


PROPOSAL FOR

ENGINEERING DESIGN AND PROJECT MANAGEMENT SERVICES

CACTUS TRAIL IMPROVEMENTS

West Side of Cactus Avenue between Baseline Road and Rialto Avenue

RFP No. 17-132, City Project No. 170801

CITY OF RIALTO

KOA CORPORATION
PLANNING & ENGINEERING

JULY 27, 2017

Engineering Design and Project Management Services for City of Rialto

CACTUS TRAIL IMPROVEMENTS

West Side of Cactus Avenue, between Baseline Road and Rialto Avenue
RFP No. 17-132, City Project No. 170801

Prepared for:

City of Rialto
Public Works Department
335 W. Rialto Ave.
Rialto, CA 92376
Attn: Robert G. Eisenbeisz, Public Works Director/City Engineer

Prepared by:

KOA CORPORATION
PLANNING & ENGINEERING

3190 C Shelby Street
Ontario, California 91764
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City of Rialto
Public Works Department
335 W. Rialto Ave.
Rialto, CA 92376

Attention: Robert G. Eisenbeisz, Public Works Director/City Engineer

Subject: **Proposal for Engineering Design and Project Management Services for City of Rialto Cactus Trail Improvements, West Side of Cactus Avenue between Baseline Road and Rialto Avenue**

Dear Mr. Eisenbeisz:

We appreciate the opportunity to submit a proposal to provide Professional Engineering Design and Project Management Services for this project to the City of Rialto. The KOA team is well-qualified, fully prepared, and eager to provide the City of Rialto with the required services to complete the Cactus Trail Improvement project.

KOA has helped design and plan hundreds of miles of trails, pedestrian facilities, safe routes to schools, complete streets, and bikeways locally in southern California. The KOA team has extensive experience coordinating projects through Caltrans local districts. The impetus for many of these projects is to improve public health and to increase safety and accessibility. Outreach, community presentations, education, and contact with stakeholders have been key aspects to nearly all of these projects.

KOA has worked extensively with public agencies and policy makers throughout the region to effectively communicate complex issues to key stakeholders and the community, enabling them to actively participate in policy, planning, and design processes, in order for them to make informed decisions. We are strong in the transportation arena, working with federal, state, and local agency partners; community members; and stakeholders to develop a consensus and a base of support for proposed transportation plans.

I will serve as Principal-in-Charge for the project. I can be reached at our Ontario office at 3190C Shelby St., Ontario, CA 91764, (909) 890-9693, fax (909) 890-9694, or by e-mail at cstephan@koacorp.com. Ms. Ming Guan, PE, TE, who has been with KOA for over 10 years, is being proposed as the Project Manager for the project. Ming recently completed preliminary design for similar multi-use bike/pedestrian trail design project in the City of Highland and City of Redlands. Ming is also the engineering task leader for the SBCTA (formerly SANBAG) Metrolink Station Accessibility Improvements project and Rialto ATP project. The extensive knowledge gained from both projects, Ming has no learning curve, and is the ideal candidate for the Cactus Trail project.

In addition, Mr. Freddie Olmos, **ECORP Consulting, Inc.**, Mr. Neal McPherson, **WestLAND Group**, Mr. Sean Lin, **Twining, Inc.**, Mr. Ceazar Aguilar, **Aguilar Consulting**, and Mr. Baxter Miller, **BMLA, Inc.**, have been included on the KOA team to provide environmental, survey, geotechnical, hydrology/drainage, and landscaping services, respectively. Our proposed team has successfully collaborated on numerous engineering design projects together.

I am authorized to bind the firm to any contracts and agreements. This proposal shall remain valid for a period of 120 calendar days from due date of proposals. KOA Corporation looks forward to working with the City on this project.

Sincerely,
KOA Corporation

Chuck Stephan, PE
Principal-In-Charge

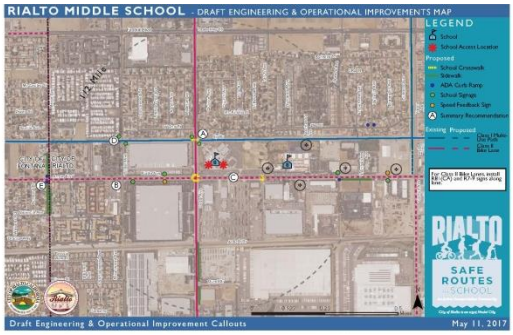
SECTION A – PROJECT UNDERSTANDING

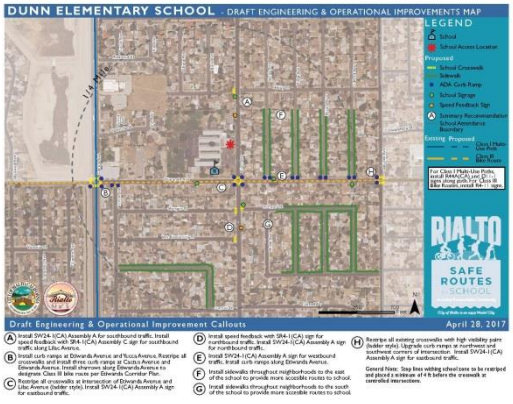
A1. PROJECT UNDERSTANDING

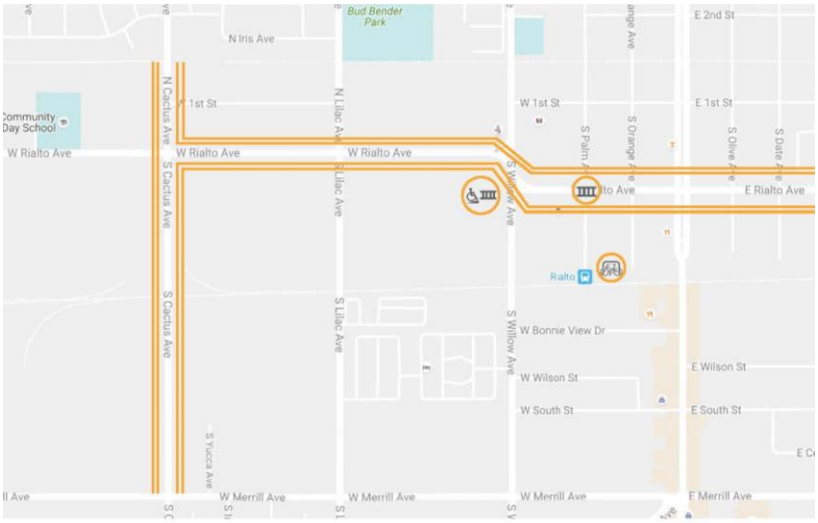
Funded by local funds, the City of Rialto desires to turn the existing Cactus Bike Route to a multi-use trail between Baseline Avenue and Rialto Avenue. Cactus Trail will create new connections for the community right in the heart of Rialto. The improvements will provide a safe and beautiful new trail along Cactus Avenue with opportunities to provide interpretative elements and historic markers. Cactus Trail will also provide the City with a unique opportunity to bring the experiences of a rural, nature trail to the residents of an active, urban community. With particular attention to viewsheds and the natural contours of the land, the Design Team will create the final design for a trail catering to the needs of the City and its residents.

As shown on Exhibit B of the RFP, the proposed improvements include 10' concrete meandering multi-use trail, safety lighting, as well as landscaping. Below rendering figures shows before and after condition at the project site.

Recently, the same KOA team has completed the PS&E package for the SBCTA (formerly SANBAG) Metrolink Station Accessibility Improvements project. As part of the project, KOA designed Class 2 buffered bike lanes on Cactus Avenue between Merrill and the Rails to Trails Bikeway entrance. KOA also assisted with the presentation of the project to the Transportation and Economic Development Committees. To complete the PS&E in a timely manner, KOA diligently worked with the Traffic Engineer and the Public Works Director of the City of Rialto. In addition, KOA is part of the Rialto ATP project team. We understand that the many schools will be benefited from the proposed Cactus Trail project, which include Eisenhower High School, Rialto Middle School and Dunn Elementary School.







A2. KEY ISSUES

In order to develop a sound project approach, it is important to understand the project objective and correctly identify project challenges that will be encountered during project development. The extensive knowledge gained from the SBCTA (formerly SANBAG) Metrolink Station Accessibility Improvements project and Rialto ATP projects enable the KOA team to have an in-depth understanding of the project area, and identify potential project risks, as well as provide more cost-effective service. All key members of the KOA project team have visited the project site, and studied and researched the project area. Project key elements that will influence the design decisions related to project developments have been identified and presented in the exhibits on the following page.

- Exhibit 1 City of Rialto Proposed Trail Improvements and Possible Project Challenges

UPGRADE EX. RAMPS TO CURRENT ADA STD.

PROVIDE BIKE/PED CROSSING AT DRIVEWAY

EXISTING AC BIKE PATH TO BE REMOVED

CACTUS AVENUE

ETIWANDA AVE

MODIFY INTERSECTION FOR BIKE/PED CROSSING

CACTUS AVENUE

MODIFY INTERSECTION FOR BIKE/PED CROSSING

BASELINE RD

North

MATCHLINE

RIALTO AVE

UPGRADE EX. RAMPS TO CURRENT ADA STD.

PROTECT EX. DRAINAGE CHANNEL

FOOTHILL BLVD

MODIFY INTERSECTION FOR BIKE/PED CROSSING

CACTUS AVENUE

CACTUS AVENUE

REMOVE EXISTING RR TRACKS MAY REQUIRE ENV STUDIES

RELOCATE GUY WIRES

RENDERING OF COMPLETED TRAIL

North

EXHIBIT 1
CACTUS AVENUE TRAIL - CITY OF RIALTO

KOA CORPORATION
PLANNING & ENGINEERING

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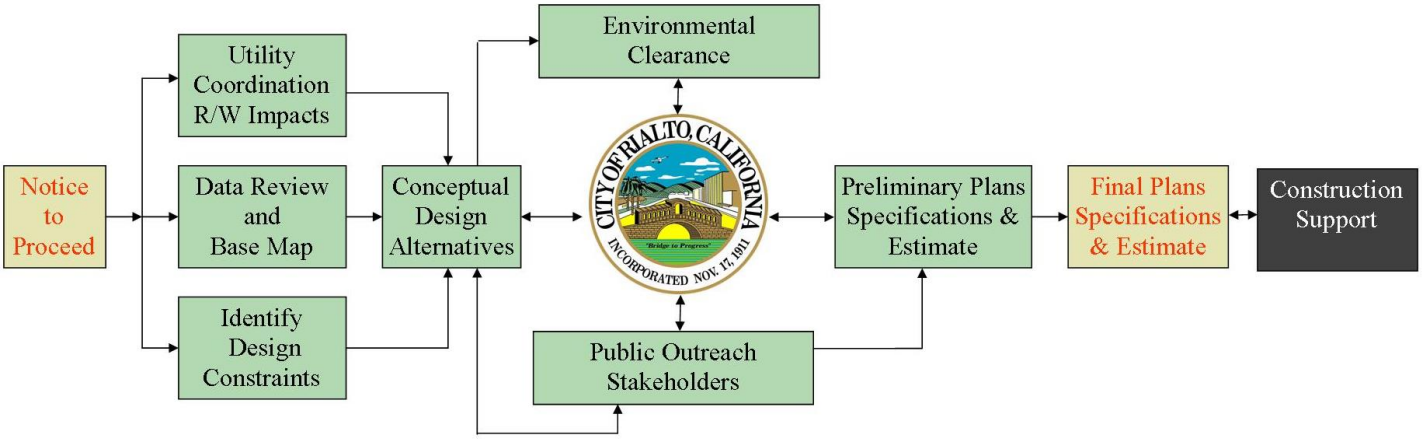
PROJECT APPROACH

The KOA team has the resources and extensive experience in completing similar multi-use trail improvement projects. We are familiar with the required standards, procedures, and regulations. We have recently completed or are developing similar projects in Coachella, Port of Long Beach, Costa Mesa, Moreno Valley, Wildomar, Fontana, and Highland, and Redlands.

At project commencement, KOA will meet with the City to discuss the project goals and scope of work in depth. We will establish an agreed-upon schedule and budget, and review the program with the City. The schedule and project cost will be monitored throughout project development, and regular updates provided to the City through reporting and/or at our regular project meetings. We will have detailed cost reports available each month at the reconciliation of our accounting system. It is anticipated that there will be one Project Development Team (PDT) meeting per month during the duration of this contract. The KOA team has developed a project flow chart that demonstrates our thorough understanding of the anticipated and required efforts from inception to completion of the project.



Our approach to this project will develop an organized, strategic plan that identifies and takes into account the specific project goals and objectives, with time and budget constraints in mind. The project is to be completed in four general phases, the first being Concept Approval and Environmental Clearance. The second phase will include completing the Plans, Specifications and Estimate (PS&E). The third phase will consist of construction bid support, followed by support during the actual construction phase.

The first effort on this project will include development of the base map which will outline existing right-of-way limits. This effort includes review of as built plans and design plans for improvements within the project limits. The base mapping effort will include aerial mapping for which we will establish horizontal and vertical controls so that composite base maps can be prepared that show centerline and right of way limits on the aerial. The base mapping will document the side slopes and edge conditions where the curb, gutter and sidewalks will be constructed and or modified. Collecting above and below ground utility information is highly critical for all urban locations, and we will coordinate this effort with all local utility companies including, but not limited to, water, sewer, natural gas, electrical, cable TV, and telephone, etc. We will also obtain information related to meter boxes, survey monuments, power poles, manholes, trees, and valve covers, etc.

Once the base mapping is completed, work towards conceptual design will begin. On this particular project, one important aspect is to ensure the proposed trail, access ramps, and driveways meet current ADA standards and provide needed ADA improvements. A meeting will be held with the City regarding the proposed project to develop project design standards and design concepts. Two conceptual alternatives will be developed for the City review. Upon approval of the Concept Plans, Public outreach will be conducted to select the preferred alternative. The 30% Preliminary Design Plans will be developed and utilized to support the Environmental Process. Once environmental clearance is obtained, KOA will complete the final plans, specifications and estimate for the City and provide support during construction phase.

KOA has an FAA waiver to conduct aerial drone photographic surveys. We will collect aerial imagery for documentation of the project area, and for presentation and public outreach purposes.

PROJECT MANAGEMENT

Our organizational approach will be based upon our knowledge of the City's objective, project requirements, and our subsequent translation of those into a project plan. It will provide structure for directing, controlling, and reporting project activities. KOA's management plan for the engineering services will provide a mechanism to ensure high-quality end products, in a timely and cost effective manner. The management plan elements include technical, schedule and cost control, progress reporting, coordination, and organization. Internal cost control procedures include budget control, which is facilitated by computerized management information reports that provide tabulations of actual cost and manpower expenditures incurred against those budgeted. The project manager will be responsible for exercising cost control, manpower scheduling, resource allocation, and estimates of cost-to-complete, performed on a period-by-period basis.

A key aspect of a successful project is the ability of the consultant team's project manager and the City project manager to work together both closely and effectively. To facilitate this, KOA's project manager will be responsive to questions and issues that may arise; be responsible for ensuring that the budget and schedule are maintained; and provide support and advice to the City's project manager, as needed. She will provide a single point of contact for questions and concerns and will ensure consultant team members are meeting standards for quality of work. Effective project management will include scheduled progress meetings and status updates via phone and e-mail as information becomes available. Status reports will accompany invoices, and summaries of meeting minutes will be provided to the City within one business day. KOA's PM will maintain a reasonable workload so that she can be responsive and available to the City while maintaining flexibility to deal with changes and adjustments to the project schedule.

Our approach to providing the City with the necessary high quality level of service involves the following key elements:

A Strong and Fast Start

Prior to receiving the Notice to Proceed (NTP), KOA will study the project locations to understand the challenges and issues, project schedule, and the budget.

Skillful Coordination of the Project

KOA understands that prioritizing coordination with the project's stakeholders is the key to the project's success. The Project Manager, Ming Guan, will use the kickoff meeting with the City to share information about the design; to identify potential issues early on; and to gain consensus with the City staff as early as possible.

Continuing Support and Project Commitment

As she has demonstrated on past projects, Ms. Guan is committed to this project from start to finish. She will provide overall project management, strategic coordination, and continuous supervision throughout the project duration.

Maximizing Team Strength

In addition to those listed in the Organization Chart, KOA's resource-pooling approach will take advantage of additional support from staff in the other KOA offices. Some of the potential tasks to be addressed include community toolboxes, preparation of display graphics and videos, and other traffic engineering issues.

Guaranteed Responsiveness

Above all, KOA will be responsive to the needs of the City. Having worked with the City on previous design projects, KOA truly understands that the key step towards project success is to be responsive. All individuals listed on the organization chart are highly reliable and proficient within the KOA team. The KOA Project Manager and Principal-in-Charge will make all reasonable efforts and take the appropriate measures, within our means, to ensure that sufficient staffing resources are available to handle any of the City's requests. KOA will communicate on a regular basis with the City regarding project matters, and will notify the City of any anticipated difficulties, issues, or concerns, so that there are no surprises to the City. As needed, we will meet with City staff at key milestones to discuss project status and deliverables, and to resolve any project issues.

Quality Assurance Program

KOA is focused on *continuous improvement*. Consequently, the company has a formal Quality Assurance program in place for all of our engineering design projects. Formal quality control checklists will be employed and will be provided to the City for review upon request. Mr. Charlie Schwinger, PE, has been designated as the QA/QC Manager. To ensure adherence to budget and schedule, Charlie will conduct and be responsible for the quality control of the project, from inception to the completion of the final design, including the preparation of the PS&E.

SECTION B – SCOPE OF WORK

B1. SCOPE OF WORK

KOA Corporation will provide comprehensive design services, prepare and complete all required environmental studies, environmental documents, surveying, geotechnical investigation, landscaping, drainage design and construction documents, including plans, specifications, and cost estimates for the Cactus Trial Improvement Project. Tasks will also include public outreach, bidding and construction assistance. In general, we agree with the Scope of Work as presented in the RFP. Without repeating the narrative detail included in the RFP, we have sequentially outlined the task and subtask activities to be undertaken by KOA and our Sub-Consultant team members.

PHASE 1: CONCEPTUAL DESIGN DRAWINGS & PRELIMINARY COST ESTIMATES

Task 1 - Project Management and Administration

The KOA team will meet with the City to establish the design parameters for this project. KOA will also meet with the City and identify all applicable agencies with authority over any particular aspects of the project. KOA will develop a list and contact information. KOA will coordinate with each agency and determine permits or project specifications that are required. KOA will serve as the main coordinator and liaison between the City and agencies.

Under the project management task, KOA will be responsible for maintaining contact with the City's Project Manager to keep him/her informed of the developments on the project. It is anticipated that monthly PDT meetings will be held until the final completion of the project. The following specific subtasks will be performed:

1) *Management of project team including sub-consultant*
2) *Attend Project Start-up Meeting, Development and Agreement on Design Standards*
3) *Conduct PDT Meetings including Preparing Agenda and Meeting Minutes*
4) *Submitting of Monthly Progress Reports and Invoices including Updating Schedules*
5) *Quality Control of Submittals*

Task 2 - Data Review, Field Surveying and Base Mapping

Under this main task, the following subtasks will be performed. KOA team will photograph the entire project area for our use during design, review, and as a pre-construction record. We can utilize our aerial camera ("drone") to obtain aerial imagery where beneficial.

1) *Obtain and Review Existing Documents and Reports*
   Research of City records including As-Builts, records of survey, corner records, centerline ties, basis of bearings, utilities, City of Rialto Public Works Standards, Caltrans Highway Design Manual, other standards, parcel maps, tract maps, right-of-way maps, field notes, existing and proposed improvements. These records will show locations of existing centerline and right-of-way monuments necessary to show existing street centerline and right-of-way alignments.

   KOA will obtain the available "As-Built" files. We will review the available data, proposed work, and develop a specific list of additional field data required for the project, including survey and geotechnical information.

2) *Conduct Field Surveys for Control and Mapping*
   Project Controls will be established for aerial mapping. Field surveys will be conducted for mapping elevations against National Mapping Accuracy Standards. This work will include sending field crews to the project area and surveying topographic information to develop one-foot contour base maps of the project area. AutoCAD plans will be prepared for the purpose of engineering design. Survey will include street centerline and right of way information, and survey monuments.

   Supplemental topographic field surveys will be performed to collect cross sectional information and clearances along the planned trail route and at the ramps at intersection crossings. The topographic field surveys will be used to verify the 20-scale aerial planimetric mapping and include additional survey data for critical tie-in points

and other features obscured by vegetation or shadows in the aerial mapping which fall within the survey limits. The limits of the topography will cover the area as shown on the Exhibit A of the RPF.

The street centerlines and record rights of way will be computed from publicly available record maps. Research will be conducted at the county of San Bernardino Public Works and GIS departments for existing files and/or available cadastral records in support of the centerline and rights-of-way and other intersecting rights of way within the project limits. Monuments recovered by field crews will be tied into the horizontal survey control established for this project and utilized in the analysis of the existing centerline and right of way.

3) *Preparation of Base Map*
The survey topography will be submitted in ASCII format on CD-RW and a hard copy plot provided, using AutoCAD software. All drawings will be prepared at 1"= 40' scale.

Task 3 - Utility Research and Coordination

KOA will provide preliminary notification/request letter and relocation/removal notices to all utility companies that have facilities within the limits of the project. The City shall provide KOA with the required format for the utility notice in Microsoft Word format. Said notices will inform the utility company of their need to relocate their facilities prior to construction or to adjust their facilities to grade after completion of the pavement construction. If requested by the City, potholing services will be performed under a supplement agreement.

1) *Contact and Obtain Utility Information*
2) *Prepare notices and follow up requests with plans to utility companies*
3) *Pothole utilities if needed (Optional)*

Task 4 - Conceptual Design and Cost Estimates / Preliminary Environmental Assessment

KOA will develop preliminary concepts, and hold a workshop with City staff to review and modify as needed. KOA will prepare up to two conceptual plans for the project, and preliminary estimate for each conceptual plan will be provided. The approved preliminary alignment will be used to prepare the Preliminary Environmental Assessment and Preliminary Design Plans. The preliminary alignment will be developed based on a full field review, review of right of way limits, and consultation with stakeholders. KOA will conduct up to two (2) meetings with the Project Team to review the draft conceptual plans, and to receive initial comments and direction in which to proceed with the final conceptual plans.

1) *Develop Conceptual Design Plans (Up to Two Alternatives)*
2) *Preliminary Cost Estimates for Two Alternatives*
3) *Preliminary Environmental Assessment to identify Scope of Special Studies*

Task 5 - Community Outreach

The KOA team will assist the City in preparing and conducting community outreach meetings to discuss the project, obtain comments, and identify and finalize the project concept. We anticipate up to three such meetings and a City Council presentation to be conducted. KOA will plan, prepare, and conduct these meetings based on discussions with the City. The City will assist in providing notification to affected stakeholders, including businesses and residents. We plan one or two community meetings to receive input from the public. Our Spanish-speaking staff will provide real-time translation. We also have experience with preparing fliers in both English and Spanish. Other tasks could include providing deliverables and services to educate the public on the project; evaluating its effectiveness; and creating bike/pedestrian and trail route map worksheets to raise route awareness and to tout the benefits of bicycling/walking. Specific tasks will include:

1) *Conceptual engineering exhibits (plans and sections for the two alternatives)*
2) *Open house meeting written comments*

Task 6 - Geotechnical Design Report

Geotechnical field investigation will consist of drilling exploratory borings to obtain material samples for bridge battement design. The results of field exploration and geotechnical laboratory tests will be evaluated and engineering analyses will be performed in order to provide geotechnical recommendations for the design and construction of the proposed project. A professional report will be prepared to summarize the data collected and present our findings, conclusions, and geotechnical recommendations for design and construction of the proposed project. Specific tasks will include:

1) *Review Background Information and As-built Documents*
2) *Analyze Data and Prepare a Preliminary Geotechnical Design Report*
3) *Coordinate and Perform Field Exploration*
4) *Perform Geotechnical Laboratory Testing*
5) *Conduct Analyses and Prepare a Geotechnical Design Report*
6) *Initial Site Assessment (Optional)*

Task 7 - Hydrology Study and Drainage Design

The KOA team will perform data research in support of the hydrology and drainage design. KOA team will perform a review of available drainage studies, master drainage plans, design topographic maps, aerial photographs of the project area. A field investigation will be conducted to familiarize the project team with the drainage conditions, flow patterns, existing design constraints, and existing improvements in the project area. A 100-year hydrology study will be prepared for the drainage areas encompassing the bike trail based upon the existing (pre-project) and proposed (with-project) conditions. It is assumed that no significant off-site drainage areas are tributary to the proposed bike trail. The study will be performed using the San Bernardino County hydrology method. Specific tasks will include:

1) *Data Collection and Review*
2) *Hydrology Study*
3) *Preliminary Drainage Improvements Plan*

Task 8 - Preliminary Design Plans (30% Plans)

Preliminary design plans will focus on issues that require general agreement before proceeding with detailed design work. These will be resolved during the preliminary phase of the project. KOA will review and refine the conceptual plan and preliminary alignment plan for the proposed improvements; and identify associated impacts and costs. The preliminary design plan will include existing right-of-way, curbs, striping and marking, medians, and As-Built data. The 30% complete Preliminary Design Plans will be utilized to support the Environmental Process. Additional subtasks for this task will include:

1) *Prepare Preliminary Design Plan(30%)*
2) *Prepare Preliminary Cost Estimates*

ENVIRONMENTAL DOCUMENTS

Task 9 - Preparation of Environmental Documents

The City anticipates the issuance of a Negative Declaration for the Cactus Trail between Rialto Avenue and Baseline Road, and the preparation of the CEQA process is anticipated to be handled by the City's Development Services Department. KOA team will be responsible for preparing special studies that may be required once the final project design has been accepted by the City Council.

ECORP Consulting, Inc. (ECORP) is part of KOA team to provide environmental services for the project. To support the findings in the CEQA CE, several technical studies are anticipated to be required. Based on a review of the project site the technical studies to be prepared are anticipated to include the following:

- Cultural Services
- Biological Services
- Air Quality/GHG Analyses
- Noise Impacts

CULTURAL RESOURCES

A records search will be conducted at the South Central Coastal Information Center (SCCIC) located at the California State University, Fullerton campus. The records search will identify the locations and extent of previous surveys conducted within 1 mile of the project area and will determine if there are any known cultural resources (i.e., prehistoric or historic archaeological sites or historic-period features) located within or near the project area. The records search will identify resources listed on or determined eligible for listing on the National Register of Historic Places (NRHP) and/or the California Register of Historical Resources (CRHR) located within or near the project area.

In addition, a search of the Sacred Lands File will be requested from the Native American Heritage Commission (NAHC) in Sacramento. The search will identify any known sensitive or sacred Native American resources located within or near the project area. It should be noted that the Sacred Lands File search will not constitute consultation in compliance with Senate Bill (SB) 18 or Assembly Bill (AB) 52. SB 18 and AB 52 consultation are separate processes from cultural technical studies and are not included in this scope of work. Based on a preliminary review of the project, it does not appear that SB-18 consultation is required because the project does not include the adoption of a Specific Plan, General Plan, or amendment to a Specific Plan or General Plan. It is assumed that the City of Rialto will conduct AB 52 consultation for the project and will provide copies of documentation of their AB 52 consultation process for inclusion in the CEQA document.
ECORP will complete a field survey of the project area (approximately 1.5 linear miles) using pedestrian transect intervals spaced 15 to 20 meters apart. The project area will be examined for evidence of cultural resources, including prehistoric and historic-period (i.e., over 50 years of age) archaeological deposits and features. If any resources are encountered, they will be recorded and mapped in detail in accordance with the standards of the California Office of Historic Preservation (OHP). California Department of Parks and Recreation (DPR) 523 site records will be prepared for archaeological sites. Aerial photographs of the project area indicate that the area has been heavily graded and is bordered on the east side by a drainage channel and Cactus Avenue and on the west side by a large modern wall. For costing purposes, it is assumed that no archaeological resources will be identified during the field survey.

Note: recordation and formal evaluation of archaeological sites is not included in this task. If any archaeological sites are encountered that will require evaluation, it will be considered as an optional task. For costing purposes we have assumed the following optional task:

- Evaluate the road using California Register of Historical Resources (CRHR) criteria based on archival research and that the evaluation will be included in the cultural survey report.

A cultural resources technical report will be prepared to document the methods and results of the records search, Sacred Lands File search, and field survey. The report will include a summary of the environmental setting and prehistoric and historic cultural background of the project area. For the purposes of costing, it is assumed that no cultural resources will be identified during the survey. Copies of correspondence with the NAHC will be provided as an attachment to the report.

Paleontological Records Search. A paleontological records search and literature review will be conducted with the Los Angeles County Museum of Natural History (LACMNH). The records search will include a review of known fossil localities in the project vicinity and an assessment of the potential for the project area to contain buried paleontological resources based on geologic maps of the region. A summary letter report will be prepared to document the results of the records search.

BIOLOGICAL REPORT

ECORP will prepare a CEQA-compliant biological report for the project, by conducting the following general tasks: literature search, field survey, and reporting.

During the literature search task, ECORP will compile a list of sensitive plant and animal species expected to occur at the Project site based on public records. Biologists from ECORP will conduct an updated review of species that have been recorded as occurring near the Project site from the California Natural Diversity Database, California Native Plant Society's online inventory, and the USFWS online inventory tool.

After the literature search is complete, ECORP will conduct a field visit to characterize the existing biological resources on-site that may be affected by project construction. This survey will be conducted on foot, at a time of day that is conducive to making wildlife observations. Using the literature and field study results, ECORP will compile a biological profile of the project area. The profile will characterize the existing biological conditions and biological constraints of the project.

The biologists who conducted the field study and literature search will prepare a document that support the CEQA document being prepared by the City. The document will summarize any project documentation provided by the City, describing the project location and other pertinent details with figures. The document will describe the existing biological environment at the project site, based on the biological information compiled, and will briefly discuss potential project impacts, temporary and permanent, and proposed project mitigation measures for biological resources. The biological report will also incorporate the most current engineering design and full project description.

ECORP assumes one administrative draft report (five copies), followed by one round of review by the City, and preparation of a final report (five copies) based on those comments. An electronic version of the final report will also be supplied. Five copies of the draft report, five copies of final report, and a final electronic document will be provided to the City following its finalization.

ASSESS POTENTIAL IMPACTS RELATED TO AIR QUALITY & GREENHOUSE GAS EMISSIONS

This scope of work outlines the work that ECORP will undertake to prepare the air quality and greenhouse gas emissions analysis for the Proposed Project. The assessment will quantify short-term (i.e., construction) and long-term (i.e., operational) emissions generated by the Proposed Project using the California Emissions Estimator Model version 2016.3.1 (CalEEMod) software. CalEEMod is a statewide land use emissions computer model designed to quantify potential pollutant emissions associated with operations from a variety of land use projects. ECORP proposes to evaluate potential air quality and greenhouse gas emission-related impacts in a stand-alone technical study. The analysis would be supported by modeling documentation, which would be included as an appendix to the technical study. Specific subtasks to be accomplished are described below.

Air Quality Subtask

Establish the Existing Conditions and Regulatory Framework. Primary pollutants of concern in South Coast Air Basin, which encompasses the Project area, include ozone, particulate matter, and toxic air contaminants. ECORP staff will prepare an air quality analysis for the Proposed Project, in accordance with the South Coast Air Quality Management District's recommended methodologies and thresholds of significance, including the District's localized significance thresholds. Baseline meteorological and air quality data developed through the California Air Resources Board (CARB) will be utilized for the description of existing ambient air quality. Air quality data from the nearest air quality monitoring station (Arrow Highway in Fontana) will be included to help highlight existing air quality local to the Project area. The analysis will also describe and address the requirements set forth by the SCAQMD CEQA Air Quality Handbook.

Construction-Related Emissions. Construction emissions associated with the Project will be quantified with CalEEMod version 2016.3.1. A general description of the major phases of construction and their timing will be required. The air pollutant emissions during construction will be compared to the SCAQMD regional thresholds of significance.

Long-Term Emissions. Operational (i.e., area and mobile source) emissions will be quantified and compared to the SCAQMD regional thresholds of significance. Due to the nature of the Project, it is not anticipated that it will be a substantial source of operational air pollutants. However, the proposed trail improvements could result in an increase in trail use over existing conditions and generate emissions from an increase in regional vehicle miles traveled. Project consistency with the 2016 Air Quality Management Plan (AQMP) will be evaluated.

Localized Emissions. The project is located within the SCAQMD's Source Receptor Area 34 (Central San Bernardino Valley). Based on localized meteorological data for SRA 34, ECORP will analyze localized impacts based upon the SCAQMD's Localized Significance Thresholds (LST) methodology.

Greenhouse Gas Emissions Subtask

ECORP Consulting will prepare an inventory of the greenhouse gas (GHG) emissions (i.e., nitrous oxide, methane, and carbon dioxide) from Project construction activities as well as on-going operations and maintenance activities proposed by the Project. The significance of increased GHG emissions from the existing baseline and the contribution to climate change associated with the proposed Project will be determined by comparing the increase in GHG emissions associated with the Project assessed against the SCAQMD interim screening level numeric bright line threshold of 3,000 metric tons of carbon dioxide equivalent (CO2e) annually.

ASSESS POTENTIAL IMPACTS RELATED TO NOISE

This scope of work outlines the work that ECORP will undertake to prepare the noise analysis for the Proposed Project. ECORP proposes to evaluate potential noise-related impacts in a stand-alone technical study. The analysis would be supported by modeling documentation, which would be included as an appendix to the technical study.

Existing Conditions. The applicable noise and land use compatibility criteria for the Project area will be reviewed and noise standards (i.e., Municipal Code Chapter 9.50, Noise Control, as well as the compatibility standards in the City's General Plan Safety and Noise Element) regulating noise impacts will be discussed for land uses adjacent to the Project site. Since the Project is proposing improvements to an existing land use as opposed to the development of a new land use, no noise level measurements are necessary.

Construction-Related Noise and Vibration. Construction would occur during implementation of the Proposed Project. Noise impacts from construction sources will be analyzed based on the anticipated equipment to be used, length of a specific construction task, equipment power type (gasoline or diesel engine), horsepower, load factor, and percentage of time in use. The construction noise impacts will be evaluated in terms of maximum levels (Lmax) and hourly equivalent continuous noise levels (Leq) and the frequency of occurrence at adjacent sensitive locations. An analysis of vibration impacts will be based on the California Department of Transportation's 2004 vibration analysis guidance. Analysis requirements will be based on the sensitivity of the area and specific construction activities.

Operational Noise Sources. Due to the nature of the Proposed Project, noise generated on-site during Project operations is anticipated to be minimal, and will be addressed qualitatively. Off-site noise impacts from any increase in vehicular traffic will be assessed using the U.S. Federal Highway Traffic Noise Prediction Model (FHWA-RD-77-108). The 24-hour weighted Community Noise Equivalent Levels (CNEL) will be presented in a tabular format. If necessary, mitigation will be identified to ensure that on-site noise levels do not exceed the County's standards.

1) *Coordination with City's Development Services Department*
2) *Preparation of Cultural Resources Technical Report*
3) *Preparation of Biological Report*
4) *Preparation of Air Quality Report*
5) *Preparation of Noise Impact Report*
6) *Preparation of CRHR Evaluation*

PHASE II - FINAL PLANS, SPECIFICATIONS & ESTIMATES

Task 10 - Prepare Interim and Final Plans, Specifications and Estimate

KOA will prepare and assemble a set of drawings for this project in a bid package format for City review, in accordance with the City of Rialto Standards. These plans will be prepared in 65%, 95%, 100% and Final Stages. The plan will be assembled after individual tasks are completed as defined in the tasks above. Other plans not noted in the tasks will be completed under this task. These plans include, Vicinity Map, Roadway Sections showing pavement thickness, etc. Plans include:

- Demolition Plan
- Trail Improvement Plans
- Storm Drain Improvement Plans
- Landscape and Irrigation Plans
- Safety Lighting Plans

All approved plans will be provided to the City on compact disk in AutoCAD, as well as on "D" size Mylar. Specifications documents, including technical specifications, will be provided on digital medium disks in Microsoft Word format. The Engineers Estimate will be provided in Excel format. Specific sub-tasks include:

1) *Specifications and Special Provisions and Engineers Estimate*
2) *2nd Review 65% Submittal*
3) *3rd Review 95% Submittal*
4) *Final 100% Review and Submittal*

PHASE III – BIDDING AND CONSTRUCTION SUPPORT

Task 11 - Engineering Support during Bidding, Award & Construction Phase

KOA will assist the City in advertising for bids, and providing plans and specifications. Tasks may include answering questions from prospective bidders, providing responses to requests for information (RFI's), preparing addenda to the PS&E during the advertisement period, and providing consultation and interpretation of construction documents. KOA will attend the project pre-construction meeting. During construction, we will be available to answer requests for information, requests for clarification, and address interpretation needing comment. We will issue clarifications or addenda if necessary. We will be available to review and comment on project submittals. KOA will work closely with the City's appointed construction inspector. Subtasks will be as follows

1) *Bidding Services*
2) *Preconstruction meeting*
3) *Review Inquiries, submittals and change orders during construction*
4) *Prepare As Built Drawings*

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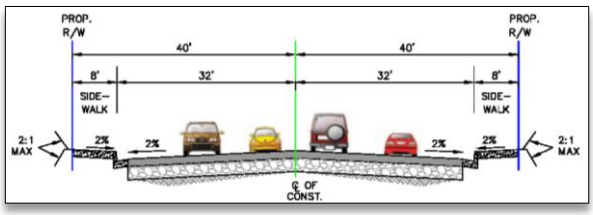
SECTION C – STAFF QUALIFICATIONS

C.1 Ms. Ming Guan, PE, TE, has been assigned as Project Manager for this project. Ms. Guan has 11 years of experience with work in civil, traffic and highway design. Ms. Guan is an integral part of many KOA projects which have involved engineering design for interchange improvements, roadway improvements, bike/pedestrians facility improvements, parks, traffic signal designs, ramp metering, signing and striping, and traffic control plans. She has completed a number of roadway and traffic signal design projects for a number of agencies. She has managed projects from PID (PSR), PA&ED to final PS&E phase. She is also an adjunct professor at Cal Poly Pomona teaching Computer Programing, Traffic Engineering, Highway Engineering and Advanced Highway Engineering for Civil Engineering Department since 2008.

C.2 Ms. Guan has successfully completed over dozen of projects that involved conceptual alternative developments and approvals by various stakeholders. Below are some key projects that she managed:

Citrus Avenue Street Widening including Minor Storm Drain Design from Santa Ana Ave to Slover Ave Street Improvement Project (2015-2017). KOA Corporation was recently selected by the City of Fontana to improve Citrus Avenue from Santa Ana Avenue to Slover Avenue. The improvements will consist of street widening, curb, gutter, sidewalk, handicapped access ramps, commercial and residential driveways, storm drain improvement, and potentially utility pole relocations. The aerial map below shows the proposed project limits.



Widening of Citrus Avenue will result in Right of Way impacts to 6 parcels. ***Reference:*** *Noel Castillo, Engineering Manager, City of Fontana, 8353 Sierra Ave, Fontana, CA 92335, (909)-350-7632,* ncastillo@fontana.org.

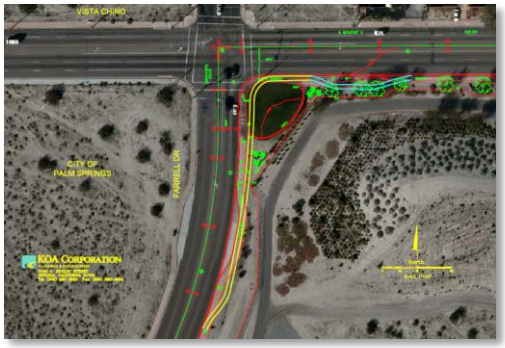
Replacing existing NB I-710/NB I-5 Connectors PSR-PDS, Metro, Los Angeles, CA (8/13-3/15). Project Manager. KOA was selected by Metro to complete the PSR-PDS for improvements at the interchange. Currently, the NB I-5 to NB I-710 and SB I-710 to SB I-5 connectors function as left exits. The existing connector geometry has many features which do not meet current Caltrans Highway Design Manual Standards. There are also a number of areas within the project limits with a high concentration of accidents. The purpose of the project is to realign the connectors to improve traffic operations and safety for the I-710/I-5 Interchange. The analysis will focus on the NB I-5 to NB I-710 connectors (and return move) but will include possible improvements to local and freeway-to-freeway interchange in the study area. Other aspects of the PSR/PDS include completion of the Traffic Engineering Performance Assessment (TEPA), SWDR, preliminary cost estimates for the Capital Outlay Project, and Support Estimates for design and right of way needs. ***Reference:*** *Ernesto Chaves, Metro Project Manager, (213) 922-7343, chavese@metro.net*

Niagara Avenue & Athol Street Sidewalks, Access Ramps, and Driveway Approach Improvements, Fontana, CA (6/14-11/14). Project Manager. Funded by Community Development Block Grant (CDBG), the City of Fontana desired to improve existing sidewalk, access ramps and driveway approaches along Niagara Avenue and Athol Street. KOA was retained by the City to provide professional engineering services for the project. This roadway improvement project included completion of 2,500 feet of sidewalk improvements, ADA ramp upgrades, and driveway approach

improvements. This project will impact over 50 households, and Public Outreach is important for sidewalk project. KOA assisted the City with Public Outreach in the early stage of the project. Another challenge of the project was to tie-in to existing resident driveway approach with minimum impact to its landscape, automatic gate, and wrought iron fences. The KOA team was able to complete the project on a fast-track basis, which helped the City meet the CDBG funding deadline. ***Reference:*** *Noel Castillo, Engineering Manager, City of Fontana, 8353 Sierra Ave, Fontana, CA 92335, (909)-350-7632,* ncastillo@fontana.org.

SR60 WB On-ramp/Perris Blvd Lane Widening and Traffic Signal Modifications, Moreno Valley, CA (6/08-8/12). Project Manager. The City of Moreno Valley selected KOA in June 2008 for modifications at the Perris Blvd and SR-60 WB On-Ramp intersection. The project cost was below $3M, so Caltrans Streamlined Oversight Process was followed to complete the design and obtain an Encroachment Permit from Caltrans District 8. The project included adding a SB right turn lane. Besides the road widening, the project included traffic signal modifications, drainage consideration, and WB on-ramp modifications at the intersection. Improvements included ADA access design at the curb return in accordance with the Caltrans District 8 requirements. Due to the close proximity of Wendy's restaurant drive-thru lane, the Caltrans standard width for the proposed right turn drop lane was dropped from 16' to 14'. A fact sheet had to be prepared and design exceptions were obtained from the District. The project was constructed in 2012. KOA also assisted the City during the construction phase of the project. This project was completed with substantial savings to the City. ***Reference:*** *Henry Ngo, Senior Engineer, (951) 413-3106, henryn@moval.org*

SR111 (Vista Chino) and Farrell Drive Designated Right Turn Lane and Traffic Signal Improvement Project, Palm Springs, CA (12/10-2/16). Project Manager. The City hired KOA to provide engineering and design services to add a northbound right turn lane on Farrell Drive and Bus Bay at Vista Chino Drive. The proposed modification will impact Vista Chino (SR-111) so the project has to be coordinated with Caltrans District 8. Also, since the project is CMAQ funded, KOA had to comply with NEPA requirements and completed PEAR document and an Air Quality Study. Additionally, since there is prevailing Agua Caliente tribal land jurisdiction in the project area, all routine tribal coordination and approval processes have to be met for the project. Caltrans District 8 is representing the FHWA for NEPA clearance. KOA was able to successfully obtain **Encroachment Permit with Fact Sheet Exception** from the District 8. ***Reference:*** *Savat Khampou, Assistant Director of Public Works, City of Palm Springs, 3200 Tahquitz Canyon Way, Palm Springs, CA 92262, (760) 323-8253.*



Safe Routes to School Project, Sidewalk Improvements and IRWL Installation for Merle Casey Elementary School, Rialto, CA. (2012-2014). Project Manager. Federally funded by Safe-Routes-to-School (SRTS) Cycle 2, the City of Rialto desired to improve the sidewalk, curb & gutter, and ADA access ramp along 2nd Street located southwest of Merle Casey Elementary School. The City also proposed to install an In-Roadway-Warning-Light (IRWL) system to provide a safer pedestrian street crossing in the vicinity of the school. The scope of work included completion of base maps with right of way and utility information, and completion of design plans for sidewalks and IRWL installation. One of the most important components of the project included obtaining NEPA/CEQA clearance from Caltrans District 8 Local Assistance. Construction was completed in year 2014. ***Reference:*** *City of Rialto, Mr. Hector Gonzalez, PE, Associate Civil Engineer, 335 W. Rialto Ave., Rialto, CA 92376, (909) 421-4986, hgonzalez@rialtoca.gov.*

Preparation of PS&E for Road Improvements in the Town Of Thermal, Redevelopment Agency (RDA) For The County Of Riverside, Ca (5/09-8/12). Project Manager. KOA was selected by RDA to provide professional engineering services for improving the general road conditions in the Town of Thermal. The project consists of the improvement of about 5 miles of roadway throughout the town vicinity and requires road widening, drainage improvements, streetscape, and traffic signal design. The roadways are proposed to be widened to the classifications identified in the County's Circulation Plan. Major improvements include Airport Road that will be widened for a length of about 2.8 miles from existing 2 lanes to a 7-Lane Urban Arterial Section with curb & gutter, and sidewalk. The project will include major considerations and design of a closed drainage system. This type of widening requires additional property acquisition so the project includes writing of the legal descriptions, etc. The project would also require under grounding of power and transmission lines through the Airport Road Corridor. Architecturally and aesthetically pleasing bus stops are also being planned to address the transit needs of the community. Obtaining the community consensus for the proposed improvements is one of the most important tasks of this project. A PS&E package is completed for this project, and KOA also provided construction inspection services for the project. One of the key aspects of the project includes constructing curb and gutter and rehabilitation of streets within the Town of Thermal. This required adjustment of driveway profile and consideration of drainage flow so that ponding does not occur within the private parcels. ***Reference:*** *Mr. Joaquin Tijerina, Project Manager, Economic Development Agency (EDA) of Riverside County, 44-199 Monroe Street, Suite B, Indio, CA 92201, (760) 863-2552*

C.3 Ming's Current Projects Involving Park or Recreational Design

ATP Cycle 1, Highland-Redlands Connector Bicycle and Pedestrian Improvements (2017-Present). The proposed project would construct a non-motorized transportation project along 4.7 contiguous miles of streets and easements in the cities of Highland and Redlands. The project would construct bicycle and pedestrian improvements including pavement widening, curb and gutter, curb ramps, median curbs, sidewalks, pavement widening, pavement rehabilitation, slurry seal, pavement markings and striping, Class I and II bikeway/pedestrian paths, bicycle/pedestrian bridge, bike racks, bollards, bike signals, in-roadway bicycle detection, pedestrian heads, sharrows, enhanced crosswalks, warning beacons, roadway and bikeway signage, lighting, and speed feedback signs. KOA team is responsible for Conceptual Development, Environmental Clearance, Right of Way engineering, and Final PS&E. KOA team conducted workshop and public outreach in June 2017. The conceptual design has been completed for the project. ***Reference:*** *Dennis Barton, Project Manager, City of Highland, 27215 Base Line, Highland, CA 92346, (909) 864-8732, dbarton@cityofhighland.org*

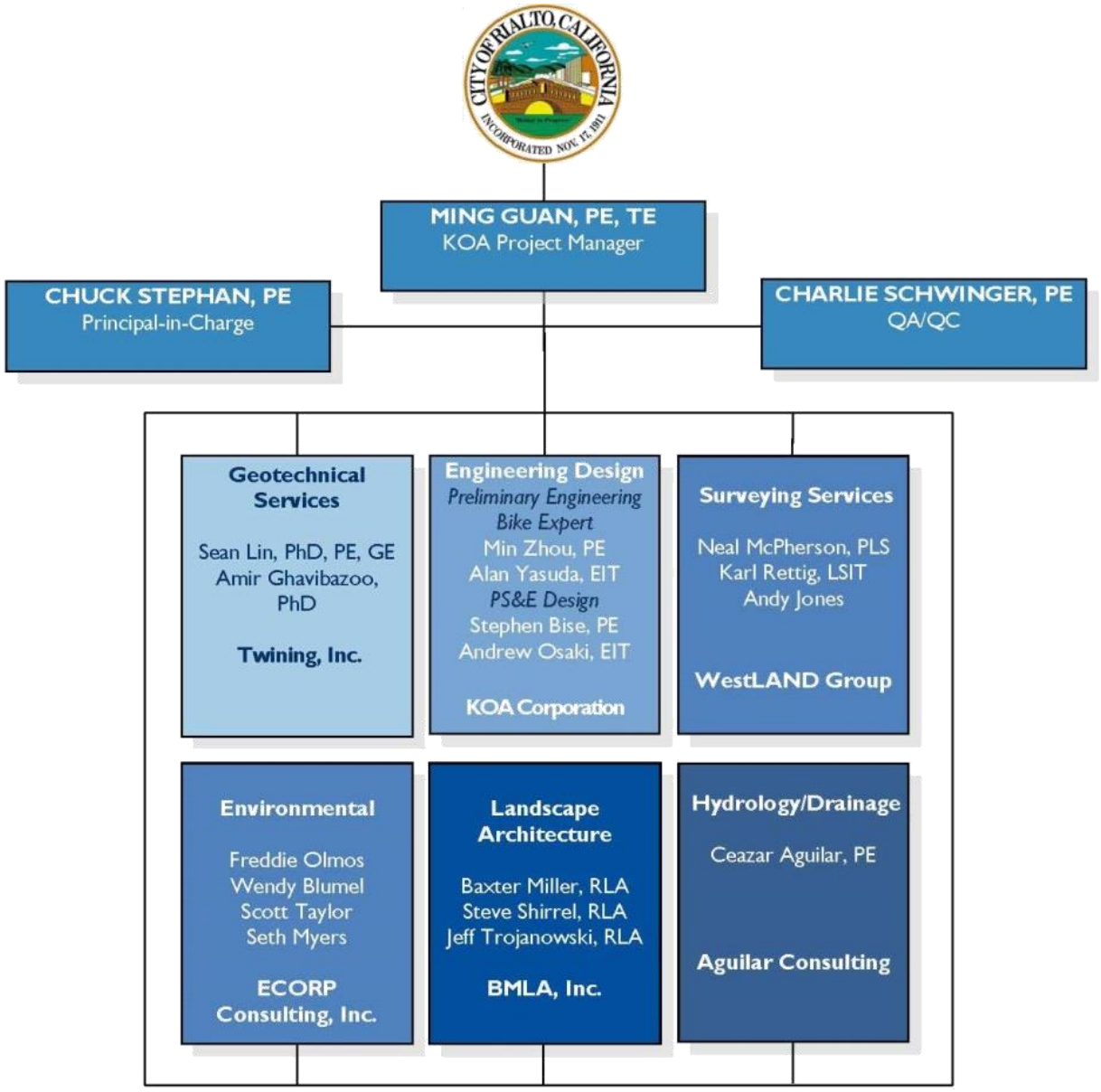
Larwin Park Improvement Project, Rancho Palos Verdes, CA. (2016-ongoing) KOA teamed with BMLA to provide design services to redesign the existing Larwin Park. The improvements include re-grading the majority of the existing park to provide visibility throughout the park, new parking lot, concrete/decomposed granite paths, landscaping, playground equipment, irrigation, new bathroom building, and new light fixtures. KOA services include improvement plans for demolition, grading, water/sewer service, parking lot, signing and striping, specifications and cost estimates. ***Reference:*** *Mr. Wood Nousome, Assistant Engineer, City of Buena Park, 6550 Beach Blvd, Buena Park, (714) 562-3678.*

C.4 Ms. Ming Guan, PE, TE, has been with KOA Corporation for 11 years since graduating from Cal Poly Pomona.

C.5 Ms. Ming Guan has just completed some major projects including the I-10 at Rancho Ave Eastbound On-Ramp and I-215 at Waterman Northbound On-Ramp projects. Her other projects include small projects that are expected to be completed in the third quarter of 2017. Her commitment through the third quarter of 2017 is about 60% after which she is substantially available to fully commit to the Rialto Cactus project.

ORGANIZATION CHART/STAFFING PLAN

Our organizational approach will be based upon our knowledge of the City's objective, project requirements, and our subsequent translation of those into a project plan. It will provide structure for directing, controlling, and reporting project activities. KOA's management plan for the engineering services will provide a mechanism to ensure high-quality end products, in a timely and cost effective manner. We have put together and organized the most qualified, knowledgeable, and experienced planning, engineering and environmental team to undertake this challenging assignment. We believe your expectations will be exceeded by the KOA Team's performance. The key personnel shown below on the organization chart will be available to the extent proposed by the City of Rialto for the duration of the project. No key person shall be removed or replaced without prior written concurrence of City of Rialto.



QUALIFICATIONS OF PROPOSED STAFF

MING GUAN, PE, TE, VP, SENIOR ENGINEER
KOA PROJECT MANAGER

EDUCATION
MS, Civil Engineering, Cal Poly Pomona, 2011
BS, Civil Engineering, Cal Poly Pomona, 2006

REGISTRATIONS
Professional Engineer, Civil, CA #75793
Professional Engineer, Traffic, CA #2795

AVAILABILITY: 60%

PROFESSIONAL EXPERIENCE

Ms. Guan has 11 years of experience with work in civil, traffic and highway design. Ms. Guan is an integral part of many KOA projects which have involved engineering design for roadway improvements, traffic signal designs, ramp metering, signing and striping, and traffic control plans. She has completed a number of roadway and traffic signal design projects for a number of agencies. She has hands-on experience in completing PS&E packages. She is also an adjunct professor at Cal Poly Pomona teaching Computer Programing, Traffic Engineering, Highway Engineering and Advanced Highway Engineering for Civil Engineering Department since 2008.

RELEVANT EXPERIENCE

Traffic Signal and Intersection Improvement Project, Fontana, CA. *Project Manager.* The City of Fontana desires to signalize the existing intersection which is currently operating as a four way stop. The project will require survey and mapping the intersection; designing a new traffic signal; and updating and constructing ADA ramps at all four curb returns of the intersection. The project will impact two properties in the northeast corner; therefore, right-of-way plans and legal descriptions will be required.

Safe Routes to School Project - Sidewalk Improvements and IRWLS Installation for Merle Casey Elementary School, Rialto, CA. *Project Engineer.* Federally funded by Safe-Routes-to-School (SRTS) Cycle 2, the City of Rialto desires to improve the sidewalk, curb & gutter, and ADA access ramp located south-west of Merle Casey Elementary School. The City also proposed to install an In-Roadway-Warning-Light (IRWL) system to provide safer pedestrian street crossing in the vicinity of the school. The scope of work included completion of base maps with right of way and utility information, and completion of design plans for sidewalks and IRWL installation.

Three Intersections and 'C' Street Improvement, Colton, CA. *Project Engineer.* The design included improving the intersections to comply with ADA standards and signalization. Additionally, 'C' Street was widened to connect the previously widened sections on both sides. This was needed for the south side of the street serving the eastbound traffic. The project required constructing new sidewalks and improving the driveway access to local properties. Right of way was required on this project including coordination with property owners.

SR-60/Perris Blvd. Lane Widening and Traffic Signal Modifications, Moreno Valley, CA. *Lead Design Engineer*. KOA completed the design and obtained permits from Caltrans for modifications at the interchange. The modifications included adding a southbound right-turn drop lane to the westbound on-ramp at the interchange. This project required traffic signal modifications; relocation of the Wendy's sign; and impact to Wendy's landscaping and drainage improvements. KOA completed a fact sheet for the project and obtained approval of the design variance from Caltrans.

Multiple Traffic Signals and One Bus Stop Platform Project, Colton, CA. *Lead Design Engineer*. KOA was recently selected by the City of Colton to provide engineering services for street safety improvements. Ms. Guan was responsible for preparing design plans, specifications and estimates.

Traffic Signal & Street Improvements to Linden Ave & Riverside Ave, Rialto, CA. *Project Manager.* The City of Rialto desires to install a new traffic signal system. The existing intersection is not currently constructed to the ultimate width, but the City plans to negotiate with the property owner to obtain additional right of way for proposed widening and to allow installation of the traffic signal equipment at their ultimate locations. Lanes will be added to provide turning lanes as needed. KOA is responsible for preparing the PS&E package for the intersection improvement and legal description for one parcel.

CHUCK STEPHAN, PE, VICE PRESIDENT

KOA PRINCIPAL-IN-CHARGE

Chuck Stephan has 33 years of extensive experience in engineering design and project management on projects for many municipalities and private firms. He has diverse project experience in planning, design, management, and construction of transportation, educational, institutional, industrial, aerospace, municipal, residential and commercial projects. Mr. Stephan works in multiple capacities as Principal-In-Charge, project manager, project engineer, lead engineer, design engineer, and construction engineer in both the civil and construction management disciplines.

EDUCATION

BS, Agricultural Engineering, California Polytechnic State University, San Luis Obispo, 1982

REGISTRATIONS

Professional Engineer, Civil, CA #C50481
Prof. Engineer, Civil, OR #1872
Prof. Engineer, Civil, HI #843
LEED Accredited Professional

AVAILABILITY: 30%

RELEVANT EXPERIENCE

Engineering Services, Program Management, Project Management, Design, and Construction Management, Torrance, CA. *Interim Project Manager.* Mr. Stephan provided engineering services to the City of Torrance Department of Public Works for the management, design, and construction of various public works capital improvement projects and studies. Projects included: annual pavement rehabilitation projects; annual water main replacement projects, arterial rehabilitation projects with federal-aid funding, street widening and intersection improvements with federal-aid funding; pedestrian facilities, plan checking, bid assistance; federal-aid reimbursements and storm drain improvements.

190th Street Reconstruction Project, Torrance, CA. *Project Manager.* Mr. Stephan guided the design and construction of this Federally Funded $4.5 million project in accordance with Caltrans Local Programs Procedures, including pavement rehabilitation marking and striping, median landscaping, sidewalk widening, signage, and water improvements.

City of Signal Hill Cherry Avenue Improvement Project, Signal Hill, CA. *Design Engineer.* Mr. Stephan was responsible for the project management associated with the new design for the widening of Cherry Avenue between 20th Street and 250-feet south of Pacific Coast Highway (PCH). The project included a new storm drain, traffic signal upgrade at the PCH/Cherry Avenue intersection, reconstruction of the street, PCC improvements and striping.

Off-Site Pedestrian and Traffic Improvements, Culver City Redevelopment Agency, Culver City, CA. *Design Engineer.* This improvement project included new sidewalks, ADA compliant ramps, landscape median islands, new traffic signals, relocating utilities, repaving sidewalk enhancements, curb extensions, new crosswalks, traffic calming measures, and NTMP work in the neighborhood.

Lambert Road and Beach Boulevard Intersection Improvement Project, La Habra, CA. *Project Engineer.* Mr. Stephan provided project and construction management services for the Lambert Road Gap Closure project which filled missing gaps and completed the sidewalk system along both sides of Lambert Road across the entire City. The project also reconstructed the Lambert Road and Beach Boulevard intersection with new signals right turn lanes, and pavement rehabilitation within the Caltrans ROW. This project also included 15' retaining walls, right of way acquisition, curb & gutter, sidewalk, ADA improvements, utility pole relocation, railroad coordination, and landscape restoration in various locations. The project was partially funded with Safe Route to School and STPL funds administered through Caltrans.

Department of Public Works, Shafter, CA. *Assistant City Engineer.* Mr. Stephan assisted the City Engineer overseeing various public works projects, including the design and construction of sewer, water storm drain, street, curbs, sidewalks, lighting, traffic signals, parks, industrial park, street rehabilitation and surveying. Performed computer traffic modeling, GIS system development and water modeling analysis.

City of Malibu Street and Intersection Improvements, Malibu, CA. *Project Manager.* Mr. Stephan completed plans, specifications, and estimate to realign Zumirez Drive and construct a new traffic signal at the intersection with Pacific Coast Highway (Caltrans).

CHARLES M. SCHWINGER, PE, PTOE, AICP, SENIOR ENGINEER

KOA QA/QC

PROFESSIONAL EXPERIENCE

With 38 years of experience, Mr. Schwinger's responsibilities include project management, design, analysis, data collection and surveys, and production of construction plans, specifications and technical reports. His experience in transportation includes: street and highway design; intersection and interchange design; trail and sidewalk design, signal design for isolated, interconnected and coordinated systems; street lighting design; signing and marking design; traffic control plans; accident analysis; traffic impact studies; capacity analysis; parking studies; public involvement; traffic circulation studies; origin-destination studies; transportation modeling; and citywide and corridor transportation studies.

EDUCATION

BS, Civil Engineering, Iowa State University, Iowa, 1976

REGISTRATIONS

Professional Engineer, Civil, CA #82908
Prof. Engineer, Civil, KS #9145
Prof. Engineer, Civil, MO #021061
ITE Certified Professional Traffic Operations Engineer (PTOE), #318
American Institute of Certified Planners (AICP), #018876

AVAILABILITY: 30%

RELEVANT EXPERIENCE

La Cañada Flintridge Foothill Boulevard Bike Lanes, La Cañada Flintridge, CA. *Project Manager.* KOA provided professional engineering services for the Foothill Boulevard Link Bikeway. The intent of the project was to maintain the eastbound and westbound on-street Class II bike lanes and to create an off-street eastbound Class I bikeway and sidewalk in a greenbelt area. Our objective was to define a viable alternative for achieving these features, and to obtain CEQA and NEPA environmental clearances for the proposed improvements. The creation of the greenbelt will be created by narrowing the traffic lanes on Foothill Boulevard and eliminating the existing eastbound on-street Class II bike lane. In addition, the curb on the north side of Foothill Boulevard will be extended to contain a parkway strip between the sidewalk and the curb. The existing center turn lane of the roadway will be modified to create a landscaped median.

90th Street East/87th Street East Bike Lane Project, County of Los Angeles, CA. *Project Manager.* KOA provided engineering services to the County of Los Angeles Department of Public Works for a roadway improvement project involving roadway widening and installation of Class II bike lanes. The project was located near Palmdale within the unincorporated areas of Sun Village and Pearblossom in the County of Los Angeles (Supervisorial District 5). KOA conducted research, field reviews, and an engineering site assessment, and subsequently prepared a Project Design Concept Report to determine and address design and construction issues, define the project schedule, estimate design and construction costs, and identify the funding sources to design and construct the project.

170th Street East Bike Lane Project, County of Los Angeles, CA. *Project Manager.* KOA provided engineering services to the County of Los Angeles Department of Public Works for a roadway improvement project involving roadway widening and installation of Class II bike lanes on 170th Street East from Avenue M-4 to Avenue M-8, and from Avenue P to East Palmdale Boulevard. The project was located within the unincorporated area of Lake Los Angeles in the County of Los Angeles (Supervisorial District 5). KOA conducted research, field reviews, and an engineering site assessment, and subsequently prepared a Project Design Concept Report to determine and address design and construction issues, define the project schedule, estimate design and construction costs, and identify the funding sources to design and construct the project.

County of Los Angeles East Avenue O Bike Lane Project, Los Angeles, CA. *Project Manager.* KOA provided engineering services to the County of Los Angeles Department of Public Works for a roadway improvement project involving roadway widening and installation of Class II bike lanes on East Avenue O from 150th Street East to 165th Street East. The project was located within the unincorporated area of Lake Los Angeles in the County of Los Angeles (Supervisorial District 5). KOA conducted research, field reviews, and an engineering site assessment, and subsequently prepared a Project Design Concept Report to determine and address design and construction issues, define the project schedule, estimate design and construction costs, and identify the funding sources to design and construct the project.

MIN ZHOU, PE, VP, SENIOR ENGINEER

KOA PRELIMINARY ENGINEERING BIKE EXPERT

PROFESSIONAL EXPERIENCE

Ms. Zhou has 24 years of transportation engineering and planning experience with both private consultant companies and public agencies. She is knowledgeable in roadway design, traffic design, transportation modeling and studies, non-motorized transportation, database management, and statistical analysis. Ms. Zhou has managed several large-scale projects involving multiple stake holder groups and has a reputation of delivering projects on-time and under budget.

EDUCATION

MS, Civil Engineering, Michigan State University, E. Lansing, Michigan, 1993
MS, Urban Planning, School of Architecture, Tsinghua University, Beijing, China, 1989
BS, Urban Planning, School of Architecture, Tongji University, Shanghai, China, 1986

REGISTRATIONS

Professional Engineer, Civil, CA #66448

AVAILABILITY: 30%

RELEVANT EXPERIENCE

OCTA Orange County Bikeway Loop Planning Support, Orange County, CA. *Project Manager.* OCTA is reaching out to the community in support of SCAG's Orange County Bikeway Loop feasibility study to close five remaining gaps along the countywide 64-mile route. The goal is to provide a safe, convenient, and pleasant riding experience along the OC Loop for all users. KOA is providing dedicated professional and support staff expertise to OCTA for the coordination and collaboration between stakeholders and is assisting with the implementation of the planning and programing for the completion of the loop. KOA's tasks on this project include project management; project support for the loop, such as with campaign branding, coordinating summits for elected officials, public outreach, and developing an action plan; and local agency assistance.

City of Wildomar Grand Avenue Bike Improvements & Multi-Purpose Trail Improvements Projects, Wildomar, CA. *Principal-in-Charge.* KOA is leading a team to improve bicycle facilities for the City of Wildomar along a five-mile span of Grand Avenue and Clinton Keith Road. Street widening and trail improvements include the incorporation of facilities for bicyclists and other non-motorized forms of transportation. The improvements will accommodate students attending a middle school on Grand Avenue and the local bicycling community. The work, which consists of three separate projects with different funding sources, is being completed concurrently as a single unit. The team's services include traffic engineering, utility research, surveying, hydrology, geotechnical engineering, and right-of-way analysis. KOA is providing conceptual plans and alignments, bicycle safety and awareness education, traffic calming design, street crossing designs for bicycle and pedestrian uses, and designs for incorporating ADA access.

Daisy Avenue Corridor Bicycle Boulevard PS&E Design SR2S Implementation Project, Long Beach, CA. *Project Manager.* KOA developed a 10-mile bike facility along Daisy corridor in the City of Long Beach, which included Class II and Class III bike lanes, along with other innovative solutions. KOA managed more than four sub-consultants for this project due to SBE requirements. A grant obtained via an SR2S application prepared by KOA was used for this project, due to an SR2S element of the corridor, which had the capacity to serve 2,000 students and five congressional districts throughout the area. Treatments such as roundabout, traffic circle, traffic signal, bicycle detector, and other greenway improvements were provided at the concept design stage of the project. Ms. Zhou managed the project and was the liaison between the consultant team, the City of Long Beach, and the project stakeholders. Relevance: Safe Routes to School grant funding/focus on safe school routes for local students | presentations.

City of Moreno Valley Aqueduct Trail System Including Missing Segments and Street Crossings - Preliminary Alignment and Environmental Document, Moreno Valley, CA. *Project Lead.* The project will upgrade and complete the entire 10-mile-long Aqueduct Trail system across the city, connecting to the Lake Perris State Recreational Area. The study examines the entire alignment, including users, trails, street crossings, and connections, and develops recommendations for typical cross sections, alignments, street crossing treatments, materials, wayfinding and landscaping, and connections, to maximize use and benefit of the trail for the public. We are making recommendations for follow-up work in the phased implementation of plans and specifications for actual construction development of the trail system. The trail alignment is fairly unique, in that it cuts through the heart of the City, providing a convenient corridor for transit and recreational uses to City residents.

ALAN YASUDA, EIT, ASSISTANT ENGINEER

KOA PRELIMINARY ENGINEERING BIKE EXPERT

EDUCATION
BS, Civil Engineering, University of California, Irvine, 2014

REGISTRATIONS
Engineer-in-Training

AVAILABILITY: 60%

PROFESSIONAL EXPERIENCE

Mr. Yasuda is an assistant engineer of KOA Corporation. He has three years of experience in transportation engineering and planning. Mr. Yasuda has assisted in design projects including transportation and civil engineering projects.

RELEVANT EXPERIENCE

SANBAG Metrolink Station Accessibility Improvement Project PS&E, ROW Engineering and Design Support Services during Construction, San Bernardino County, CA. *Assistant Engineer.* Mr. Yasuda is the Assistant Engineer and coordinator for this project which involves wayfinding signage, bike lanes, sidewalks and bike lockers. Mr. Yasuda is involved with the PS&E of the project. The project involves the cities of Montclair, Rancho Cucamonga, Upland, San Bernardino, Rialto and Fontana. Mr. Yasuda was the main point of contact between the City of Rialto and the KOA team. He assisted with the delivery of the PS&E and was involved with the Transportation Commission and Economic Development Meetings. SANBAG prepared a report that recommended first-mile and last-mile access improvements to transit stations based on a planning-level analysis. Subsequently, SANBAG conducted environmental clearance studies and submitted an ATP Cycle 1 grant application, which was approved for $4.6 million to fund the design and construction of the proposed improvements. Six Metrolink stations, located in the cities of Montclair, Upland, Rancho Cucamonga, Fontana, Rialto, and San Bernardino, have been determined to be the first set to receive the improvements. KOA was selected to put together a construction bid package for six station accessibility improvement projects and to provide assistance during construction. The work includes road diets, traffic signal modifications, enhanced crossings, trail extensions, sidewalk design, wayfinding signage, signing and striping, automated rail crossing gates for pedestrians, bicycle lockers, bicycle parking, bicycle facilities, pavement repairs, and lighting. The implemented designs will provide enhanced station access to pedestrians and bicyclists.

OCTA Bikeway Strategy and Feasibility Studies for Supervisorial District 5, Orange County, CA. *Assistant Engineer.* Mr. Yasuda was an Assistant Engineer for this project and created a conceptual bicycle design plan with existing and proposed cross sections. KOA is developing bike plans for Orange County Supervisorial District 5, which involves 11 cities, Caltrans District 12, and the County of Orange. The primary tasks include analyzing existing bicycle facilities and future bicycle demand within the district; developing district-wide bike strategic plans; conducting feasibility studies for high-priority regional corridors; facilitating outreach; and building consensus among all local agencies and the general public. KOA is assisting OCTA with promoting the "6 Es" campaign: education, equity, encouragement, evaluation, engineering, and enforcement.

OCTA Orange County Bikeway Loop Planning Support, Orange County, CA. *Project Support.* Mr. Yasuda is serving as the Administrative Supporter for OCTA's Bikeway Loop. Mr. Yasuda has assisted in the production of cross sections, renderings, location maps and fact sheets. OCTA is reaching out to the community in support of SCAG's Orange County Bikeway Loop feasibility study to close five remaining gaps along the countywide 64-mile route. The completion of the loop will significantly increase recreational ridership and more importantly, utilitarian ridership, such as by commuters, students, and shoppers. The goal is to provide a safe, convenient, and pleasant riding experience along the OC Loop for all users. KOA is providing dedicated professional and support staff expertise to OCTA for the coordination and collaboration between stakeholders and is assisting with the implementation of the planning and programing for the completion of the loop. KOA's tasks on this project include project management; project support for the loop, such as with campaign branding, coordinating summits for elected officials, public outreach, and developing an action plan; and local agency assistance. KOA conducted photography and videography as part of the outreach services.

STEPHEN BISE, PE, VP, SENIOR ENGINEER

KOA PS&E DESIGN

PROFESSIONAL EXPERIENCE

Mr. Bise has managed/worked on a number of civil and traffic engineering projects. His recent projects involve roadway improvements, drainage modifications, low impact development (LID) implementation, traffic signal design, signing and striping, and planning for future development. He also has experience in providing survey, hydraulic and hydrology studies; roadway and drainage engineering design; traffic engineering design; and final plans, specifications and estimates for various street improvement projects.

EDUCATION

BS, Civil Engineering, California State Polytechnic University, Pomona, 2007

REGISTRATIONS

Professional Engineer, Civil, CA #76775

AVAILABILITY: 50%

RELEVANT EXPERIENCE

San Fernando Bikeway, Burbank, CA. *Associate Design Engineer.* The proposed San Fernando Bikeway is a 3-mile bikeway that varies between Class I and III along San Fernando Boulevard, Victory Place, Lake Street, and the Burbank Western Flood Control Channel, generally parallel to the Metropolitan Transportation Authority's (Metro's) Union Pacific/Metrolink Valley Rail line. The project will include a separate Class I bicycle path for much of the proposed alignment. Most of the path will be constructed in Metro-owned rail right-of-way adjacent to the current Union Pacific/Metrolink railroad right-of-way. While the proposed improvements constitute a standalone project, the design and implementation must be carefully coordinated with the adjacent Interstate 5 HOV/Empire Avenue Interchange project and a planned railroad grade separation project at Buena Vista Street and San Fernando. These two (2) projects are currently being designed and the design of the San Fernando Bikeway will necessarily incorporate elements of these more substantial projects. Mr. Bise developed the typical sections and preliminary alignment to identified conflicts with existing infrastructure and utilities.

Vista Street Bicycle Boulevard Feasibility Study and PS&E Design, Long Beach, CA. *Project Engineer.* KOA developed the project concept; led public workshops; and prepared final Plans and Specifications for implementation of a bicycle boulevard along Vista Street in the city of Long Beach. The project provides an enhanced route for bicycling by eliminating stop signs and discouraging automobile through traffic. Urban compact roundabouts were provided at a couple of important cross streets, and several "Seattle-style" traffic circles were provided at the site of prior all-way stop intersections and other locations. All locations provide full landscape treatments on the circular islands and curb extensions. Resident reaction to the final concept plans was 95% favorable. Building upon the success of this project, Long Beach expects to construct 20-30 miles of bicycle boulevards in other appropriate areas of the city during the next five years. The City aspires to become the most bicycle friendly city in the nation, and KOA is advising them on project opportunities, securing demonstration project approvals, and preparing final plans for their most innovative facilities. Mr. Bise designed one of the two roundabouts for the City.

Los Angeles River Bike Trail: Whitsett to Riverside, Los Angeles County, CA. *Project Engineer.* KOA was the prime contractor to produce a Preliminary Scoping Report (PSR) which identifies the viability, opportunities and constraints associated with constructing an extension of the Los Angeles River Regional Bike Path. The PSR investigated alternative alignments and the impact each would have, which included road crossings, river-crossings, right-of way, proximity to access points, and existing or proposed improvements. A key component of the study was the elimination of at-grade crossings wherever possible. The PSR also included a construction cost matrix, which will assist decision makers in evaluating the entire project as well as individual segments.

Los Angeles River Regional Bike Path, Los Angeles, CA. *Project Engineer.* KOA assisted the LACDPW in preparing a Preliminary Scoping Report (PSR) to identify the issues and recommend alternatives needed to prepare a Project Design Concept (PDC) for the completion of the Los Angeles River Regional Bike Path Project. The PSR needed to consider right of way constraints, physical constraints, costs, schedule, alternatives, and recommendations for completion of the bike path through a project segment between the 134 Freeway and Riverside Drive in the city of Los Angeles; all part of the 51-mile transportation and recreation link between Canoga Park and Long Beach.

ANDREW OSAKI, EIT

KOA ASSISTANT ENGINEER II

Mr. Osaki has been with KOA for 4 years since graduating from Cal Poly Pomona. He has worked on a number of roadway design and traffic engineering projects as a part of the KOA team. Quickly rising to become an accomplished design engineer, Mr. Osaki is now an integral part of many KOA projects. He is very well skilled in the application of Civil Design Software and has been instrumental in preparing PS&E package for projects in various sizes.

EDUCATION

B.S., Civil Engineering, Cal Poly Pomona, 2013

REGISTRATION

Engineer in Training, Civil, California #80532

AVAILABILITY: 35%

RELEVANT EXPERIENCE

Traffic Signal and Intersection Improvement Project, Fontana, CA. *Design Engineer.* This project impacts one corner property and will require preparation of a right of way plan and legal description. ADA ramps also have to be modified to comply with standards. The project is in the final stages of completion.

Vista Chino at Farrell Drive Street Improvements for the City of Palm Springs, CA. *Design Engineer*. This street improvement project will improve the intersection at Vista Chino at Farrell Drive by adding a dedicated northbound right-turn lane. The professional engineering services for this project will include curb, gutter, sidewalk, ADA access ramps, a city bus turn-out design, traffic signal modification plan, and new signing and striping. The project will provide close coordination with the Department of Transportation and SunLine Transit Agency. Mr. Osaki is responsible for preparation of plans, specifications, and estimate.

Riverside Avenue Improvement at Linden Street for the City of Rialto, CA. *Design Engineer.* The City of Rialto desired to install a new traffic signal system and construct ADA ramps at the intersection of Riverside Avenue and Linden Avenue. The existing intersection is not currently constructed to the ultimate width, but the City plans to negotiate with the property owner to obtain additional right of way for proposed widening and to allow installation of the traffic signal equipment at their ultimate locations. Lanes will be added to provide turning lanes as needed. Mr. Osaki provided hands-on design for the project using AutoCAD and Civilsoft.

Cesar Chavez Road Improvement Project, Calexico, CA. *Design Engineer.* This is a federally-funded street widening project that requires NEPA Clearance from Caltrans District 11. This project is required to meet the new Port of Entry that is planned to be constructed in the city in 2016. The project requires roadway improvements including three intersection modifications including traffic signal design. One of the intersections needs coordination with Caltrans District 11, while the intersection at Cesar Chavez and Grant Street has a UPRR at-grade crossing so extensive coordination and approval is necessary with UPRR.

Niagara Avenue & Athol Street Sidewalks, Access Ramps, and Driveway Approach Improvements, Fontana, CA. *Design Engineer.* Funded by Community Development Block Grant (CDBG), the City of Fontana desired to improve existing sidewalk, access ramps and driveway approaches along Niagara Avenue and Athol Street. KOA was retained by the City to provide professional engineering services for the project. This roadway improvement project included completion of 2,500 feet of sidewalk improvements, ADA ramp upgrades, and driveway approach improvements. This project will impact over 50 households, and Public Outreach is important for sidewalk project. KOA assisted the City with Public Outreach in the early stage of the project. Another challenge of the project was to tie-in to existing resident driveway approach with minimum impact to its landscape, automatic gate, and wrought iron fences.

Martin Avenue, Sidewalks, Access Ramps, and Driveway Approach Improvements, Fontana, CA
Design Engineer. Funded by Community Development Block Grant (CDBG), KOA was retained by the City of Fontana to provide professional engineering services for the project. This roadway improvement project included completion of 600 feet of sidewalk improvements, ADA ramps upgrades, and driveway approach improvements. KOA prepared detail resident frontage impact exhibit to help the City get censuses from residents.

SEAN LIN, PHD, PE, GE

TWINING CHIEF GEOTECHNICAL ENGINEER

Dr. Sean Lin has over 20 years' professional experience as a Geotechnical Engineer. He specializes in seismic site response analysis as it applies to hospitals, schools, and high-rise buildings. His professional experience includes soil mechanics and foundations, soil reinforcement, geosynthetics, pile design and driving analysis, slope stability, and liquefaction analysis. Sean has experience in engineering projects for commercial, residential, water/wastewater, military, educational, and industrial facilities. Sean also has experience in geotechnical and construction projects for municipal, commercial, residential, military, educational, and industrial facilities including technical and laboratory oversight and supervision of staff and personnel.

EDUCATION

PhD, Civil Engineering emphasis Earthquake Engineering, University of Southern California, Los Angeles, 2002
MS, Civil Engineering emphasis Geotechnical Engineering, University of Southern California, Los Angeles, 1997
BS, Civil Engineering, Chung Yuan Christian University, Taoyuan City, Taiwan, 1993

REGISTRATION

Professional Engineer, Civil, CA #67109
Professional Engineer, Geotechnical, CA #2921

AVAILABILITY: 40%

RELEVANT EXPERIENCE

City of Santa Monica, Tongva Park Project, Santa Monica, CA. The project consisted of design and construction of a 6-acre municipal park on the land west of the Santa Monica City Hall building within the Civic Center campus. The proposed development included construction of 4 landscape mounds ranging from approximately 6 feet to 18 feet in height, associated retaining walls, public restrooms, overlook structures, water features, a playground area, storage sheds, a sidewalk, flatworks, and a storm water infiltration system. Sean supervised field exploration, reviewed site-specific geotechnical data, performed engineering analyses, prepared a geotechnical investigation report during the design phase, attended pre-construction meetings, and supervised field geotechnical testing during the construction phase.

City of Fontana, Street Widening including Sidewalk Design, Martin Avenue & Sierra Avenue, Fontana, CA. *Project Manager/Geotechnical Engineer.* This street improvement project included street and sidewalk improvements on Martin Avenue from Sierra Avenue to approximately 525 feet east of Sierra Avenue. The roadway and street improvements consisted of curb, gutter, sidewalk, handicapped access ramps, commercial and residential driveways, AC pavement, and utility pole relocations. Sean served as the geotechnical engineer and project manager for this project. He performed pavement condition evaluation, field exploration, geotechnical laboratory testing, and engineering analysis.

City of Colton, Mt. Vernon Avenue over UPRR Tracks Bridge Widening, Colton, CA. *Project Manager.* This project consisted of the widening of a bridge from 2 to 4 lanes. For this project, Sean served as the Project Manager. He was responsible for the geotechnical engineering services which included a preliminary foundation report, geotechnical investigation, geotechnical laboratory testing, and geotechnical engineering analyses. He communicated with the project structural and civil engineer closely, and provided geotechnical design recommendations during the design phase.

AMIR GHAVIBAZOO, PHD

TWINING SENIOR PAVEMENT ENGINEER/ASPHALT MATERIAL SPECIALIST

EDUCATION

PhD, Civil Engineering and Environmental Engineering, North Dakota State University
MS in Railways Engineering, Iran University of Science and Technology, Tehran, Iran, 2009

AVAILABILITY: 30%

Dr. Amir Ghavibazoo is the Senior Pavement Engineer at Twining. He directs and works on pavement design, highway design, engineering specifications, and consulting services. He joined Twining in 2014 after graduating with his Ph.D. in Civil and Environmental Engineering from North Dakota State University. During his graduate study, Amir obtained great knowledge and expertise on Pavement Management Systems (MicroPaver), Pavement Evaluation, and Pavement Rehabilitation Strategies. He is an expert in calculating Pavement Condition Index (PCI) through visual inspection following the United States Army Corps of Engineers' methodology, as well as conducting Life Cycle Cost Analysis (LCCA) rehabilitation strategies for pavements. Amir has extensive practical experience in asphalt pavement engineering including pavement design, rehabilitation, preservation, pavement management, materials, and construction. His experience includes the characterization of rubberized asphalt binders and developing mix designs following Superpave specifications. Additionally, he has extensive experience with advanced performance testing of asphalt binders including Dynamic Shear Rheometer (DSR), Bending Beam Rheometer (BBR), and other asphalt binder quality control tests. He works closely with cities and government agencies to develop unique and specialized mix designs, pavement constructions inspections, and pavement design solutions. Amir also serves on several technical committees in California helping to develop new specifications and update existing ones.

RELEVANT EXPERIENCE

City of Huntington Beach – Arterial Rehab, Huntington Beach, CA. *Senior Pavement Engineer.* Twining performed pavement evaluation on approximately 8 lane miles of street at multiple locations in the City of Huntington Beach to recommend repair and rehabilitation strategies for the pavement at project level. Amir served as Senior Pavement Engineer coordinating the required testing and preparing the final recommendation and design. Several alternative options provided to the city included mill and overlay, reconstruction, and soil stabilization.

City of Claremont – Foothill Boulevard Improvements, Claremont, CA. *Senior Pavement Engineer.* Twining performed pavement evaluation on approximately 4 lane miles on Foothill Boulevard in the City of Claremont to recommend repair and rehabilitation strategies for the pavement at project level. Amir served as Senior Pavement Engineer coordinating the required testing and preparing the final recommendation and design. Several alternative options provided to the City included mill and overlay, cold in-place recycling, reconstruction, and soil stabilization.

City of Coachella – Pavement Evaluation for Grapefruit Boulevard, Coachella, CA. *Pavement Engineer.* Amir performed pavement evaluation on a 1.7-mile stretch of Grapefruit Boulevard for the City of Coachella. The surface condition assessment was performed following the Caltrans Flexible Pavement Rehabilitation Manual and ASTM Standard D6433. Also, boring and coring were performed to investigate the subsurface condition of the road. Based on collected information, different rehabilitation strategies were calculated and recommended to the City of Coachella. These recommendations included Cold Central Plant Recycled Asphalt Concrete Pavement (CCPRACP) and Cement Stabilized Pulverized Base (CSPB). Also, the Pavement Condition Index (PCI) of the section was calculated, following the Standard.

NEAL MCPHERSON, PLS, VP

WESTLAND GROUP – GEOSPATIAL SERVICES

EDUCATION

BS, Business Management, University of Redlands, CA
Certificate in Surveying, Riverside Community College, Riverside, CA

REGISTRATION

Professional Land Surveyor, CA #8892

AVAILABILITY: 35%

Mr. McPherson has over seventeen years of surveying experience in all phases of surveying and pipeline design. He attended Riverside Community College where his surveying education complemented his field experience. Neal worked for several large firms in the Los Angeles and Riverside County area before joining the Westland Group. Neal attended the University of Redlands to complement his technical skills and applies principles learned to facilitate continuous improvement at WestLAND. He has strong leadership, communication, and teamwork skills and brings extensive expertise in boundary analysis, interpretation of land title, writing legal descriptions, pipeline design, construction staking, GPS control and data collection, design topographic surveys, and project management. Neal has played a large role in the creation and implementation of WestLAND's current survey and mapping procedures. Neal interfaces directly with clients and key stakeholders as well as contractors to establish a scope of work for specific projects. Management of budgets, allocation of resources, and Quality assurance are a big part of his duties.

RELEVANT EXPERIENCE

Ramona Ave Rehabilitation Projects, City of Rancho Cucamonga, CA. Mr. McPherson served as the Project Manager and surveyor of record on this project and was responsible for communication with the city and Westland personnel in overseeing the collection of all existing topographic conditions from right-of-way to right-of-way to facilitate volume calculations, utility obstructions, and monument preservation before and after the repaving of a mile section along Ramona Ave.

MetroLink Design Surveys-JL Patterson, Glendale, CA. Mr. McPherson served as the Project Surveyor and Lead Field Surveyor for this project. Neal Performed research at necessary cities and counties to establish street and railroad right-of-ways, survey monument reconnaissance and extensive field topo at street crossings, boundary analysis, and preparation of Land Base displaying ownership lines and found monuments.

Day Creek Shopping Center, Rancho Cucamonga, CA, ALTA Survey. Mr. McPherson served as the Project Manager on this project and was responsible for communication with the client and Westland personnel in overseeing Topographic and Boundary survey of the Shopping center to update access to ADA requirements. The deliverable included a detailed topographic map and boundary for the site.

KARL RETTIG, LSIT

WESTLAND GROUP – SURVEY ANALYST/PARTY CHIEF

EDUCATION

Survey and Mapping Services Certificate, Santa Rosa Junior College, Santa Rosa, CA

REGISTRATION

Land Surveyor in Training, CA #7423

AVAILABILITY: 35%

Mr. Rettig has over 15 years of experience exhibiting versatility, functioning as a field and office surveyor making him a valuable asset to the company. His field skills in collecting boundary and topographic features with the aid of GPS, laser scanning and conventional equipment, along with accurate note-taking, help our office team to produce an exceptional product on time and within budget. Karl is also capable of performing field calculations for construction staking, bathymetric surveys, and he is productive utilizing AutoCAD Civil 3D, Scene, and MicroStation software packages for the preparation of boundaries, topographic maps, pipeline construction drawings, and construction staking calculations. He has vast experience with field survey equipment and laptop computers which provides us the flexibility with our field team to resolve issues quickly in the field and meet tight schedules and construction demands. He possesses a UAV pilot license for us to utilize drones to help with inspections and construction site progress photos. Karl's years of experience both in the field and office make him a valuable asset to client projects.

RELEVANT EXPERIENCE

Ramona Ave Rehabilitation Projects, City of Rancho Cucamonga, CA. Mr. Rettig was Lead Field Survey Technician on this project and was responsible for collecting all existing topographic conditions from right-of-way to right-of-way to facilitate volume calculations, utility obstructions during, and monument preservation of the repaving of a mile section along Ramona Ave.

Street Rehabilitation Projects, City of Redlands, CA. Mr. Rettig was Office Survey Technician on this project and was responsible for preparing field crew to collect topographic conditions to facilitate volume calculations, utility obstructions during, and monument preservation of the repaving of multiple streets within the city of Redlands. He also was responsible for drafting the survey for the deliverable to the city.

Day Creek Shopping Center, Rancho Cucamonga, CA, ALTA Survey. Mr. Rettig was responsible as the Lead field Survey Technician for the Topographic and Boundary survey of the Shopping center to update access to ADA requirements. His attention to detail helped in facilitating the deliverable to the client in a demanding time frame.

ANDY JONES

WESTLAND GROUP – LEAD FIELD SURVEY TECHNICIAN

Mr. Jones has over 13 years of experience working as a field surveyor. He has extensive training and experience in all aspects of field surveying; including GPS control surveys, RTK surveys for topographic surveys, utility surveys, construction staking, and as-built surveys. He is a lead field surveyor at WestLAND Group who utilizes their cutting- edge land surveying equipment and software to maximize productivity and overall work quality. One may find him working with one of WestLAND Group's many robotic or reflector-less total stations, or Trimble R-10 GPS systems with TSC3 data collectors equipped with Trimble Access, and a field laptop with Auto CAD Civil 3D. Andy has led a survey crew on a wide variety of types of surveying including boundary surveys, topographic surveys, construction staking, and as-built surveys for all types of civil projects such as railroads, residential and industrial construction, utility construction, and road construction throughout all of California.

EDUCATION

Survey and Mapping Services Certificate, Santa Rosa Junior College, Santa Rosa, CA

REGISTRATION

Land Surveyor in Training, CA #7423

AVAILABILITY: 45%

RELEVANT EXPERIENCE

Spruce Ave Rehabilitation Projects, City of Rancho Cucamonga, CA. Mr. Jones was Lead Field Survey Technician on this project and was responsible for collecting all existing topographic conditions from right-of-way to right-of-way to facilitate quantity calculations and utility obstructions during the repaving of approximately 1 mile along Spruce Ave. The city also planned to improve specific areas for ADA compliance based on the survey information collected. Mr. Jones also identified existing monuments, tied them out and replaced them post construction.

Baseline Rd Rehabilitation Project, City of Rancho Cucamonga, CA. Mr. Jones served as Lead Field Survey Technician for this project. He was responsible for performing boundary/right-of-way field work for establishment, and preparation of boundary/right-of-way mapping to facilitate planning for the repaving of approximately 1.5 miles along Baseline Road.

So Cal Gas PSEP Line 36-1032 12-mile Pipeline Replacement, Santa Barbara County, CA. Mr. Jones served as Lead Field Survey Technician for this pipeline replacement project in Santa Barbara County, along Harris Grade and Graciosa county roads (Orcutt and Lompoc vicinity). He was responsible for performing a survey control network, including ground control for photogrammetric mapping; and collecting data in preparation of boundary/right-of-way and subsurface utility mapping.

JESUS "FREDDIE" OLMOS

ECORP – SENIOR ENVIRONMENTAL SCIENTIST/CEQA TASK MANAGER

Mr. Olmos' professional experience involves California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) analysis and document preparation for government agencies and private clients. He has prepared and managed a variety of environmental documents, including Initial Studies/Negative Declarations (ISs/NDs), Mitigated Negative Declarations (MNDs), Environmental Impact Reports (EIRs), Environmental Impact Statements (EISs), Supplemental EISs/EIRs, Environmental Assessments (EAs), and Findings of No Significant Impact (FONSIs). While his experience focuses on environmental report writing and permit preparation, he also has experience with biological resources monitoring and surveying for public facilities construction and research projects. **Proficient in oral and written Spanish.** Mr. Olmos is experienced in the bilingual English-Spanish translation of notices, documents, and handouts for CEQA and biological/cultural resources projects.

EDUCATION

BA, Environmental Analysis & Design, with a minor in Urban & Regional Planning, University of California, Irvine

REGISTRATION

Caltrans Environmental Compliance Training Course for Local Agency Partners and Consultants – Categorical Exemptions and Categorical Exclusions, Caltrans, 2013

AVAILABILITY: 35%

RELEVANT EXPERIENCE

CEQA and Air Quality Peer Review Services for a 500,000-Square-Foot Warehouse located within the Renaissance Specific Plan, Rialto, CA. *Project Manager and Lead Reviewer* for peer review services provided for a CEQA IS prepared for a 500,000-square foot (SF) warehouse (Golden Bear Regional Food Distribution Center) located within the Renaissance Specific Plan in the City of Rialto. The IS was reviewed to determine if it was complete, legally adequate, unbiased, and an objective statement of the proposed project's environmental consequences. ECORP assisted the City in determining if the project impacts were addressed under the Renaissance Specific Plan Program EIR or if a new supplemental or focused EIR was required. In addition, the proposed project's consistency with the adopted Renaissance Specific Plan was evaluated and the Air Quality Technical Report was reviewed.

CEQA, Air Quality, and Traffic Peer Review Services for the Proposed FedEx Ground Facility Expansion located within the Rialto Commerce Center (PPD No. 2235), Rialto, CA. *Project Manager and Lead Reviewer* for peer review services provided for an IS/MND prepared for the proposed expansion of a FedEx Ground Facility. The proposed facility would be located within the Rialto Commerce Center for which an EIR was prepared. The proposed project consisted of a 307,062 SF main building, a 5,180 SF maintenance building, and a 1,889 SF security building.

EIR and CEQA Plus Checklist for the Wastewater Treatment Plant Master Plan/Expansion, Rialto, CA. *Project Manager* for the CEQA EIR for the proposed Waste Water Treatment Plant expansion. Expansion and modernization of the facility will accommodate the projected population growth and future developed projects. The expansion would double the amount of waste water it could treat per day from 8 MGD to 16 MGD. After certification of the Rialto Wastewater Treatment Plant Master Plan/Expansion EIR, the City of Rialto/Chevron applied for Clean Water State Revolving Funds from the State Water Resources Control Board. Since State Revolving Funds are from the federal government, additional CEQA Plus documentation was required to comply with federal environmental regulations. The Rialto Wastewater Treatment Plant Master Plan/Expansion EIR and technical studies were used to complete the majority of the CEQA Plus Checklist. Additional services included a National Historic Preservation Act Section 106 evaluation, Native American Consultation, and Clean Air Act conformity determination. The checklist was completed on an accelerated schedule in order to meet funding deadlines.

PES, Joint CE/CE, and Cultural Resources Documentation for the Wildomar Bike and Multi-Purpose Trail Improvement Project, Wildomar, CA. *Project Manager* for a Caltrans PES and Joint CE/CE for the Proposed Project. Phase 1 would provide an on-street Class II bike lane along Clinton Keith Road from George Avenue to Grand Avenue (1.3 miles) and continue on Grand Avenue to Pasadena Street (1.4 miles). Phase 2 would provide a Class II or Class III bike lane along Grand Avenue from the City limit (Richard Lane) to Pasadena Street (2.3 miles). A Categorical Exemption was also prepared for the Multi-Purpose Trail proposed along a portion of Grand Avenue. Additional cultural resources documentation (APE, ASR, HPSR, Native America Consultation) was also prepared at the request of Caltrans.

WENDY BLUMEL, RPA

ECORP – CULTURAL STUDIES TASK MANAGER

EDUCATION

MA, Anthropology, Louisiana State University, Baton Rouge, Louisiana
BA, Anthropology, Beloit College, Beloit, Wisconsin

REGISTRATION

Registered Professional Archaeologist
Riverside County Qualified Archaeologist

AVAILABILITY: 55%

Ms. Blumel has nine years of experience in cultural resource management with an area of specialization in human osteology. She has supervised and participated in all aspects of the archaeological field and laboratory process. Although she has worked throughout western Arizona and California, the majority of her experience is in Riverside, San Bernardino, Kern, and Los Angeles counties of southern California. Her experience has involved working as a project manager, field director, staff archaeologist, crew chief, osteologist, assistant faunal analyst, and archaeological technician. She is experienced in the organization and execution of field projects in compliance with Section 106 of the National Historic Preservation Act and the California Environmental Quality Act. She serves as a Project Manager, Cultural Task Manager, and Field Director for ECORP's southern California projects. She also serves as Laboratory Manager for ECORP's Inland Empire Office and is experienced in a variety of laboratory tasks including artifact analysis, cataloging, preparation and curation of cultural artifacts, database management, and the analysis of human remains.

RELEVANT EXPERIENCE

Pepper Avenue Extension Project, Rialto, CA. *Field Director* responsible for an 8-acre pedestrian survey of land in Rialto, San Bernardino County for the proposed extension of Pepper Ave to the I-210 freeway. Duties included implementing a cultural resources record search, identifying cultural resources, use of a GPS, organizing field logistics, archival research, detailed site recording, preparing DPR records, preliminary evaluations for the CRHR, and writing the technical survey/evaluation report.

First Line of Defense (FLOD) Survey Project, San Bernardino County, CA. *Assistant Cultural Task Manager* for an approximately 1,000-acre survey of 36 existing flood control facilities located at the base of the San Gabriel and San Bernardino Mountains in Rancho Cucamonga, Fontana, Rialto, San Bernardino, Highland, and Yucaipa. The County plans on conducting on-going maintenance of these flood control facilities. Maintenance activities would include vegetation clearance, bank repair, mechanized clearance, herbicide application, and ingress/egress. Duties included managing two field personnel, preparing DPR records, NRHP and CRHR evaluations, and writing two technical reports for the project.

National Trails Highway Emergency Repairs Project, San Bernardino County, CA. *Assistant Project Manager* for construction monitoring and recording of features around circa 100 historic-period bridges on National Trails Highway (former U.S. Route 66) between Ludlow and Mountain Springs Road in the Mojave Desert. Flash floods required removal of sediments from the vicinity of the bridges and road shoulder repairs. These activities were monitored to ensure that no cultural resources were impacted by the work. Historic features around the bridges, such as dikes, C-markers, and paddle boards, were photographed and recorded. Duties included staffing, field logistics, field support, and refining methods in consultation with the client.

Jacinto-Sapphire Project, San Bernardino County, CA. *Project Manager* for the Urban Environs Jacinto-Sapphire project. This project consisted of a records search, Native American Heritage Commission Sacred Lands File search, field survey of 17-acres, recordation and evaluation of historic-age orange groves and associated features, and preparation of a technical report describing the methods and results of the study. The orange groves were evaluated for eligibility to the CRHR. Potential impacts from future development were assessed and management recommendations provided in the technical report. The project was completed in compliance with CEQA.

Prospect Park Reservoir Project, Redlands, CA. *Project Manager*. The City of Redlands demolished a historic-age reservoir and replaced it with orange groves. The cultural resources study consisted of a records search, archival research, field visit, CRHR evaluation of the reservoir, and preparation of a technical report describing the methods, results of the study, and management recommendations. The project was completed in compliance with CEQA.

SCOTT TAYLOR

ECORP – BIOLOGICAL STUDIES TASK MANAGER

EDUCATION

BA, Biology, Point Loma Nazarene University, San Diego, California

REGISTRATION

Certified CRAM Practitioner: Riverine Module
Wetland Training Institute Certification

AVAILABILITY: 35%

Mr. Taylor has over 28 years of professional experience in the field of biological sciences in California, with a specialty in jurisdictional delineation, regulatory permitting, endangered species biology and conservation biology in southern California. His experience includes conducting focused survey work, preparation of Habitat Conservation Plans (HCPs), implementation of Natural Communities Conservation Plans (NCCPs) such as the San Diego Multiple Species Conservation Plan (MSCP) and Western Riverside County Multiple Species Conservation Plan (MSHCP), Section 7 Consultations, conducting general biological assessments, conducting jurisdictional delineations, Geographic Information Systems (GIS) mapping, implementing restoration plans, implementing Biological Opinions (BOs) and other agency permits, and monitoring construction projects. He has prepared various technical documents including biological technical reports for the California Environmental Quality Act (CEQA), restoration plans, jurisdictional delineation reports, permitting packages for the US Army Corps of Engineers (ACOE), California Department of Fish and Wildlife (CDFW) and Regional Water Quality Control Board (RWQCB), mitigation and monitoring plans, Environmental Assessments (EAs), and Biological Assessments (BAs).

RELEVANT EXPERIENCE

Pepper Avenue Extension Project, Rialto, CA. *Project Manager* overseeing biological pre-construction surveys and biological monitoring for the extension of Pepper Avenue between Baseline Road and State Route 210. When completed, the project will provide much-needed north-south access to emergency services through the City. With the assistance of ECORP, the City sought an Incidental Take Permit for SBKR and SARWS for direct take (by injury or death) and take of habitat that may occur in the course of extending Pepper Avenue. In addition to this permit, permits were also sought with the U.S. Army Corps of Engineers (Section 404 permit), the U.S. Fish and Wildlife Service (Biological Opinion), and the California Department of Fish and Wildlife (Streambed Authorization Agreement). ECORP is currently providing environmental services for the project, including: Biological monitoring, pre-construction survey, San Bernardino kangaroo rat trapping and relocation, Santa Ana River Woolly Star transplantation and seed collection, worker environmental awareness training, agency coordination, and restoration management.

Foothill Boulevard Improvement Project, Fontana, CA. *Biological Lead and Task Manager* for a road improvement project on a segment of Foothill Boulevard and Historic Route 66. The biological resources services performed for this project consisted of all work necessary to complete the Natural Environment Study required by Caltrans for Local Assistance projects. These studies included a vegetation map, habitat assessment for several rare and endangered plants and animals, jurisdictional delineation, and assessment of potential project impacts and recommendations for project mitigation measures for biology. In addition, a cultural resources study, an Initial Site Assessment for hazardous materials, and a Relocation Impacts Memo were prepared.

Zanja Trail and Parkway Project, Redlands, CA. *Lead Biologist and Regulatory Permitting Specialist* for a proposed 0.6-mile trail between Lincoln Street and Wabash Avenue in the City of Redlands. ECORP also assisted with CEQA documentation, AB 52 consultation with the San Manuel Band of Mission Indians, and cultural resource studies. The project involved trail improvements and addition of two pocket parks. The Zanja is the oldest civil engineering project remaining in southern California and was fundamental to the founding and settlement of Redlands.

Moore Middle School Property, San Bernardino County, CA. *Biological Project Manager* for a project to develop a vacant property located in the City of Redlands adjacent to Moore Middle School. A site visit was performed and the potential for special-status species to occur on or adjacent to the site was evaluated for the purposes of preparing a biological resource assessment.

SETH MYERS

ECORP – SENIOR AIR QUALITY & NOISE ANALYST

With 11 years of experience as an environmental planner and air quality/noise analyst, Mr. Myers is involved in the preparation of a full range of CEQA and NEPA environmental compliance and review documents including environmental impact reports. He has extensive expertise conducting air quality, greenhouse gas emissions, and noise analyses and has a comprehensive working knowledge of the associated regulatory environment. He is proficient in the use of CalEEMod, EMFAC2014, AERMOD, the Roadway Construction Model, the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model, and other industry standard emissions and noise modeling tools.

EDUCATION

BA, Environmental Studies and Planning (Minor in Biology) | Sonoma State University

REGISTRATION

Certified Arborist, International Society of Arboriculture (WE 7501A)

AVAILABILITY: 55%

RELEVANT EXPERIENCE

Greenhouse Gas Reduction Plan EIR, San Bernardino County, CA. *Environmental Writer*. The project consisted of the proposed adoption of a General Plan amendment, a Greenhouse Gas Emissions Reduction Plan (GHG Plan), and the associated Development Code amendment, including greenhouse gas emissions reduction policy provisions and specific procedures for implementing development-related provisions of the GHG Plan in the Development Code. The framework of the GHG Plan consisted of an inventory of greenhouse gas emissions that identified and quantified existing emissions and projected future emissions; a reduction target to reduce existing greenhouse gas emissions by 15% by 2020; and the goals, objectives, and strategies devised to reduce existing emissions to meet the reduction target. The County's GHG Plan and its reduction target were based on Assembly Bill 32 and the California Air Resources Board's recommendations to ensure California emissions are reduced to 1990 levels by the year 2020.

Western Realco Industrial Warehouse Project EIR & Health Risk Assessment, San Bernardino County, CA. *Air Quality/Greenhouse Gas Analyst*. Analyzed the potential health risks associated with a 676,983-sf distribution facility with the potential to generate 727 daily heavy-duty diesel truck trips daily and surrounded by sensitive receptors. The projected dispersion of diesel particulate matter was modeled uses the AERMOD dispersion software and the associated health risks computations were performed to determine the risk of developing an excess cancer risk calculated on a 70-year lifetime basis, 30-year, and 9-year exposure scenarios, and based on the standardized equations contained in the U.S. EPA Human Health Evaluation Manual and the OEHHA 2015 Guidance Manual.

White Knob/White Ridge Limestone Quarries Expansion EIR. San Bernardino County, CA. *Air Quality Greenhouse Gas Emission Analyst* for the EIR analyzing an amended mine and reclamation plan for expansion of the existing White Knob/White Ridge Limestone Quarries, a limestone mining operation located in the San Bernardino Mountains in southwestern San Bernardino County. The amended plan would increase the operational years of the quarry by 24 years from the existing permit expiration date of 2031 to the year 2055.

San Bernardino County Partnership for Renewable Energy & Conservation (SPARC) Program, San Bernardino County, CA. *Air Quality/Greenhouse Gas Emissions Analyst*. This project included the creation of the Renewable Energy and Conservation General Plan Element with the intent to facilitate the efficient use of energy and to manage and guide the development of renewable energy in the unincorporated county.

960 East Green Street Noise Impact Report, Pasadena, CA. *Noise Analyst*. Prepared a noise report analyzing the conversion of an existing three-story office building into a mixed-use residential building by converting the second and third floors into 20 residential dwelling units, while the first floor would remain medical office uses. The proposed 92,328-square-foot project site contains five parcels located on the southwest corner of Green Street and Catalina Avenue.

BAXTER MILLER, RLA, ASLA, PRINCIPAL

BMLA – PROJECT MANAGEMENT

Baxter Miller is responsible for the overall operation and design direction of BMLA Landscape Architecture, which he established in 1987. He has led a wide variety of projects from parks and streetscapes to national memorials and downtown redevelopment. Baxter has more than 35 years of practical knowledge in design which helps him to work with developers, cities, and agencies to create a unique vision that translates into real world projects. He works extensively with the American Society of Landscape Architects as an Executive Board Member to promote the technical advancement and public prominence of the profession. Baxter is moving the office to integrate new forms of technology like Geographic Information System (GIS) and SketchUp to help inform every aspect of the design process.

EDUCATION

BS, Landscape Architecture, Cal Poly San Luis Obispo, 1978

REGISTRATION

Registered Landscape Architect, CA #2136

AVAILABILITY: 60%

STEVE SHIRREL, RLA, ASLA, VICE PRESIDENT OF OPERATIONS

BMLA – QA/QC

Steve Shirrel is responsible for overseeing the day-to-day operations of the office, including developing marketing strategies, project contracting, establishing and maintaining budgets, scheduling, and internal work flow. He oversees the design and production teams to make sure they deliver the highest level of service to their clients. Steve has over 25 years of experience working within the Northern California and Southern California markets and has designed a wide variety of projects including parks, streetscapes, urban infill, commercial developments and multi-family and single-family housing projects. He is a member of the American Society of Landscape Architects and the Building Industry Association of Southern California.

EDUCATION

BS, Landscape Architecture, Cal Poly San Luis Obispo, 1995

REGISTRATION

Registered Landscape Architect, CA #5062

AVAILABILITY: 55%

JEFF TROJANOWSKI, RLA, ASLA, SENIOR PROJECT MANAGER

BMLA – SENIOR PROJECT MANAGER/LANDSCAPE ARCHITECT

Jeff Trojanowski comes to BMLA with 15 years of experience in the profession. He brings with him significant knowledge and insight as a Certified Arborist and Registered Landscape Architect. With his vast experience and knowledge, Jeff is invaluable when involved in a project. He is an asset as a part of the design team, as well as aiding the production side in all our current and future projects.

EDUCATION

BS, Landscape Architecture, Cal Poly Pomona, 2002

REGISTRATION

Registered Landscape Architect, CA #5785
Certified Arborist, WE-9665A

AVAILABILITY: 35%

CEAZAR AGUILAR, PE

AGUILAR CONSULTING – DRAINAGE TASK LEADER

EDUCATION
BS, Civil Engineering, Cal Poly Pomona, CA, 1984

REGISTRATION
Professional Engineer, Civil, CA #41679

AVAILABILITY: 55%

Mr. Aguilar has extensive experience in the field of hydrology, hydraulics, drainage design, and storm water quality. His experience encompasses drainage projects of various types, sizes and scope.

- Mr. Aguilar has over 26 years of project management experience and 32 years of drainage engineering experience.
- Mr. Aguilar has served as Project Manager and Principal-in-Charge on more than 60 drainage projects in the last 22 years.
- He successfully served as project manager for the listed projects below.
- He has provided training in hydrology, hydraulics, floodplain studies, and drainage design to members of the Filipino American Society of Architects and Engineers. He has also presented lectures on project management and consulting business practices.

He began his professional career working at the Riverside County Flood Control District where his responsibilities included development of comprehensive master drainage plans, performing special hydrologic and hydraulic studies, reviewing land development proposals, and recommending flood protection measures for such projects. His experience at the Flood Control District provided him with invaluable knowledge and understanding of the intricate plan approval process of a public agency. Since that time, Mr. Aguilar has been employed by several of the Inland Empire's largest civil engineering consulting firms as director of hydrology and hydraulics department where he was responsible for the design supervision and management of drainage studies and flood control improvement plans. He interfaces with the City, County and local agencies, providing all necessary information and design criteria and ensures that all plans are processed smoothly and efficiently. Mr. Aguilar has developed an excellent reputation with various Flood Control Districts and public agencies for providing thorough and efficient designs of flood control facilities and for emphasizing cooperative working relationships with public agency staff members.

As Principal Engineer of ACI, Mr. Aguilar is responsible for overseeing and managing the drainage and transportation departments. He is also involved in the financial management and professional development of the firm. His philosophy of professional practice, which employs personalized service to each client, forms one of the foundations upon which ACI is built. Mr. Aguilar's unique approach and personal attention to clients' needs have helped him establish a reputation for the highest of professional standards.

RELEVANT EXPERIENCE

Santa Ana River Trail (SART) Project, San Bernardino County, CA. Mr. Aguilar served as drainage manager on this 3.8-mile bike/pedestrian trail running along the Santa Ana River. For the most part, the proposed 10-foot AC paved trail runs along the top of the existing channel. For segments under existing bridges, a14-foot PCC section was provided. The project was funded by San Bernardino County Parks Department.

Cathedral Canyon Low-Water Crossing Replacement Project (New Bridge) over Whitewater River, Cathedral City, CA. Mr. Aguilar served as drainage manager on this new bridge and channel improvements project. A new 14-foot PCC bike trail was designed to go under the proposed bridge and match the existing bike trail approximately 400 feet downstream and upstream of the new bridge location. Caltrans' standards were used to design the bike trail.

La Cadena Drive New Bridge over Santa Ana River Project, City of Colton, CA. Mr. Aguilar is currently serving as drainage manager on this new bridge and channel improvements project. The project involves the re-design of the existing 14-foot bike trail running along the south side of the Santa Ana River. Design of the existing bike trail was coordinated with the San Bernardino County Parks Department and San Bernardino County Flood Control District.

SECTION D – FIRM QUALIFICATIONS

D.1: FIRM INTRODUCTION

Founded in 1987, KOA Corporation (KOA) is a leading provider in civil and traffic engineering, transportation planning, and construction management services for public agencies and private-sector clients. Driven by our mission, "Changing the Future of Travel", we offer our clients technical knowledge, creative solutions, and responsive services. The hallmark of our success is our dedication to each and every project being designed to leave a legacy of extraordinary contributions to our communities. As a 100% employee-owned firm, our staff includes certified transportation planners and registered civil and traffic engineers. With four Southern California offices, KOA has provided engineering services for the largest public works and transportation planning projects throughout California.

KOA is a California Corporation, a regional firm based and working primarily in California. The office assigned to this project will be our Ontario office located at 3190 C Shelby Street, Ontario, CA 91764, (909) 890-9693.

The KOA team is well-qualified, fully prepared, and eager to provide the City of Rialto with the required services to provide engineering design and project management services.

KOA Corporation has a strong financial history and a positive financial outlook. The firm is in excellent financial condition and has no bankruptcies, pending litigations, planned office closures, or pending mergers. We have no prior or ongoing civil or criminal litigations or investigations pending in which KOA has been judged guilty or liable in the past five years.

TYPES OF SERVICES

Traffic Engineering
Transportation Planning
Highway & Transportation Design
Program Management
Construction Management

YEAR FOUNDED

1987

SIZE/LOCATION OF OFFICES

Monterey Park (46 employees)
Ontario (8)
Orange (18)
San Diego (11)

PROJECT OFFICE LOCATION

3190 C Shelby Street
Ontario, CA 91764
Tel: (909) 890-9693
Fax: (909) 890-9694

KEY INDIVIDUALS

Ms. Ming Guan, PE, TE
Project Manager
mguan@koacorp.com

Chuck Stephan, PE
Principal-in-Charge
cstephan@koacorp.com

D.2 FIRM'S PRINCIPAL OFFICERS

The following are officers of the firm that have authority to bind the firm in agreement:

Joel Falter
Alan Braatvedt
Walter Okitsu
Min Zhou
Chuck Stephan

D.3 KOA RELEVANT EXPERIENCE

KOA has helped design and plan hundreds of miles of ADA compliant trails, pedestrian facilities, safe routes to schools, and streets and bikeways locally in southern California. The impetus for many of these projects is to improve public health and to increase safety and accessibility. Outreach, community presentations, education, and contact with stakeholders have been key aspects to nearly all of these projects.

In recent years, KOA has developed a reputation for planning, designing, and implementing innovative pedestrian, bicycle, and transit facilities to promote Active Transportation. The table below lists examples of Active Transportation Projects which KOA and its key staff members have conducted.

PROJECT TYPE	AGENCY	PROJECT NAME	5/6 Es CAMPAIGN	PLANNING ANALYSIS	ENGINEERING DESIGN	SAFETY IMPROVEMENTS	FEDERAL COORDINATION	GRANT WRITING	OUTREACH (BILINGUAL)	STAKEHOLDER / EVENT FACILITATION & WORKSHOPS
ADA Transition	Anaheim	Family Justice Building & Facility	X	X						
ADA Transition	UC Riverside	UC Riverside Campus	X	X						
ATP	Barstow	Active Transportation Program	X	X		X		X	X	X
ATP	Colton	Active Transportation Plan	X	X		X		X	X	X
ATP	Multiple Agencies	ATP Cycle 2 Grant Applications	X	X				X		
Bike	Costa Mesa	W. 19th St. Bike Facility Design Services	X		X	X		X		X
Bike	Long Beach	2nd Street Green Paint Sharrows					X	X		X
Bike	Long Beach	3rd and Broadway Cycle Track		X	X					X
Bike	Long Beach	Vista Street Bike Blvd. Feasibility Study & PS&E Design	X			X		X		X
Bike	OCTA	66-Mile OC Loop Planning Support	X			X				X
Bike	OCTA	OC S. County Bike Strategic Plan & Feasibility Study		X						X
Bike	Pasadena	Bikeway Analysis & Feasibility Study	X	X		X				X
Bike	Pasadena	Bikeway Transportation Action Plan	X					X		X
Bike	San Diego	Uptown Regional Bike & Ped Corridor Design		X						X
Bike	SANDAG	SANDAG Uptown Regional Bike Corridor Project			X					X
Bike	South Pasadena	El Centro Cycle Track	X	X	X	X				
Bike	South Pasadena	Mission Street Bike Improvement	X	X	X	X	X			X
Bike	Temple City	Rosemead Blvd Cycle Track			X					
Bike & Ped	Big Bear	Big Bear Valley Bike, Ped, & Equestrian Master Plan		X						X
Bike & Ped	Irvine	Oak Creek Village JOST Engineering & Design			X					
Bike & Ped	Long Beach	Ocean Blvd Class I Bike/Ped Path						X		X
Bike & Ped	Los Angeles	Los Angeles River Regional Bike Path								
Bike & Ped	Moreno Valley	Juan Bautista De Anza (Aqueduct) Trail Master Plan		X			X			X
Bike & Ped	Port of Long Beach	South Waterfront/Pier J Bike and Pedestrian Path		X	X			X		X
Bike & Ped	San Clemente	N. El Camino Real Class I Bike & Ped Path Design	X			X				
Bike & Ped	Wildomar	Bike Lanes and Multi-Purpose Trail Design	X		X	X	X	X		X
Complete Streets	Pasadena	Avenue 64 Complete Street			X					X
Complete Streets	Santa Ana	Central Area Complete Streets Plan	X		X	X			X	X
Complete Streets	Santa Ana	Downtown Complete Streets Plan	X	X		X				X
Multimodal	Long Beach	2030 Mobility Element of the General Plan Update		X				X		X
Pedestrian	Coachella	Safe Routes to School Cycle 2 Project	X	X		X				
Pedestrian	Costa Mesa	Citywide School Zone Traffic Calming & SR2S		X	X			X	X	X
Pedestrian	Desert Hot Springs	Safe Routes to School Cycle 8 Project	X	X		X		X		
Pedestrian	Santa Ana	Ped. Awareness/Safety Campaign & Task Force		X						X
Pedestrian	South Pasadena	HSIP Flashing Crosswalk Design	X		X	X	X			
SR2S	Anaheim	Weir Canyon Rd./Running Springs Dr. SR2S Design			X			X		
SR2S	Apple Valley	SR2S Master Plan	X	X		X			X	X
SR2S	County of LA	LA County Wide SR2S Maps	X			X				
SR2S	Long Beach	10-Miles North & South Bike Blvd Design	X	X	X		X	X	X	X
SR2S	Long Beach	SR2S Grant Applications						X		
SR2S	Malibu	Point Dume Elementary School SR2S Walkways			X			X		X
SR2S	Moreno Valley	SR2S Program - Suggest Route Maps 28 Schools				X			X	
SR2S	Rancho Cucamonga	SR2S Traffic Congestion Strategic Plan	X							
SR2S	Rialto	Sidewalk Imp. & In-Roadway Warning Light Installation	X		X	X				
SR2S	Rialto	SR2S Program-Walk Audits, Enforcement, Engineering	X		X	X			X	X
SR2S	San Jacinto	SR2S Program - Suggest Route Maps 12 Schools				X			X	
SR2S	SANBAG	SR2S Phase II Plan	X	X		X		X	X	X
SR2S	Santa Clarita	SRTS Non-Infrastructure Program								
SR2S	South Gate	Safe Routes to School Design Project	X		X					
SR2S	Thousand Oaks	Los Feliz SR2S Design	X		X					
SR2S	Thousand Oaks	Safe Routes to School Traffic Calming		X						
SR2S	Vista	SR2S Master Plan	X			X			X	

Safe Route to School Multiple Sidewalk Improvement, Rialto, CA (2008-2009)

The City of Rialto received Safe Route to School funds to complete missing links for sidewalks in three separate school locations. KOA was selected by the City to provide engineering services for these sidewalk and pedestrian signal improvement projects. The projects have all been constructed except for the pedestrian traffic signal at Carter High School; the City plans to construct this project in tandem with other traffic signal projects. Each of the project scopes is supplemented with actual before and after photos below:

Task 1 – Zupanic High School/Adult Education Center, 266 West Randal Avenue, Rialto, CA. Constructed a 300-foot by 6-foot-wide sidewalk, curb/gutter, and provided drainage improvements on the north side of Randall Avenue. Also reconstructed 250 feet of chain link fence in order to construct the new sidewalk, and install two wheelchair ramps to comply with ADA requirements. This project required particular consideration of drainage as the runoff from the school was flowing into the street catch basin. Specific catch basin modification plans were prepared to maintain the current storm water runoff (Safe Routes to School Grant).

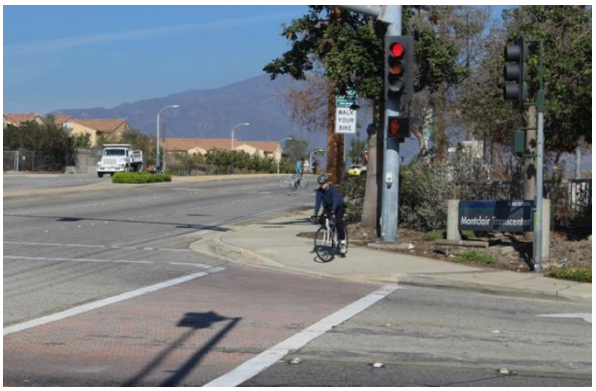
Task 2 – Carter High School, 2630 North Linden Avenue, Rialto, CA. Installed sidewalk curb and gutter, accessible ramps, and striping on the east side of Linden Avenue. This project was challenging in that local residents had extended their yards onto city property. KOA researched right-of-way data and a determination was made for negotiations with the property owners which lead to construction completion of the project.

Task 3 – Carter High School, 2630 North Linden Avenue, Rialto, CA. Installed sidewalk curb and gutter and accessible curb ramp on the east side of Maple Avenue from the south side of Persimmon Avenue to Carter High School. Determined ROW requirements and completed documents for right-of-way acquisition.

Task 4 – Carter High School, 2630 North Linden Avenue, Rialto, CA. The City's initial intent was to construct mid-block, in-pavement warning lighted crosswalk on Linden Avenue, with advanced warning signs, and reconfigure existing 1,400 feet of Linden Avenue to a four-lane street with center striped median. Advanced warning sign shall flash yellow beacon for north- and southbound Linden Avenue. However, after careful consideration, the City decided to construct a pedestrian traffic signal instead of the in-roadway flashing lights at the location (Safe Routes to School Grant).

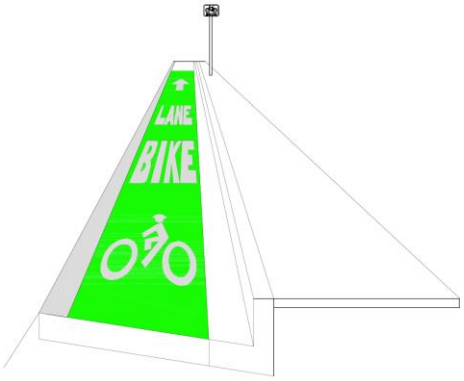
Reference: *City of Rialto, Mr. Hector Gonzalez, P.E., Associate Civil Engineer, 335 W. Rialto Ave., Rialto, CA 92376, (909) 421-4986, hgonzalez@rialtoca.gov.*

SBCTA Metrolink Station Accessibility Improvement Project Ps&E, ROW Engineering & Design Support Services During Construction (08/2016-07/2017)



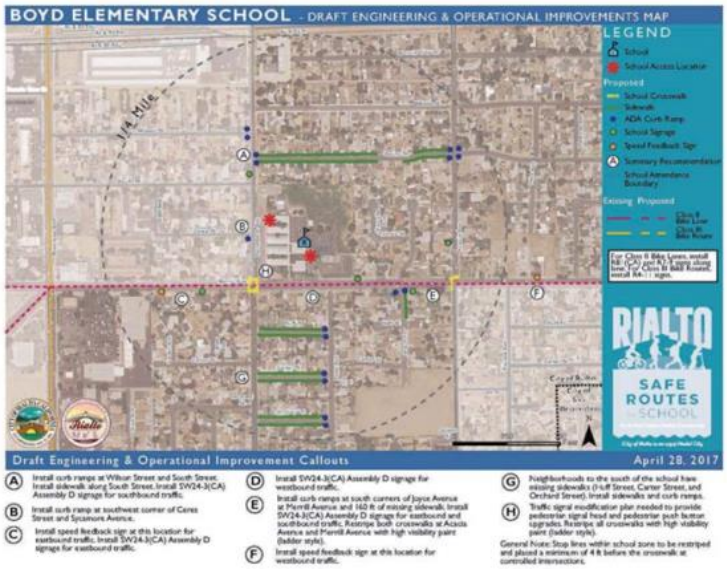
SBCTA prepared a report that recommended first and last-mile access improvements to transit stations based on a planning-level analysis. Subsequently, SBCTA conducted environmental clearance studies and submitted an ATP Cycle I grant application, which was approved for $4.6 million to fund the design and construction of the proposed improvements. Six Metrolink stations, located in the cities of Montclair, Upland, Rancho Cucamonga, Rialto, and San Bernardino, have been determined to be the first set to receive the improvements. KOA was selected to put together a construction bid package for accessibility improvement projects for six stations and to provide assistance during construction. The improvements includes road diets, traffic signal modifications, enhanced crossings, trail extensions, sidewalk design, wayfinding signage, striping, automated rail crossing gates for pedestrians, bicycle lockers, bicycle parking, bicycle facilities, pavement repairs, and lighting. The implemented designs will provide enhanced station access to pedestrians and bicyclists. ***Reference:*** *City of* ***Rialto, Mr. Brian Smith, SBCTA Project Manager, (909) 884-8276 x195, bsmith@gosbcta.com***

Coachella Green Bike Lane Project, Coachella, CA. (2016-2017)



KOA provided engineering design services for the City of Coachella for Green Bike Lane Class II Improvement Project. The project encompassed almost 4 miles of new bike lanes for Calhoun Street, Van Buren Street, Avenue 50, and Harrison Street. KOA evaluated the project area, developed alternatives for Green Bike Pavement Marking, Prepared construction plans, specifications, cost estimate, and assisted the City in preparing this project for construction bidding. ***Reference:*** *Mr. Oscar, Espinoza, Senior Civil Engineer, City of Coachella, 1515 Sixth Street, Coachella, CA 92236, (760) 398-5744 x168.*

City Of Rialto Safe Routes to School, Rialto, CA (2016-Present). The City of Rialto, in partnership with the Rialto Unified School District, is implementing a Safe Routes to School Program. This program is an opportunity to evaluate school access and related safety considerations. As a part of this project, KOA conducted GPS enabled field work inventory that included school crossing locations, school warning signs, on-street parking restrictions, bicycle and pedestrian detection at nearby signals and beacons, traffic signal and flashing beacon locations, school pavement markings, missing sidewalk, and ADA ramps. This work led to the facilitation of meetings at each school (29) to discuss concerns regarding existing infrastructure conditions, school safety, and school circulation patterns. Through this task, we identified a number of engineering and operation improvements for enhancing the pedestrian and bicyclist environments and infrastructure surrounding the 29 schools and developed a recommended improvement plan with associated cost estimates. KOA developed a policy document in order to set forth uniform application and processing procedures to request traffic safety improvements or traffic control devices within school boundaries. The overall goal for the project was to help engage the school community on the necessary improvements and implement fun activities such as Walk & Bike to School Days, Walking School Buses, and Bicycle Rodeos. ***Reference:*** *Katie Nickel, Public Works Program Coordinator (909) 820-2507, knickel@rialtoca.gov*



ATP Cycle 1, Highland-Redlands Connector bicycle and pedestrian improvements (2017-Present). The proposed project would construct a non-motorized transportation project along 4.7 contiguous miles of streets and easements in the cities of Highland and Redlands. The project would construct bicycle and pedestrian improvements including pavement widening, curb and gutter, curb ramps, median curbs, sidewalks, pavement widening, pavement rehabilitation, slurry seal, pavement markings and striping, Class I and II bikeway/pedestrian paths, bicycle/pedestrian bridge, bike racks, bollards, bike signals, in-roadway bicycle detection, pedestrian heads, sharrows, enhanced crosswalks, warning beacons, roadway and bikeway signage, lighting, and speed feedback signs. KOA team is responsible for Conceptual Development, Environmental Clearance, Right of Way engineering, and Final PS&E. KOA team conducted workshop and public outreach in June 2017. The conceptual design has been completed for the project. ***Reference:*** *Dennis Barton, Project Manager, City of Highland, 27215 Base Line, Highland, CA 92346, (909) 864-8732, dbarton@cityofhighland.org*

City of Wildomar Grand Avenue Bike Improvements & Multi-Purpose Trail Improvements Projects, Wildomar, CA (2015-Ongoing). KOA is leading a team to improve bicycle facilities for the City of Wildomar along a five-mile span of Grand Avenue and Clinton Keith Road. Street widening and trail improvements include the incorporation of Class 1, Class II, and Class III facilities for bicyclists and other non-motorized forms of transportation. The improvements will accommodate students attending a middle school on Grand Avenue and the local bicycling community. The team's services include traffic engineering, utility research, surveying, hydrology, geotechnical engineering, and right-of-way analysis. KOA is providing conceptual plans and alignments, bicycle safety and awareness education, traffic calming design, street crossing designs for bicycle and pedestrian uses, and designs for incorporating ADA access. ***Reference:*** *City of Wildomar, Dan York, Assistant City Manager, (951) 677-7751, dyork@cityofwildomar.org.*

Aqueduct Multi-Use Trail System: Juan Bautista de Anza Trail; Trail Plan; ATP Grant Funding; Moreno Valley, CA. The 9.5-mile-long Juan Bautista de Anza Pedestrian and Bicycle Path transects Moreno Valley from the northwest to the southeast corners of the city, providing a safe and viable commuter and recreation trail for the entire city. The trail connects schools and parks, dining, shopping, entertainment, office, commercial, and residential areas along the route, leading to the Lake Perris State Recreation Area and the City of Perris regional trail system to the south, and major shopping centers to the north. The project will provide an off-street Class I bike path, walking, and jogging facility for most of the length, on-street connections at two schools, and improved crossing at local and arterial streets. KOA is preparing the major planning and engineering basis of design, and environmental document for the project. During document development, KOA assisted the City in applying for, and winning, two Active Transportation Program (ATP) grants for significant portions of the project, which will connect several schools and parks along the corridor. *Reference: City of Moreno Valley, Margery Lazarus, PE, Senior Engineer, (951) 413-3133, margeryl@moval.org.*

Larwin Park Improvement Project, Rancho Palos Verdes, CA. (2016-Ongoing) KOA teamed with BMLA to provide design services to redesign the existing Larwin Park. The improvements include re-grading the majority of the existing park to provide visibility throughout the park, new parking lot, concrete/decomposed granite paths, landscaping, playground equipment, irrigation, new bathroom building, and new light fixtures. KOA services include improvement plans for demolition, grading, water/sewer service, parking lot, signing and striping, specifications and cost estimates. ***Reference:*** *City of Buena Park, Wood Nousome, Assistant Engineer, 6550 Beach Bl, Buena Park, (714) 562-3678.*

Lower Hesse Park Improvement Project, Rancho Palos Verdes, CA. (2016-2017) KOA provided engineering design services for the City of Rancho Palos Verdes for the redesigning of Lower Hesse Park. The project involved the redesigning a portion of the existing park to include ADA compliant trails, landscaping, irrigation, new parking lot, and repairing the existing dirt trail. KOA evaluated the existing site conditions for ADA compliance, provided new ADA trail profiles, prepared demolition plans, striping plans, erosion control plans, specifications, and cost estimates. ***Reference:*** *City of Rancho Palos Verdes, Nicole Jules, PE, Deputy Director of Public Works, 30940 Hawthorne Blvd., Rancho Palos Verdes, CA 90275, (310) 544-5275.*

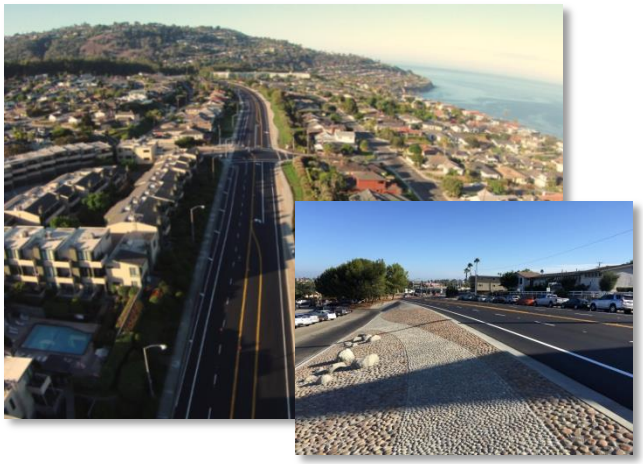
Los Angeles River Regional Bike Path, Los Angeles County Department of Public Works, Los Angeles, CA (2014). KOA assisted the LACDPW in preparing a Preliminary Scoping Report (PSR) to identify the issues and recommend alternatives needed to prepare a Project Design Concept (PDC) for the completion of the Los Angeles River Regional Bike Path Project. The PSR needed to consider right of way constraints, physical constraints, costs, schedule, alternatives, and recommendations for completion of the bike path through a project segment between the 134 Freeway and Riverside Drive in the City of Los Angeles, all part of the 51-mile transportation and recreation link between Canoga Park and Long Beach. *Reference: Los Angeles County Department of Public Works Allan Abramson, Principal Engineer, Programs Development Division, (626) 458-3902, AABRAMS@dpw.lacounty.gov.*

Beech Blvd Improvement Project from Foothill Boulevard to north of P.E. Trail, Fontana, CA. (2016-Present) *Design Engineer.* KOA prepared plans and cost estimates for the design of Beech Avenue from Foothill Boulevard to Miller Avenue. The project included new road construction plans for connecting Beech Avenue from Foothill Boulevard and just north of the Pacific Electric Trail. Traffic signals and interconnection are proposed along Beech Avenue at Foothill Boulevard, the Pacific Electric Trail, and at Miller Avenue. These plans proposed construction of ADA access ramps, bus bay, road widening, storm drain, signing and striping, fiber optic interconnection and the installation of traffic signals. Key issues involved were utility conflicts, right-a-way acquisitions, right-a-way limitations, and coordination with local business/agencies. *Reference: Mr. Noel, Castillo, Engineering Manager, City of Fontana, 8353 Sierra Ave, Fontana, CA 92335, (909) 350-7632.*

Port of Long Beach Pier J Bike Path PS&E, Long Beach, CA (2013 – Ongoing). KOA is helping the Port design their first bike path.. A combination of Classes I, II, and III, innovative bike facilities, landscapes, wayfinding signs, public art/display boards, and two viewing platforms will be provided for pedestrians and bicyclists along the southshore ocean front area. KOA managed subconsultants who are performing the structural work and associated architectural, mechanical, electrical, and plumbing for the restroom facility, the cantileavered pier outlook structures, and the retaining walls and performing landscaping and wayfinding services for the project. ***Reference:*** *City of Long Beach, Ron Richardson, Senior Civil Engineer, (562) 590-4146, Ron.Richardson@polb.com.*

City of Costa Mesa West 19th Street Bicycle Facility (2015 - Ongoing). The City of Costa Mesa is taking the lead to improve its bicycle connectivity by providing new bicycle facilities along 19th Street, from Placentia Avenue to Balboa Boulevard, continuing through Talbert Regional Park to the Santa Ana River Banning Channel Bikeway. The new facilities will transit existing streets, partially developed streets, and natural habitat areas, within the jurisdictions of the County of Orange and the cities of Costa Mesa and Newport Beach. The project length includes a Class II bike lane, a Class I bike trail, and a multipurpose trail. Funding is through Federal Active Transportation Program (ATP) grants administered through the State of California. KOA is providing "turn-key" project design services, which includes preliminary engineering and alternatives analysis; the preparation of construction-ready bid documents consisting of complete plans, specifications, and a construction cost estimate; and the completion of required federal forms, including the Request for Authorization to Proceed with Construction, among others. The 19th Street bikeway will provide an important east-west connection within Costa Mesa, as well as access to the regional bike system along the Santa Ana River. *Reference: City of Costa Mesa, Transportation Services Department, David Cho, Assistant Engineer, (714) 754-4017, dcho@ci.costa-mesa.ca.us.*

Palos Verdes Boulevard Improvement Project, Torrance, CA. KOA prepared Plans, Specifications and Estimate for the widening, improvement, and pavement rehabilitation of Palos Verdes Boulevard from Pacific Coast Highway to the south City limit. (approximately 1.1 miles). This four lane arterial highway project included new curb & gutter, sidewalks, landscape and hardscape, widening, new bicycle lanes, regarding, traffic signal upgrades, ADA curb access ramps, and striping and signing improvements to MUTCD standards. ***Key Reference:*** *Nicole Jules, PE, Deputy Director of Public Works, City of Rancho Palos Verdes, 30940 Hawthorne Blvd., Rancho Palos Verdes, CA 90275, (310) 544-5275.*



Stanton Parking Lot, City of Buena Park (2015-2017). KOA prepared the plans, specifications, and estimate for the SCE Parking Lot Improvement Project west of Beach Blvd behind the Movieland Wax Museum property. The project included complete improvements to unimproved property within the Southern California Edison electrical transmission tower easement, consisting of conventional and permeable asphalt pavement, median and perimeter curbs, ADA walkways and parking, landscaping, lighting, perimeter walls, and on-site stormwater retention. ***Reference:*** *City of Buena Park, Mr. Wood Nousome, Assistant Engineer, 8353 Sierra Ave, Fontana, CA 92335, (909) 350-7632.*

D.4 RELEVANT SUBCONSULTANT EXPERIENCE

ECORP CONSULTING, INC.

ECORP Consulting, Inc. (ECORP) is a California "S" Corporation that specializes in assisting government agencies and private clients with a wide range of environmental services including technical expertise in land use planning; biological, cultural, and water resources; and regulatory compliance with California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), Clean Water Act, federal and state Endangered Species Acts, NHPA, and other laws and regulations. We have well-established working relationships with the resources agencies, including the U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), and the U.S. Fish and Wildlife Service (USFWS). ECORP is a financially sound with five offices serving clients throughout California and one office in New Mexico.

The technical studies will be primarily be managed from the Redlands office located at 215 North Fifth Street, Redlands, CA 92374; tel: (909) 307-0046; fax: (909) 307-0056.

ECORP provides support over the life of a project, from initial baseline studies; to environmental planning, documentation, and review; permit negotiation, liaison with resource agencies, and mitigation design; and through to construction supervision, monitoring, and compliance reporting. ECORP brings an experienced team of more than 100 CEQA and NEPA specialists, environmental permitting specialists, environmental analysts, terrestrial and aquatic biologists, wetland specialists, landscape architects, engineers, hydrologists, archaeologists/ cultural resource specialists, Geographic Information Systems (GIS) specialists, and Unmanned Aerial Systems (UAS) specialists.

Bike and Multipurpose Trail Improvement Project, Wildomar, California (2015-2016). ECORP prepared a Caltrans PES and Joint CE/CE for Phases 1 and 2 of the proposed project. The purpose of the proposed project was to install Class II and Class III bike lanes to promote non-motorized transportation for the City of Wildomar. Proposed improvements would include the widening of existing pavements, re-striping, and other safety improvements along the roadway segments. The project would not require any additional right-of-way. A CEQA CE was also prepared for the multipurpose proposed along a portion of Grand Avenue. Additional cultural resources documentation (APE, ASR, HPSR, Native American consultation) was also prepared at the request of Caltrans. ***Reference:*** *City of Wildomar, Kev Tcharkhoutian (951) 677-7751 / Email.* ktcharkhoutian@interwestgrp.com

Pepper Avenue Extension Project, Rialto, California (2011-Ongoing). ECORP provided biological and cultural resources survey and monitoring services, general construction monitoring, and habitat restoration for the Pepper Avenue Extension Project for the City of Rialto. The project extended Pepper Avenue from its northernmost extent to Highland Avenue north of State Route 210. The project entailed construction of approximately 0.75 mile of new roadway, crossing the Frisbie Wash (a tributary to Lytle Creek). The project involved lengthy environmental documentation and a complex regulatory permit process with the resource agencies, including USFWS, CDFW, and the USACE. Prior to project initiation, ECORP provided assistance with obtaining the needed permits. As part of the permit compliance, ECORP prepared a Habitat Mitigation and Monitoring Plan (HMMP) that describes the mitigation of biological resources on site. This plan was submitted and approved by resource agencies prior to initiation of work activities for the project. The HMMP outlined the woolly-star mitigation and restoration of Riversidean Alluvial Fan Sage Scrub within the Frisbie Wash. ***Reference****: City of Rialto, Gina Gobson (909) 421-7240 / Email.* ggibson@rialtoca.gov

WESTLAND GROUP INC.

WestLAND Group, Inc. is a California corporation headquartered in Ontario and has satellite offices in Santa Clarita, and Bakersfield. WestLAND is certified as a Woman Business-Owned Enterprise (WBE) providing a broad suite of Civil Engineering and Geospatial services for Energy, Land Development and Transportation. WestLAND is also certified as an (SBE). WestLAND's team has grown to over 90 professionals and has provided services in the Southern California area for over 16 years, with a comprehensive range of services for all sizes and categories of projects. WestLAND's core competencies include, surveying, mapping, GIS, engineering, planning, structural design, traffic engineering, construction staking, and construction management.

WestLAND's mission is to provide quality and responsive services in a safe professional and ethical manner, while enhancing the communities and environment in which we live. WestLAND maintains a high level of satisfaction across its entire client base by providing top quality, professional services at competitive rates. WestLAND promotes team work with emphasis on meeting project objectives and deliverables while balancing engineering feasibility, safety, economic viability, and environmental sensitivity.

The company continuously invests in leading-edge technology, from the field to the office, in order to improve productivity and increase accuracy for various engineering products and services. Over 85 percent of WestLAND Group's work comes from repeat clients, which is testimony to its customer service and quality of work products. The company prides itself on providing exceptional service, timely deliverables, and unmatched quality, at reasonable cost. WestLAND is respected and recognized as a top consulting firm in California and was recognized in 2015 and 2016 as a "Top 100 Hot Firms in North America" by the Zweig Group. And "Top 100 Geospatial Firm" in North America, by POB Magazine.

Irwindale Avenue Street Improvement Project, Irwindale, CA. The City of Irwindale was seeking to improve a .75 mile section of Irwindale Avenue between Foothill Blvd. and 1st Street, including curb and gutter, raised medians, driveways and ramp modifications. The City hired The WestLAND Group to provide design topographic survey, and construction surveying services. Pre-construction surveying included establishing horizontal and vertical survey control throughout the project alignment and locating and surveying existing centerline monuments to establish street centerline and right-of-way lines. Topographic cross-sections were performed for street design in supplement to aerial topography. Construction surveying/staking was performed for all new improvements. WestLAND commenced preliminary survey in 02/2015, completed construction survey in 12/2016. ***Reference:*** *Francisco Carrillo, Civil Engineering Associate, (626) 430-2259, fcarrillo@ci.irwindale.ca.us.*

Milliken Avenue Street Improvements, Rancho Cucamonga, CA. The City of Rancho Cucamonga was seeking to rehabilitate pavement along a 2.6 mile section of Milliken Avenue from Arrow Route to the 210 Freeway. The city hired WestLAND Group to provide design topographic survey, and survey monument preservation services. This required performing a horizontal and vertical control survey, utilizing GPS/GNSS surveying, conventional traversing and differential leveling to establish precise survey control for design and construction. Topographic design level cross-section surveying was performed along the project limits, including surveys of above ground visible utilities. Survey data was processed and used to generate AutoCAD base maps for engineering design, including established street centerlines, right-of-way and found monuments, survey control points, cross-section survey points and above ground utilities, such as water valves, manholes, etc. Prior to pavement construction, existing centerline monuments were tied-out and WestLAND prepared "pre-construction tie-sheets". Upon the completion of final paving, WestLAND reset the centerline monuments destroyed during construction and recorded corner monument records with the County of San Bernardino. WestLAND commenced preliminary survey in 02/2012, completed monument preservation in 09/2013. ***Reference:*** *Romeo David and Ping Kho, Associate Engineers, (909) 477-2740 ext. 4070, Romeo.David@cityofrc.us.*

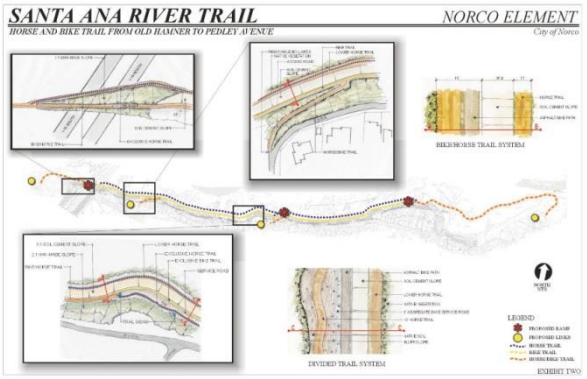
Spruce Avenue Rehabilitation Project, Rancho Cucamonga, CA. The City of Rancho Cucamonga was seeking to rehabilitate pavement along a 1 mile section of Spruce Avenue. The city again hired WestLAND Group to provide survey, and monument preservation services in support of this project. WestLAND field crews performed a design level topographic survey, office personnel processed the survey data and prepared a CAD basemap deliverable including all features along the corridor from right-of-way to right-of-way. The boundary monuments along the corridor were surveyed and tied out for preservation and utilized to establish the boundary of Spruce Avenue. After construction, WestLAND returned to reset destroyed monuments and subsequently is in the process of filing corner records with the County of San Bernardino. WestLAND commenced preliminary survey in 02/2014. ***Reference:*** *Romeo David, Associate Engineer, (909) 477-2740 ext. 4070, Romeo.David@cityofrc.us.*

BMLA, Inc.

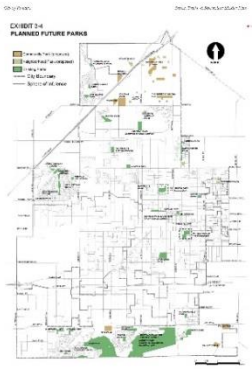
After establishing the firm in 1987, Baxter Miller and BMLA have gone on to design award-winning public and private projects around Southern California. BMLA continually strives to achieve design innovation for communities, public spaces, parks, and municipalities. By designing socially relevant spaces, we encourage a community to more actively engage with both their natural and built environment. Our design process springs from our desire to create sustainable communities. It is this belief that strengthens our close collaboration with our clients. By working as a team, we make big ideas a reality. BMLA Landscape Architecture maintains a staff size of 12 professionals, five of which are licensed California Landscape Architects. Our staff consists of specialists with a wide range of skill sets in landscape design, irrigation, horticulture, fine arts, graphic design, geographic information systems (GIS), and research. It is this diversity of experience and education that allows us to accomplish more in-house than most typical landscape architecture firms.

Spruce Avenue Rehabilitation Project, Rancho Cucamonga, CA. The City of Rancho Cucamonga was seeking to rehabilitate pavement along a 1 mile section of Spruce Avenue. The city again hired WestLAND Group to provide survey, and monument preservation services in support of this project. WestLAND field crews performed a design level topographic survey, office personnel processed the survey data and prepared a CAD basemap deliverable including all features along the corridor from right-of-way to right-of-way. The boundary monuments along the corridor were surveyed and tied out for preservation and utilized to establish the boundary of Spruce Avenue. After construction, WestLAND returned to reset destroyed monuments and subsequently is in the process of filing corner records with the County of San Bernardino. WestLAND commenced preliminary survey in 02/2014. ***Reference:*** *Romeo David, Associate Engineer, (909) 477-2740 ext. 4070, Romeo.David@cityofrc.us.*

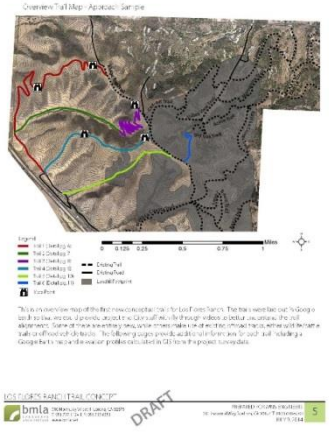
Santa Ana River Trial, Norco, CA (4/05 – 9/06). BMLA was engaged by the City of Norco to prepare an Equestrian and Bike Trail Plan for a stretch of the Santa Ana River Trail. The project consisted of master planning the transition points, parking facilities and routing, both long and short-term. The design team coordinated with local equestrian groups, Public Works and the Recreation Department to meet the needs of the public and the Army Corp of Engineers, who were in the process of stabilizing the Norco Bluffs as a part of a larger federal flood control project. BMLA was responsible for the design development, as well as the bid documents necessary to facilitate the construction of the trails and access points and transitions. ***Reference:*** *City of Norco, Brian Petree, 951.270.5632, bpetree@ci.norco.ca.us*



Trails, Parks, and Recreation Master Plan Update, Fontana, CA (9/08–5/09). BMLA was engaged by the City of Fontana to prepare an update to the decade old Master Plan. The city needed to update the document to reflect the current recreation trends and facilities that had been added to the city and adjust the maps and plans to reflect the move away from pocket parks towards larger consolidated sport facilities. BMLA assisted with user surveys and public outreach to gage the level of public satisfaction regarding the park system, both locally within the City and regionally. As a result of this work, BMLA prepared a Comprehensive Design Guideline for the development and renovation of the City's parks, creating standardization for the City staff and the developers to follow. ***Reference:*** *City of Fontana, Dan West, 909.350.6760, dwest@fontana.org*



Los Flores Open Space Management Plan, Santa Maria, CA (8/13 – 7/14). BMLA was engaged by the City of Santa Maria to prepare a comprehensive opens Space master plan for an 1,800- acre park site along the 101 highway south of the City. BMLA worked with the City to develop the overall mapping plan and site-specific designs for the space, including passive recreation and hiking trails, a parking lot, an equestrian staging area, a maintenance area and a visitor's docent center. Using onsite assessment and GIS technology, BMLA evaluated the existing recreation and landscape and made recommendations for future opportunities. BMLA also provided the graphics for the pamphlet used for distribution to visitors which include a trail map, park rules, and donor information. Though the site allows for very limited low impact uses for the time being, it was important for City leadership to have a visioning document that received public input in the form of workshops and surveys. The result of which was a master plan that created a process by which trails would be operated, maintained and future trails would be built, while maintaining the picturesque rural beauty of the rolling hill site. ***Reference:*** *City of Santa Maria, Alex Posada, 805.925.0951, aposada@ci.santa-maria.ca.us*



TWINING, INC.

Founded in 1898, Twining has taken pride in its reputation for quality, reliability and expertise in providing geotechnical, materials testing and construction inspection services for over 100 years. As one of California's largest service providers, the firm have the in-house resources to meet the changing needs of complex construction projects from multi-building hospital campuses to interstate highways. They employ some of the industry's most well-known construction materials experts who perform research and consult with regulatory agencies to shape the future of construction standard practices.

Twining is a full-service engineering and quality control company with unmatched technical expertise, quality assurance/quality control capabilities, laboratory capabilities, and personnel resources. With laboratories throughout California and more than two hundred team members, they are unequaled in their core competencies:

- Pavement Design and Evaluation
- Geotechnical Engineering
- Materials Testing and Inspection
- Specialty Testing
- Mobile Laboratories
- Asphalt Pavement Quality Assurance Services
- Applied Engineering and Research

Twining's local office and state-of-the-art laboratory is located in San Bernardino. This location houses some of their best and brightest resources including a depth of engineering resources, technicians, and inspectors to meet the changing needs of projects in California. They are located at 732 East Carnegie Drive, Suite 100, San Bernardino, CA 92408, (909) 383-6660.

Prior Experience with KOA

City of Claremont - Foothill Blvd Improvement
City of Buena Park - Stanton Ave Parking Lot Improvement Project
City of Moreno Valley - Aqueduct Trail System
City of Fontana - Street Widening, Martin Avenue to Sierra Avenue
City of Santa Monica - Moomat Ahiko Way Roadway Rehab
City of Simi Valley - Cochran St & Las Llajas Channel Bridge Widening
City of Colton - Mt Vernon Ave Bridge over UPRR Tracks
City of Alhambra - 2012 Street Improvement Design Project
City of Thousand Oaks - Residential/Arterial Overlay 2011
City of Thousand Oaks - 2011 Pavement Evaluation

City of Fontana Pavement Evaluation, Fontana, CA. Twining provided asphalt concrete pavement coring, identification of sub-surface conditions, and geotechnical engineering recommendations for the City of Fontana's pavement rehabilitation program. Twining performed a visual surface condition survey, in accordance with Caltrans and ASTM, that involved documenting the pavement distresses, design constraints, and drainage issues observed in the field for the subject streets. This assessment was performed by Twining's pavement engineer, Amir, and was used to develop repair recommendations. After the assessment, Twining performed 10 corings and obtained samples from the exploratory borings that were transported to our laboratory. The results of their field exploration and geotechnical laboratory tests were reviewed by the project engineer to provide recommendations for the design and construction of the proposed pavement rehabilitation. Additionally Twining provided materials testing and inspection services during the construction of this project. ***Reference:*** *Darren Adrian, Project Manager, Kimley-Horn, (619) 234-9411, Darren.adrian@kimley-horn.com.*

Inland Empire Health Plan, Parking Lot Pavement Evaluation, San Bernardino County, CA. After severe cracks appeared on the asphalt surface of the Inland Empire Health Plan parking lot, Twining was enlisted to perform a geotechnical pavement evaluation of the lot. They performed asphalt pavement corings to determine the existing structural thickness of the pavement; performed lab testing of samples obtained from the exploratory borings to classify and evaluate the properties of the subgrade soil; and provided pavement design recommendations for pavement rehabilitation of the parking lot. ***Reference:*** *Pamela White, Senior Property Manager, TRIGILD, (858) 242-1159, pam.white@trigild.com.*

City of Huntington Beach, Pavement Evaluation and Structural Design Recommendations for Arterial Road Rehabilitation Projects, Huntington Beach, CA. Twining provided the City of Huntington Beach Public Works Department with pavement evaluation and structural design recommendations for various arterial roads throughout the city. Their services included asphalt-concrete pavement coring, deflection testing, sampling and laboratory testing of subgrade soils, and geotechnical engineering recommendations for pavement overlay structural thickness design, using the 10- and 20-year design traffic indices (TI). ***Reference:*** *Jim Wagner, City of Huntington Beach, phone: 714.536.5467, email: jwagner@surfcity-hb.org*

AGUILAR CONSULTING, INC.

Established in 2011 as an S-Corporation, Aguilar Consulting, Inc. (ACI) provides professional hydrology, hydraulics, floodplain and sediment transport studies, drainage and transportation design services. Our entrepreneurial spirit and commitment to innovation have allowed us to maintain a competitive cost structure while offering superior services. ACI employs 8 professionals primarily serving Southern California. ACI office is located at 2155 Chicago Avenue, Suite 301, Riverside, CA 92507; Phone Number is (951)300-1431; Fax Number is (951)300-1435.

- **Drainage/Flood Control:** ACI has top notch experience with river crossing projects and provides an extensive array of flood control services including Underground Storm Drain and Open Channel Design, Regional Master Drainage Plans, Floodplain Management & Processing, Debris Production and Sediment Transport Analysis, Detention and Debris Basins, Regional Facility Design and Resource Agency Permit/Design Support.

- **Transportation:** ACI carries extensive local roadway improvement experience and understands that agencies are challenged with the development and maintenance of a transportation network that provides safe travel routes, aesthetically pleasing community corridors, and efficient access to its businesses. ACI understands these challenges and brings exceptional design and management services to our public agency partners for Neighborhood Beautification, Traffic Safety, Pavement Rehabilitation, Street Improvements, and Highway Design projects.

- **Municipal Plan Checking Services:** ACI works closely with our public agency clients providing seamless plan checking support services. Our experienced reviewers understand the need to provide thorough reviews as well as efficient turn-around time.

Santa Ana River Trail Phase III Project from Waterman Avenue to California Street, Cities of San Bernardino and Redlands, CA; Start Date: 2007, End Date: 2009

The proposed Santa Ana River Trail Phase III (SART, Phase III) construction project runs along the south bank of the Santa Ana River and it extends from Waterman Avenue to California Street for a total length of approximately 19,992 feet. The majority of the trail improvements run along the top of the Santa Ana River so it has no impact to the river hydraulics. For short segments of the proposed trail improvements located under existing bridges, the trail was designed to ensure that construction of fill encroachment into the river bed is off-set by cutting into the existing side slope to provide additional flow conveyance. Constructing the trail improvements in this manner at the bridge crossings minimizes any significant effects to the existing or pre-project hydraulic characteristics of the river. For the most part, 10-foot section of the proposed trail is paved with AC. For segments under existing bridges, 14-foot section of the trail is paved with PCC. Shoulder backing areas are provided for convenience and safety considerations. These areas vary in width from 2 to 5 feet. ACI prepared the Location Hydraulic Study (LHS) and Summary Floodplain Encroachment Report (SFER) for submittal to the County and Caltrans District 8. ***Reference:*** *Erwin Fogerson, Design Chief, San Bernardino County, (909) 387-8041, EFogerson@dpw.sbcounty.gov*

Cathedral Canyon Low-Water Crossing with a New Bridge Replacement Project over Whitewater River, Cathedral City, CA; Start Date: 2010, End Date: Current.

ACI provided a floodplain and bridge hydraulics/scour study utilizing the HEC-RAS computer model for the Whitewater River at Cathedral Canyon Road Bridge Crossing. Additionally, ACI prepared channel design plans, roadway and drainage plans, and construction staging plans, in support of the project. As part of the channel plans, a 14-foot PCC bike trail was designed to go under the proposed bridge and match the existing bike trail approximately 400 feet downstream and upstream of the new bridge location. Caltrans' standards were used to design the bike trail. The project required plan and study processing through CVWD, RCFC & WCD, Indian Tribe, Caltrans District 8, USACOE and Cathedral City. ***Reference****: Bill Simmons, Engineering Manager, Cathedral City, (760) 323-5344, BSimons@cathedralcity.gov*

La Cadena Drive New Bridge Replacement over Santa Ana River Project, City of Colton, CA Start Date: 2014, End Date: Current.

ACI prepared a floodplain and bridge hydraulics/scour study for the Santa Ana River at La Cadena Drive Bridge Crossing. The proposed HBP bridge project involved replacing the existing 4-lane bridge crossing with a new 6-lane bridge. ACI prepared channel design plans including the grade stabilizer structure. The project also involves the re-design of the existing 14-foot bike trail running along the south side of the Santa Ana River. Design of the existing bike trail was coordinated with the San Bernardino County Parks Department and San Bernardino County Flood Control District. The project required plan and study processing through the City, SBCFCD, Caltrans District 8, and USACOE. ***Reference:*** *Victor Ortiz, City Engineer, City of Colton, (909) 514-4210, VOrtiz@ci.colton.ca.us*

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SECTION E – PROJECT SCHEDULE

E.1 PAST PROJECT PERFORMANCE: KOA and its team members have completed projects in the past that have involved environmental clearance and pedestrian /bike trail PS&E design. Some of the projects and specific schedules are noted below:

1) Project Name: **SBCTA Metrolink Station Accessibility Improvements**

NTP: May 2016

Phase I: Conceptual Plans/ Public Outreach Completed: January 2017
Phase II: FINAL PS&E : Completed July 2017

2) Project Name: **Safe Routes to School Project, Sidewalk Improvements and IRWL Installation for Merle Casey Elementary School, Rialto, CA**

NTP: November 2010

Phase I: 30% Plans/ Environmental Completed: August 2011

1. Preliminary Environmental Study (PES)
2. Natural Environment Study - Minimal Impact (NES-MI)
3. Initial Site Assessment (ISA)
4. Categorical Exemption/Exclusion Determination Form

Phase II: Final PS&E Completed November 2012 (Extra Revisions January 2013)

3) Project Name: **Green Bike Lane, Coachella CA**
NTP: June 2016

Phase I: Conceptual Plans/ Bike Lane Alternatives Completed: September 2016

Phase II: FINAL PS&E : Completed March 2017

4) Project Name: **Wildomar Grand Avenue and Multi-purpose Trail Design**
NTP: June 2015

Phase Ia: Conceptual Plans Completed: September 2015
Phase Ib: Environmental Completed CEQA: December 2016

Phase II: FINAL PS&E : Completed July 2017

E.2 PROJECT SCHEDULE:

A **preliminary Project Schedule** is included on the following page. The design schedule is very conservative and includes all of the necessary tasks to complete the project. While this schedule reflects our ideas regarding the most efficient and expeditious manner for taking on this project, we are open to suggestions from the City's staff and will modify our schedule accordingly.

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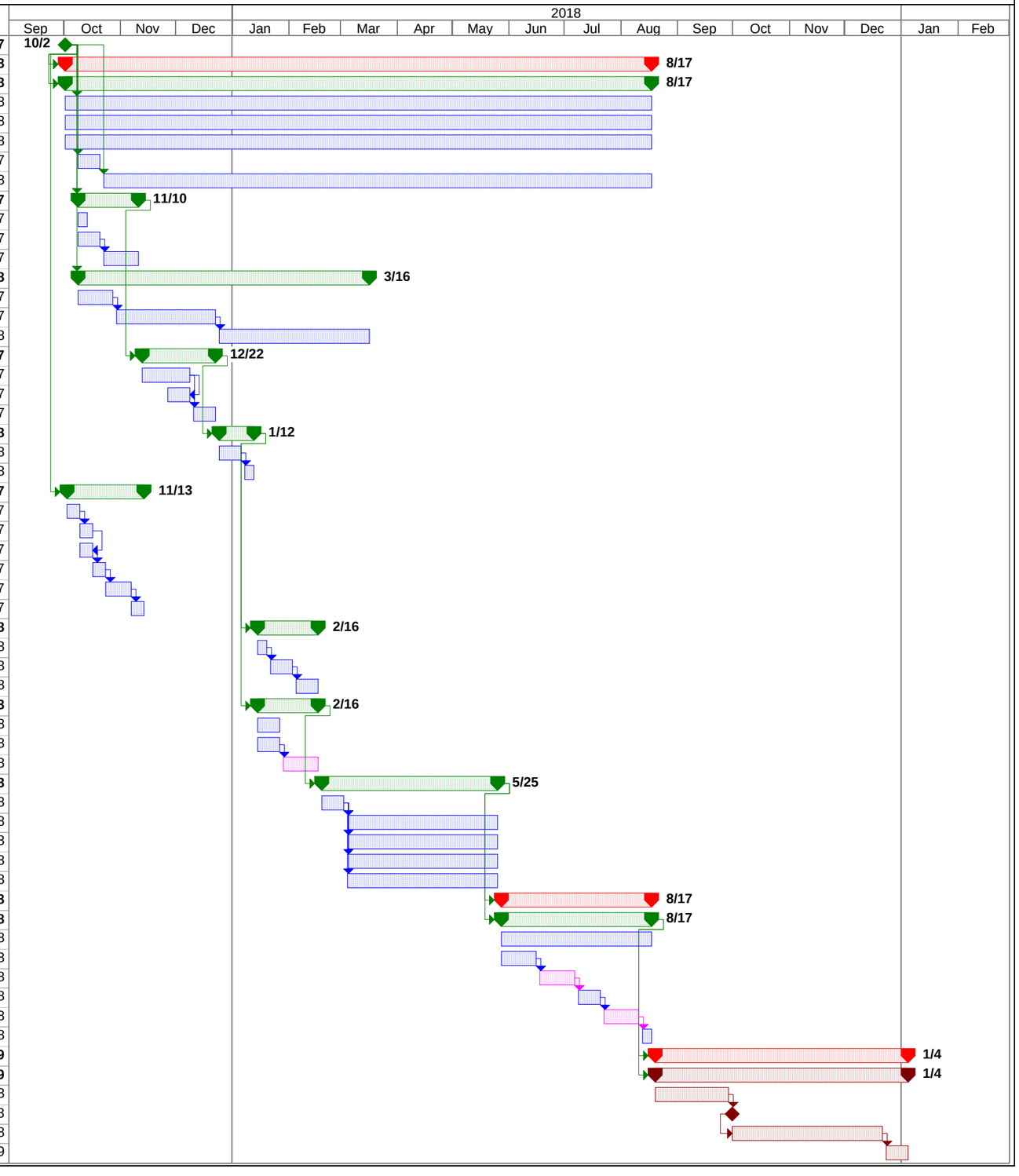
PROJECT SCHEDULE
Design Services for West Side of Cactus Avenue, between Baseline Road and Rialto Avenue
City of Rialto RFP No. 17-132, City Project No. 170801

ID	Task Name	Duration	Start	Finish
1	**Notice to Proceed**	**1 day**	**Mon 10/2/17**	**Mon 10/2/17**
2	**PHASE 1: CONCEPTUAL DESIGN DRAWINGS & PRELIMINARY COST ESTIMATES**	**230 days**	**Mon 10/2/17**	**Fri 8/17/18**
3	**Task 1 - Project Management and Administration**	**230 days**	**Mon 10/2/17**	**Fri 8/17/18**
4	1) Management of project team including sub-consultant	230 days	Mon 10/2/17	Fri 8/17/18
5	2) Development and Agreement on Design Standards	230 days	Mon 10/2/17	Fri 8/17/18
6	3) Conduct PDT Meetings including Preparing Agenda and Meeting Minutes	230 days	Mon 10/2/17	Fri 8/17/18
7	4) Submitting of Monthly Progress Reports and Invoices including Updating Schedules	10 days	Mon 10/9/17	Fri 10/20/17
8	5) Quality Control of Submittals	215 days	Mon 10/23/17	Fri 8/17/18
9	**Task 2 - Data Review, Field Surveying and Base Mapping**	**25 days**	**Mon 10/9/17**	**Fri 11/10/17**
10	1) Obtain and Review Existing Documents and Reports	5 days	Mon 10/9/17	Fri 10/13/17
11	2) Conduct Field Surveys for Control and Mapping	10 days	Mon 10/9/17	Fri 10/20/17
12	3) Preparation of Base Map	15 days	Mon 10/23/17	Fri 11/10/17
13	**Task 3 - Utility Research and Coordination**	**115 days**	**Mon 10/9/17**	**Fri 3/16/18**
14	1) Coordinate with Utility Agencies	15 days	Mon 10/9/17	Fri 10/27/17
15	2) Prepare Notices and Follow Up Requests with Plans to Utility Companies	40 days	Mon 10/30/17	Fri 12/22/17
16	3) Pothole utilities if needed (Optional)	60 days	Mon 12/25/17	Fri 3/16/18
17	**Task 4 - Conceptual Design and Cost Estimates / Preliminary Environmental Assessm**	**30 days**	**Mon 11/13/17**	**Fri 12/22/17**
18	1) Develop Conceptual Design Plans (Up to Two Alternatives)	20 days	Mon 11/13/17	Fri 12/8/17
19	2) Preliminary Cost Estimates for Two Alternatives	10 days	Mon 11/27/17	Fri 12/8/17
20	3) Preliminary Environmental Assessment to identify Scope of Special Studies	10 days	Mon 12/11/17	Fri 12/22/17
21	**Task 5 - Community Outreach**	**15 days**	**Mon 12/25/17**	**Fri 1/12/18**
22	1) Conceptual engineering exhibits (plans and sections for the two alternatives)	10 days	Mon 12/25/17	Fri 1/5/18
23	2) Open house meeting written comments	5 days	Mon 1/8/18	Fri 1/12/18
24	**Task 6 - Geotechnical Design Report**	**30 days**	**Tue 10/3/17**	**Mon 11/13/17**
25	1) Review Background Information and As-built Documents	5 days	Tue 10/3/17	Mon 10/9/17
26	2) Analyze Data and Prepare a Preliminary Geotechnical Design Report	5 days	Tue 10/10/17	Mon 10/16/17
27	3) Coordinate and Perform Field Exploration	5 days	Tue 10/10/17	Mon 10/16/17
28	4) Perform Geotechnical Laboratory Testing	5 days	Tue 10/17/17	Mon 10/23/17
29	5) Conduct Analyses and Prepare a Geotechnical Design Report	10 days	Tue 10/24/17	Mon 11/6/17
30	6) Initial Site Assessment (Optional)	5 days	Tue 11/7/17	Mon 11/13/17
31	**Task 7 - Hydrology Study and Drainage Design**	**25 days**	**Mon 1/15/18**	**Fri 2/16/18**
32	1) Data Collection and Review	5 days	Mon 1/15/18	Fri 1/19/18
33	2) Hydrology Study	10 days	Mon 1/22/18	Fri 2/2/18
34	3) Preliminary Drainage Improvements Plan	10 days	Mon 2/5/18	Fri 2/16/18
35	**Task 8 - Preliminary Design Plans (30% Plans)**	**25 days**	**Mon 1/15/18**	**Fri 2/16/18**
36	1) Prepare Preliminary Design Plan(30%)	10 days	Mon 1/15/18	Fri 1/26/18
37	2) Prepare Preliminary Cost Estimates	10 days	Mon 1/15/18	Fri 1/26/18
38	City of Rialto Plan Check	15 days	Mon 1/29/18	Fri 2/16/18
39	**Task 9 - Preparation of Environmental Documents**	**70 days**	**Mon 2/19/18**	**Fri 5/25/18**
40	1) Coordination with City's Development Services Department	10 days	Mon 2/19/18	Fri 3/2/18
41	2) Preparation of Cultural Resources Technical Report	60 days	Mon 3/5/18	Fri 5/25/18
42	3) Preparation of Biological Report	60 days	Mon 3/5/18	Fri 5/25/18
43	4) Preparation of Air Quality Report	60 days	Mon 3/5/18	Fri 5/25/18
44	5) Preparation of Noise Impact Report	60 days	Mon 3/5/18	Fri 5/25/18
45	**PHASE II - FINAL PLANS, SPECIFICATIONS & ESTIMATES**	**60 days**	**Mon 5/28/18**	**Fri 8/17/18**
46	**Task 10 - Prepare Interim and Final Plans, Specifications and Estimate**	**60 days**	**Mon 5/28/18**	**Fri 8/17/18**
47	1) Specifications and Special Provisions and Engineers Estimate	60 days	Mon 5/28/18	Fri 8/17/18
48	2) 2nd Review 65% Submittal	15 days	Mon 5/28/18	Fri 6/15/18
49	City of Rialto Plan Check	15 days	Mon 6/18/18	Fri 7/6/18
50	3) 3rd Review 95% Submittal	10 days	Mon 7/9/18	Fri 7/20/18
51	City of Rialto Plan Check	15 days	Mon 7/23/18	Fri 8/10/18
52	4) Final 100% Review and Submittal	5 days	Mon 8/13/18	Fri 8/17/18
53	**PHASE III – BIDDING AND CONSTRUCTION SUPPORT**	**100 days**	**Mon 8/20/18**	**Fri 1/4/19**
54	**Task 11 - Engineering Support during Bidding, Award & Construction Phase**	**100 days**	**Mon 8/20/18**	**Fri 1/4/19**
55	1) Bidding Services	30 days	Mon 8/20/18	Fri 9/28/18
56	2) Preconstruction meeting	1 day	Mon 10/1/18	Mon 10/1/18
57	3) Review Inquiries, submittals and change orders during construction	60 days	Mon 10/1/18	Fri 12/21/18
58	4) Prepare As Built Drawings	10 days	Mon 12/24/18	Fri 1/4/19



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ATTACHMENT A

ATTACHMENT "A"

NOTE: THIS FORM MUST BE COMPLETED AND INCLUDED INSIDE ENVELOPE #1, "WORK PROPOSAL"

REQUESTS FOR PROPOSALS (RFP) # 17-132
ENGINEERING AND PROJECT MANAGEMENT SERVICES
FOR
CITY OF RIALTO CACTUS TRAIL IMPROVEMENTS, WEST SIDE OF CACTUS AVENUE, BETWEEN BASELINE ROAD AND CACTUS AVENUE, PROJECT NO. 170801

SIGNATURE AUTHORIZATION

PROPOSER: KOA Corporation

A. I hereby certify that I have the authority to submit this Proposal to the City of Rialto for the above listed individual or company. I certify that I have the authority to bind myself/this company in a contract should I be successful in my proposal.

SIGNATURE

B. The following information relates to the legal contractor listed above, whether an individual or a company. Place check marks as appropriate:

1. If successful, the contract language should refer to me/my company as:

____ An individual;
____ A partnership, Partners' names:_____
_____
_____

__X__ A company;
____ A corporation

2. My tax identification number is: 95-4515908

ADDENDA ACKNOWLEDGMENT:

Acknowledgment of Receipt of any Addenda issued by the City for this RFP is required by including the acknowledgment with your proposal. Failure to acknowledge the Addenda issued may result in your proposal being deemed non-responsive.

In the space provided below, please acknowledge receipt of each Addenda:

Addendum(s) # Q&A Response **is/are hereby acknowledged.**

The "Small Business Concerns Information" sheet shall be included as part of Attachment "A".

Attachment "A" - Small Business Concerns Information

The Proposer shall furnish the following information. Additional sheets may be attached, if necessary.

(1) Name: KOA Corporation

(2) Address: 3190 Shelby Street Ontario CA 91764

(3) Phone No.: (909) 890-9693 Fax No.: (909) 890-9694

(4) E-Mail: mguan@koacorp.com

(5) Type of Firm: (Check all that apply)

_____ Individual _____ Partnership ___X__ Corporation

_____ Minority Business Enterprise (MBE) _____ Women Business Enterprise (WBE)

_____ Small Disadvantaged Business (SDB) _____ Veteran Owned Business

_____ Disabled Veteran Owned Business _____ Other

(6) Business License: __X__ Yes _____ No License Number: 64660

(7) Tax Identification Number: 95-4515908

(8) Number of years as a firm practicing the requested services: 30

(9) Three (3) projects of this type recently completed:

Type of project: SBCTA Metrolink Station Accessibility Improvements

Contract Amount: $547,990.45 Date Completed: June 2017

Owner: SBCTA Phone: Brian Smith, (909) 884-8276 x195

Type of project: Wildomar Grand Avenue and Multi-purpose Trail Design

Contract Amount: $35,915 Date Completed: July 2017

Owner: City of Wildomar, Email: Daniel York, dyork@cityofwildomar.org

Type of project: San Juan Capistrano Bicycle Gap Closure

Contract Amount: $51,890 Date Completed: May 2017

Owner: City of San Juan Capistrano Phone: Joe Mankawich, (949) 487-4313

(10) Person who reviewed the RFP for your firm:

Name: Ming Guan, PE Date of Review: 7/27/17

ATTACHMENT B

ATTACHMENT "B"

NOTE: THIS FORM MUST BE COMPLETED AND INCLUDED INSIDE ENVELOPE #1, "WORK PROPOSAL"

REQUESTS FOR PROPOSALS (RFP) # 17-132
ENGINEERING AND PROJECT MANAGEMENT SERVICES
FOR
CITY OF RIALTO CACTUS TRAIL IMPROVEMENTS, WEST SIDE OF CACTUS AVENUE, BETWEEN BASELINE ROAD AND RIALTO AVENUE PROJECT NO. 170801

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The Consultant, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, and manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past 3 years;
- Does not have a proposed debarment pending; and
- Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining Proposer responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions.

Consultant Name: KOA Corporation

7/26/17
(Date)

(Signature)

Ming Guan, Vice President/Project Manager
(Name & Title)