwater Technical Memorandum as part of a proposed remodel of the Tahoe City store. Close coordination with Caltrans and Placer County Department of Public Works was required in assessing the existing and proposed offsite water quality treatment.

ALPINE PEAKS SEWER LINE REHABILITATION

Tahoe City Public Utility District, Tahoe City, CA

Project Engineer responsible for background investigation, design, development of construction documents and specifications, cost estimates, permitting, and

Peter Calhoun, E.I.T. Staff Engineer



Experience

Years of Experience: 2

Years with Auerbach
Engineering: 2

Education

BS Civil Engineering
University of New Hampshire,
2012

BA International Affairs
University of New Hampshire,
2012

Skills and Training

E.I.T. Certified

AutoCAD Civil 3D

SWPPP Monitoring

Expertise

Site Planning

Grading and Drainage Design

Hydrology and Drainage Studies

Underground Utility Design

Construction Documents

Summary of Professional Experience

As Staff Engineer, Peter works on a variety of residential, commercial, and municipal development projects. These include site designs, utility systems, recreation facilities, and other community development projects with AEC. He joined the company in 2015 with 2 years of experience in the residential construction industry. Peter has been responsible for preparing construction documents, drafting drainage reports, preparing cost estimates, performing SWPPP monitoring, and conducting agency and permitting coordination.

Key Project Experience

SIERRA EXPEDITIONARY LEARNING SCHOOL

TTUSD, Truckee, CA

Performed the grading and drainage design for the reconstruction of the existing parking lot in order to improve access, drainage, and parent and bus drop off. Improvements also included waterline and utility connections for the future Maintenance and Operations Building. Peter's coordination efforts with Lahontan RWQCB throughout design led to the agency's decision to not require a full SWPPP, and instead issue an Erosivity Waiver for the project, saving the District time and money. AEC was responsible for design layout of the 3.6-acre site including much needed drainage improvements throughout.

PICKLEBALL COURTS DESIGN AND PERMITTING

Placer County Parks and Recreation, Olympic Valley, CA

Assisted with preparation of improvement plans for the pickleball courts in Olympic Valley. Emphasis in drainage design while meeting ADA accessible design standards. Coordinated the permitting of the project through the Lahontan Regional Water Quality Control Board.

MAINTENANCE AND OPERATIONS BUILDING

Ward Young Architects, Truckee, CA

Prepared design development and construction documents for the new NCS D Maintenance and Operations building. Worked closely with architects and owners throughout the design process. Emphasis in grading, drainage, and utility design.

DONNER PASS ROAD CORRIDOR IMPROVEMENTS, DRAINAGE AND SURVEY

Mark Thomas and Company, Truckee, CA

Facilitated the Drainage Report and utility mapping for this pedestrian and corridor improvement project slated for 2017. Peter worked closely with the design engineer throughout the process.

SWPPP TECHNICIAN

Various, Lake Tahoe Basin, Truckee, CA

Mr. Calhoun has been responsible for stormwater monitoring and testing. Peter has provided stormwater technician duties for many projects including the Tahoe Lake Elementary Parking Lot/Playground Improvement Project, Bunker Tank Relocation, Pinyon Creek Subdivision, and Schaffer's Mill Planned Development.



Experience

Years of Experience: 34

Years with Auerbach
Engineering: 14

Education

BS Civil Engineering
Sacramento State
University, 1986

Registration

California – RCE No. 53439

California – PLS No. 6819

Expertise

- Boundary Surveying
- Topographic Mapping
- Bathymetric Surveys
- Project Management
- Land Development
- Structural Design
- Data Collection in Mountain
Environments
- Construction Staking
Services
- Mapping

Summary of Professional Experience

Mr. Masuda has been with AEC since April 2003. Keith brought with him 20 years of surveying and civil engineering experience in land development and structural design. He has since been responsible for all field surveys, data collection, mapping, legal descriptions and exhibits, and construction staking. Keith is skilled in project management, technical engineering and surveying, and design software.

Key Project Experience

MARTIS VALLEY REGIONAL TRAIL

Northstar Community Services District, Martis Valley, CA

Coordinated aerial survey for the topographic base map used for the preliminary design which will be used to fine tune the preferred alignment to avoid environmentally and culturally sensitive areas. Completed the design level survey for phases 1A and 1B, constructed in 2014 and 2015 respectively. Prepared legal descriptions for trail easement acquisition.

TEICHERT-BOCA QUARRY BICYCLE LANE SURVEYS, MAPPING AND ANALYSIS

Teichert, Truckee, CA

AEC was retained to evaluate the scope of improvements and associated costs for widening Stampede Meadows Road to include multi-use shoulders, as a possible mitigation of impacts to bicyclists from increased truck traffic due to a quarry expansion. Keith provided aerial survey control along approximately 2 miles of roadway, and a 200-foot corridor was mapped at a high level of detail for planning and design purposes. AEC developed conceptual plans and cost estimates for selective widening of the existing roadway to enhance safety for bicycles. AEC also evaluated sight distance conditions at a major intersection to establish possible impacts to be analyzed in the project EIR.

TAHOE CITY TRANSIT CENTER

WRS Studios & Placer County DPW, Tahoe City, CA

Project Surveyor providing design topo survey services including contour information, boundary data, trees, and improvements for the Tahoe City transit center project.

LAKESIDE TRAIL PROJECT

Tahoe City Public Utility District, Tahoe City, CA

Provided design topo survey services including contour information, boundary data, underground utilities, trees, and improvements. Construction staking services including staking layout for the curbs, sidewalks, and trails and retaining walls. Close coordination with the TCPUD and multiple construction companies.

SCHAFFER'S MILL AMENITIES PARCEL, PHASE 3A, AND 3B

New Martis Partners, Truckee, CA

475-acre planned development consisting of a clubhouse, restaurant, cart barn, sales center, parking, and residential community. Survey Manager for topographic surveys including utility, and tree locations. Prepared easement descriptions, topographic maps, and Final Maps. Provided construction phase/staking services.

Lydia Altick Environmental Planner



Experience

Years of Experience: 20

Years with Auerbach
Engineering: 6

Education

BS, Geography - Urban
Planning
University of Nevada, Reno
1991

Expertise

Regional, State, and Federal
Regulatory Permitting

Client Coordination

Feasibility Analysis

CEQA Compliance

Summary of Professional Experience

Ms. Altick has worked on projects both large and small in the Reno-Tahoe area for the past 19 years. Lydia joined AEC in 2011, bringing planning and construction industry experience to the firm. She has facilitated project development for commercial as well as residential development for numerous public and private developers. Recently, Ms. Altick served on the West Shore Area Plan Committee in facilitation of the Placer County Tahoe Basin Area Plan update. Ms. Altick currently leads clients through local, state, and federal planning and permitting processes in the Lake Tahoe region.

Key Project Experience

TRUCKEE TAHOE AIRPORT DISTRICT – OFFICE WAREHOUSE BUILDING

Peter Beaupre and Ward Young Architects, Truckee, CA

Completed air quality modeling for construction and operational phases of the project for Nevada County CEQA compliance. The project is multi- use, which includes a 13,000 SF office, car rental, and long term parking.

KINGS BEACH COMMERCIAL CORE ENVIRONMENTAL IMPROVEMENT PROJECT (EIP)

Dokken Engineering & Placer County DPW

Completed pre-land acquisition services, and boundary line adjustments for the Placer County-owned parcels. Services also included CEQA compliance, and entitlement acquisition with Placer County Community Development Resource Agency, Design Review, and TRPA permitting.

TAHOE CITY CEMETERY DISTRICT (TCCD) EXPANSION, MASTER PLAN UPDATE

TCCD, Tahoe City, CA

Completed TRPA Land Capability/Coverage Verifications for the 3-acre site in order to expand parking, burial grounds, and incorporate niche walls. Close coordination with TRPA was required for the approval of excavation in the expanded areas. In addition, Ms. Altick coordinated with Placer County Planning Department and was able to obtain permitting under the original Conditional Use Permit, saving the District time and resources.

TAHOE CITY WINTER SPORTS PARK & ICE RINK

Tahoe City Public Utility District, Tahoe City, CA

Provided regulatory permitting for the Winter Sports Park Ice Rink including snowmaking through TRPA. Completed Initial Study for CEQA compliance including a parking and traffic analysis for the subsequent addition of the seasonal ice rink to the WSP. Both projects required a noise analysis. The ice rink received a Mitigated Negative Declaration.

WEST SHORE EXPORT TRUCKEE RIVER CROSSING

Tahoe City Public Utility District & NV5, Tahoe City, CA

Provided permitting services for this project that replaced the sewer export line over the Truckee River at the USFS 64-Acres and the Caltrans Tahoe City Maintenance Yard. Permitting included 401 WQC, and 100-Year Floodplain Exemption with Lahontan RWQCB, Special Use Permit and Decision Memo with USFS, Streambed Alteration Agreement with CDFW, permitting with TRPA, and Caltrans.