

**MOORPARK CITY COUNCIL
AGENDA REPORT**

TO: Honorable City Council

FROM: Dave Klotzle, City Engineer/Public Works Director 

DATE: September 11, 2012 (CC Meeting of 09/19/12)

SUBJECT: Consider Agreement for Construction Management and Inspection Services for the Widening of Los Angeles Avenue Between Maureen Lane and Leta Yancy Road (Project 8058)

BACKGROUND

The vacant property on the south side of Los Angeles Avenue between Maureen Lane and Leta Yancy Road was to be developed by Pacific Communities Builders as part of Tract 5053. That development would have included improvements to Los Angeles Avenue to widen the highway to its ultimate width and provide three through travel lanes in each direction. The developer's plans to construct this project have been deferred indefinitely.

In July of 2003 the City Council considered a report which discussed ways and means for the City to undertake construction of this project in advance of the development of Tract 5053. Later, in June of 2004, the City Council adopted Resolution No. 2004-2203 amending the budget to provide \$200,000 of funding from the Los Angeles Avenue Area of Contribution Fund (Fund 2501), for initial design efforts. Subsequent updates to the Capital Improvement Budget included appropriations from Fund 2501 for project design, construction and inspection.

On February 21, 2007, the City Council awarded a consultant agreement to KOA Corporation (KOA) to complete the design of the project. KOA has completed the design and an encroachment permit has been issued by Caltrans for construction of the project.

DISCUSSION

A. Scope of Work

The project includes widening the south side of Los Angeles Avenue and restriping to provide three through lanes in each direction and a center lane for left turns. A traffic signal warrant analysis at Shasta Avenue has shown that a signal is not warranted at this time and therefore is not included in this project. If the property on the south side of Los Angeles Avenue is developed, another traffic signal warrant analysis could be conducted to determine if a signal is needed at that time.

The project also includes the construction of a protective concrete cap over the existing Calleguas Municipal Water District pipeline.

Pacific Communities Builders has conveyed the right-of-way required for this project to the City. At the conclusion of the project, the right-of-way will be transferred to Caltrans. It's intended that the ultimate developer of the Pacific Communities Builders property will reimburse the LA AOC for the cost of these improvements as part of an amended or new development agreement.

B. Construction Management and Inspection

Construction management, inspection and materials testing services will be provided by a consultant. The consultant will finalize the construction bid documents and manage the bidding and contract award process. Staff solicited proposals for these services from several qualified consultants and received the following proposals:

<u>Consultant</u>	<u>Amount</u>
KOA Corporation	\$ 105,116.38
Willdan Engineering	\$ 126,540.00

KOA's proposal is attached. Staff is recommending that the City Council authorize the City Manager to execute a consultant agreement for construction management, inspection and materials testing with KOA in an amount not to exceed \$105,116.38.

C. Project Schedule

The anticipated project schedule is as follows:

Execute Agreement for Construction Management	October 8, 2012
City Council Project Approval and Authorization to Bid	January 15, 2013
Advertise for Bids	January 21, 2013
Bid Opening	February 19, 2013
Award of Construction Contract	March 6, 2013
Notice to Proceed	April 1, 2013
Project Completion	July 26, 2013

FISCAL IMPACT

The FY 2012/13 Capital Improvement Budget includes funding for the project as shown below. Approximately \$7,000.00 of the KOA agreement is to finalize the project bid package which will be funded from the project design budget. The remaining tasks of the KOA agreement will be funded out of the construction management, inspection and testing budget.

Fund 2501	FY 2012/13 Budget
Design	\$ 116,124.00
Construction	\$ 900,000.00
Construction Management, Inspection & Testing	\$ 100,000.00
Total	\$ 1,116,124.00

A future budget amendment to appropriate additional funds for construction may be needed at the time that City Council awards the construction contract, depending on the actual construction bid amount.

STAFF RECOMMENDATION

Authorize the City Manager to award a consultant agreement for construction management, inspection and material testing services to KOA Corporation in an amount not to exceed \$105,116.38, subject to final language approval by the City Manager and City Attorney.

Attachment:

KOA Corporation Proposal



1100 Corporate Center Dr., Suite 201
Monterey Park, CA 91754
t: 323-260-4703 f: 323-260-4705
www.koacorporation.com

August 13, 2012

Dave Klotzle, P.E.
City Engineer/Public Works Director
City of Moorpark
799 Moorpark Avenue
Moorpark, CA 93021
(805) 517-6285
dklotzle@ci.moorpark.ca.us

RE: Proposal for Construction Management Services for the LA Avenue Widening Project

Dear Mr. Klotzle:

KOA Corporation ("KOA") appreciates the opportunity to submit qualifications to the City of Moorpark for Construction Management services. KOA has the expertise and resources required to assist the City of Moorpark in a timely and efficient manner. We are committed to working seamlessly with your staff and project team to ensure the successful delivery of this project. KOA has teamed with Twining, Inc. to provide materials testing services for this project.

The KOA team, our project systems, and our entire management structure are geared to providing flexible services to agencies such as yours. Descriptions of similar projects and respective references for these projects are included in our proposal. We assure that our key personnel will be assigned to the project for its duration and will not be removed or replaced by us without concurrence from the City of Moorpark. Every member of our proposed team is available to be committed to the projects assigned to us beginning the start date.

Kevin Klaus, PE, LEED AP will be the Management Contact and Project Manager for this contract. The contract would be managed through the Los Angeles office at 1100 Corporate Center Drive, Monterey Park, CA, 91754; Phone: 323.260.4703; Fax: 323.260.4705; Email: kklaus@koacorporation.com. Thank you for this opportunity to offer our services to the City of Moorpark. Should you have questions during the selection process, please contact me at 323.260.4703.

Sincerely,
KOA Corporation

A handwritten signature in black ink, appearing to read 'Kevin Klaus', written over a white background.

Kevin Klaus, PE
Vice President

Summary of Project

KOA understands the project primarily consists of widening highway 118 within the City of Moorpark from Maureen Lane to Leta Yancy Road. This project is within Caltrans right away and all Caltrans standards will be adhered to. Callegus Municipal Water District will also be performing some upgrades and capping a waterline. This work will consist of excavation, minor concrete pipe encasement, structural concrete, structural backfill, and slurry cement backfill. Once this work is complete the outside shoulder of east bound Highway 118 will be widened along with associated curb, gutter, and sidewalk improvements. There is approximately 520 tons of Class B asphalt concrete (AC) to be placed in repair areas. There is approximately 680 tons of asphalt rubberized hot mix (ARHM-GG-C) overlay to be placed on top of the newly constructed widening portion.

KOA proposes to provide construction management, construction inspection, and materials testing services for the duration involving pre-construction, construction, and construction closeout activities. We have teamed with Twining, Inc. to provide geotechnical materials testing services.

We will: 1) Finalize the bid package which includes getting the plans signed by Calleguas MWD and completing the specs/bid docs. 2) Oversee the bidding and award of the construction contract. 3) Provide construction management, inspection and materials testing.

Scope of Services

Bidding and Award: KOA Corporation will assist the City of Moorpark during the bidding and award phase of this project. Once bids are received by the City, we will review and tabulate the results to assist the City in selecting a responsive and responsible low bidder.

Safety: First and foremost, KOA always considers safety the most important issue on any construction project. KOA will recommend key safety provisions to require the contractor to have competent safety personnel and site specific safety programs employed on the projects at all times. KOA will monitor the contractor's operations for compliance with the project safety requirements

Pre-construction Conference: KOA will coordinate and conduct the Pre-Construction Meeting including notification to contractor, utility agencies, and other stakeholders, and prepare the meeting agenda and minutes.

The agenda and minutes will include the following items, at a minimum:

- Introductions of key personnel
- City responsibilities
- Safety
- Project Overview
- Confirmation of fully-executed Contract Documents and Notice to Proceed
- Establishment of Contract Time and Completion Date
- Review of Working Day definition and holiday schedule
- Common overall project goals will be identified
- Chain of communication & key contacts
- Public Relations

- The scope will be discussed and clearly defined
- Critical design elements, schedule and cost factors will be discussed
- Experience and key roles in the project will be discussed
- Past project experiences will be discussed to identify potential pitfalls
- Jurisdictional agencies and the Contractor
- Discussion of Master Schedule
- Sub-contracts
- Integration of utility coordination activities into schedule
- Documentation and tracking controls
- Change order procedures
- Scope, schedule and cost change administration, notification requirements & controls
- Submittal and RFI Process
- Identify long lead and any substitution and or-equal items
- & Testing – review call-out requirements and deputy/special & testing requirements
- Review survey for consistency with the design
- Progress payment procedures
- Labor compliance
- Rights-of-way
- Easements and special access considerations
- Placement of signs
- Questions and answers
- Action item assignments

KOA considers the pre-construction meeting as progress meeting #1. All items discussed are designated as “open” or “closed”. All open items are carried forward to subsequent progress meetings until resolved and closed. Action items are assigned a specific responsible party and a deadline for resolution. Each progress meeting is clearly minuted and distributed to all attendees and affected coordination parties. KOA will also conduct all site meetings. Pre-construction meeting and site meeting minutes will be distributed via fax and / or email to meeting participants and to courtesy recipients identified by the City.

Daily Construction Observation Reports: KOA and/or its deputy inspection subconsultant will compile daily observation reports documenting the contractor’s workforce, material and equipment used, a summary of construction activities, field problems, disputes or claims, resolutions of issues and directions given to the contractor. Completed daily reports will be transmitted to the City on a weekly basis.

Periodic Progress Reports: If desired by the City, KOA will cooperatively develop, with the Project Stakeholders, the format and information required for reports that may be required during the construction phase. These reports are typically compiled every other month and include the following information:

- Summarized report of construction activities including significant events and accomplished goals
- Construction observation reports
- Description of progress with photos to enhance the descriptions

- Description of equipment used
- Comparison of Actual vs. Planned Progress, in narrative form and bar graph form
- The latest detailed 4 Week Look Ahead Schedule submitted by the Contractor and reviewed by KOA
- Identification and discussion of current problems or pending change orders and actions taken or planned to resolve such issues
- A discussion of new short and long term goals for the project
- A comparison of Actual vs. Planned budget expenditures
- A Master Trend Log detailing potential and approved changes
- Report of progress payments made to date and invoices in process
- Labor Compliance Reports for Contractor and Subcontractor employees (if required)
- A QA/QC section prepared by the Team addressing testing and regulatory compliance issues
- An analysis of change order impacts or potential problems on schedule and budget

Submittal Processing: KOA will track all correspondence and submittals on this project. KOA will receive all Contractor submittals and review them for completeness and general conformance with the contract documents. All shop drawings, samples and other submittals received from the Contractor will be logged in and routed to the City and the Architect. Responses will be logged in and transmitted to the Contractor. Submittals will be tracked throughout the project to ensure timely response in order to avoid Contractor claims for delay. All Submittals will be expedited utilizing electronic delivery whenever possible (except for shop drawings, large format documents, etc.). Additionally, KOA will recommend key contractual requirements for the Contractor to clearly indicate submittal processing requirements in the project schedule. Submittal comments will be monitored to identify potential impacts to quality, cost or schedule, with recommended alternatives and/or solutions.

RFI's: Upon receipt, KOA will log, distribute and respond to each Request for Information (RFI) as required. It is anticipated that most will be handled upon receipt. However, in the event that the design engineer or the City staff are required to answer questions, the project manager will coordinate a timely resolution. KOA will identify potential impacts to cost or time that may result due to issues identified in RFIs, with recommended alternatives or solutions to mitigate the potential impacts.

Weekly Statement of Working Days: KOA will prepare a weekly statement of working days documenting the construction progress, time of completion, delays and time extensions, and submit to Contractor and the City on a weekly basis. The weekly statement of working days is typically discussed and agreed upon at each progress meeting and transmitted as an attachment to the minutes.

Problems and Solutions: KOA'S proactive approach serves to anticipate and expeditiously resolve field problems. Our team is well trained in problem solving. All issues are processed with a sense of urgency and presented to the City with suggested alternatives, cost and schedule impacts and recommended solutions. KOA will quickly implement the alternative, which suits the best interests of the project and the City.

KOA will effectively and expeditiously communicate with City staff, Design Consultants and the Contractor to identify conflicts construction problems, coordination issues, and will obtain the needed action and response to submittals and RFI's.

Document Tracking System: Complete and current project files shall be kept at the job site, or at a location agreeable to the City, and shall be available to the City at all times. These files will consist of the contract, correspondence relating to or modifying the contract, proposal requests, clarifications, permits, logs, reports, RFI's, field orders, change orders, claims inspection reports, test reports, etc. KOA has a detailed file indexing system for all project hard files, and a contract administration database customized for public works agency construction management for management of digital data and scanned documents. KOA has already developed customized forms, reports database structure, and work breakdown structure, well suited for this project. We will adapt our system to the specific needs of the project, to monitor, track and control the project. This detailed tracking system will enable us to provide an accurate assessment of the progress to the City with recommendations to maintain or improve adherence to the approved project schedule. The table to the right details the systems available to the project and the frequency of updates for the related processes & documents.

Schedule Review: KOA is intimately familiar with all of the main stream scheduling software utilized by the public works contracting industry, including, but not limited to Primavera P6® Suretrak® and Microsoft Project®. KOA will review the baseline construction schedule, including activity sequences and duration, schedule of submittals and schedule of delivery for products with long lead-times. The KOA team will evaluate the baseline project schedule for the following:

- Consistency with the contract schedule (completion within the contract time)
- Accurate start dates, completion dates, other dates detailed in the contract
- Any impacts of weather and change orders
- Sufficient detail – including submittal process and procurement requirements
- Sequence of construction and correct schedule logic
- Identification of the critical path and project float

The schedule will not be approved as the baseline until all discrepancies are resolved.

Schedule Control: During the progress of construction, KOA will compare the contractor's monthly schedule updates to the baseline schedule and any approved time extensions, note any shortcomings and monitor and track corrections by the Contractor to keep the Project Schedule on track. A 4- week look ahead will be required from the contractor, updated weekly and presented at the weekly construction progress meetings. This tool will keep the entire team looking one-month ahead of the project and will facilitate proactive handling of project activities and issues. If necessary, KOA will negotiate time extensions due to change orders or other delays.

Photographs: Prepare and maintain an electronic photo journal documenting the construction progress. Photos shall be taken before construction begins, during construction and upon completion of the project.

Contract Conformance: KOA's Construction Observer will visit the site on a part time basis during the normal working hours and when critical activities require to verify construction progress and to verify

that all work conforms to contract requirements. Deputy and special inspection and materials sampling and testing will be coordinated and provided as required by the final plans and specifications. KOA's will reject work that does not conform to the requirements of the contract documents and will promptly report unacceptable work to the City and contractor. Rejected work will be thoroughly documented, photographed, and tracked until repaired or replaced to the satisfaction of the City.

Coordination with City: KOA will monitor closely the work of the contractor. The contractor will be required to submit a 4-week look ahead schedule at the weekly meetings. This is a very effective tool in helping to coordinate the construction operation, particularly in relation any interface operations with the City's activities. KOA will assist the City to minimize disruption to both City and construction operations.

Safe Conditions: KOA will monitor project work and adjacent areas for unsafe conditions, promptly require corrective measures to be addressed by the Contractor in compliance with the contract documents and report such issues and corrective measures taken to the City.

SWPPP: KOA will enforce all provisions of the Storm Water Pollution Prevention Plan. At a minimum SWPPP requirements will be monitored and a specific SWPPP Checklist will be compiled. Any deficiencies noted will be addressed with the contractor for immediate remedy. Upon a weather report of 40% (or higher) expectancy of rain, a site walk will be conducted to ensure that SWPPP measures are in place and well maintained.

Materials and Workmanship: KOA will recommend approval of materials and workmanship that meet the contract requirements, in coordination with the authority of the consulting engineer, architect, fire inspector, deputy inspector, or other authorized representative or regulatory authorities having jurisdiction.

Documentation Interpretation & Technical Assistance: KOA will perform the coordination and expediting between the contractor, design team and City Staff to clarify any questions for interpretation of the construction documents. Timely, firm and fair determinations will be processed to minimize cost and time impacts to the project.

QA/QC: KOA will enforce the quality assurance plan, in conformance with the City's Quality Assurance Manual. KOA will coordinate QA/QC activities on a daily basis and review activities as they happen, to make sure that QA/QC procedures are followed and deficiencies are resolved in a timely and efficient manner. The CM will maintain a chronological log of all records.

Special, Deputy and Soils Inspection and Materials Testing:

KOA has a working relationship with most of the local soils, deputy inspection and material testing firms. Upon determination of the specific special, deputy and soils inspection and testing requirements, KOA will develop the required scope of services engage the necessary services for the QC on the project.

An allowance for special, deputy and soils inspection and testing services is recommended in the proposed fee. The actual amount will be coordinated and determined upon completion of the plans and

specifications, and coordination with building and safety for determination of the final requirements for the project.

Testing and Observations: KOA will coordinate laboratory, jobsite, offsite testing of construction materials and required observations per construction documents, construction codes, and Jurisdictional Agencies. KOA will implement established procedures for testing as required per the construction documents. KOA will monitor testing services, track documentation and record testing results in weekly construction progress meetings. When necessary, KOA will require and track that corrective measures are implemented and re-inspected to verify acceptable completion.

Change Orders: KOA will establish, implement and coordinate systems for processing all contract change orders. Each issue, which is identified as a potential change to the design, scope, cost or contract time will generate change notice. KOA will determine whether or not a change notice should be considered. The plans and specifications will be reviewed against the change notice. If the issue does not appear to be included in the plans or specifications, a Request for Quotation (RFQ) will be sent to the Contractor. Any credits for work deleted as a result of the change will be required at this time as well. The contractor's response to the RFQ will be evaluated for reasonableness and completeness. KOA will maintain a Trend Log, listing potential changes as identified, either formally or informally. This Trend Log shall be used such that potential change items are not overlooked or deferred until the end of the job. KOA will prepare independent cost estimates as required for contract change orders. Upon approval by the City, KOA will prepare, log and process change orders for full execution, and administer their implementation. Once fully executed, KOA will review the timely completion of the work and coordinate inclusion of the change order in the appropriate payment application.

Change Management/Claims resolution: KOA will implement its time tested claims management process to minimize changes to the project and avoid claims such that the project can be quickly and successfully closed out. KOA has done so on over 400 public projects valued at approximately \$1 billion with no unresolved claims. The basis for KOA procedures is a well organized documentation system, a keen understanding of the construction process, exceptionally qualified staff and fair and firm negotiations. KOA will not defer difficult issues and will process only change issues that have been analyzed and determined to have merit. Those items will only be recommended for consideration when the most reasonable cost and time has been negotiated and all alternatives to avoid the impact have been resolved.

Daily Extra Work Reports: KOA will verify and sign contractor's daily extra work reports documenting force account (time & materials) work. In particular, KOA will monitor that only appropriate worker classifications necessary for approved time and materials work is included on extra work reports. Any inappropriate workforce and/or equipment charges will be promptly rejected and removed from extra work reports.

Progress Payment Processing: A cost control system, based on the Contractor's schedule of values, approved change orders and the contract amount shall be developed and implemented to monitor progress costs. Monthly cost reports will be submitted to the City as a component of the Monthly Progress Report.

KOA will review the payment applications submitted by the contractor and determine whether the amount requested reflects the progress of the contractor's work. Appropriate adjustments to each payment application will be required by the contractor. When the payment application is acceptable and all backup documentation is verified (certified payrolls, lien releases, etc.), KOA will prepare and forward to the City a Progress Payment Report. The Report shall state the total contract price, payments to date, current payment requested, retainage and actual amounts owed for the current period. The KOA team is experienced evaluating complex pay applications. It is critical to the City's best interest that payment application review be performed accurately and prudently to maintain the prime and subcontractor incentives to perform on the projects.

Construction Meetings, Schedule and Conduct Field Meetings: The following meetings will be held on site:

Periodic Progress Meetings with agencies, design team and staff to discuss all data included in the monthly progress reports and focus on the following items:

- Progress during the period
- Major decisions made
- Planned vs. actual schedule
- Upcoming work schedule
- Current or unresolved problems
- Anticipated or pending change orders
- Impacts of problems or change orders on schedule and budget
- Discussion of new goals
- Planned vs. actual budget analysis
- Scheduled concurrent with a weekly meeting to save time and cost

Weekly Progress Meetings will be mandatory for the Contractor and staff, and optional or on an as needed basis for City and design team staff. All parties are always invited to attend in person or via remote. Meeting minutes are distributed to all team members whether in attendance or not. Discussions will focus on the following items:

- Contractor's detailed 4 week look-ahead schedule
- Progress and major decisions during the last week
- Update of unresolved items from previous meetings
- Status of submittals and change orders

Special Meetings will be scheduled as needed to discuss important issues or which require detailed discussion or review of plans and specifications. These meetings will follow the weekly meeting to reduce trips, if issues are not urgent.

Written Instruction: KOA will Issue written instructions to contractor regarding routine matters and/or follow-up of verbal instructions as necessary to properly document project issues.

Plans, Specs and As-Builts: At a minimum, KOA will periodically review the Contractor's as-built updates on the approved job plan set, identify missing items and require the Contractor to keep as-built records up to date throughout the project. At the City's option KOA will keep its own set of as-built plans which will note the location of subsurface utilities encountered and / or installed, identify where any design or field changes were required (utilizing the corresponding RFI and / or change order numbers)

and note the location of critical building components that are covered by finish work. At the end of the project the final as-built plans are submitted the City within thirty days of construction completion.

Pre-Final Inspection: The Construction Manager and Construction Observer will perform the final job walk and prepare the punchlist (deficiency list). KOA will coordinate and observe completion of required corrections. Should the Contractor lag on a portion of the completion of project work, KOA will estimate the value of the incomplete items and recommend specific retainage in accordance with the contract to preserve the City's interest. If necessary, a change order will be recommended for approval for completion of the remaining work such that the City may file the notice of completion and start the time after which stop notices and/or claims are no longer valid.

KOA will schedule and perform quality assurance materials testing to verify compliance of the work with the contract documents. We will review test reports submitted by others to substantiate compliance and ensure that Certificates of Compliance or source release tags are furnished by the Contractor along with the applicable delivered materials at the project site.

Final Inspection: All corrections must be made before KOA recommends processing of the "Notice of Completion". KOA is noted for our attention to detail. Not only have we excelled at closing out our own projects, but we have been requested to and successfully closed out problem client projects where our services were not initially utilized.

Upon completion of the punchlist and final sign off by all project stakeholders, KOA will make recommendation to City regarding Contractors final progress payment request and prepare final progress payment report for submission to City.

Delivery of As-Builts and close-out documents: KOA will review "as-constructed" plans and prepare "as-constructed" reports. KOA will assist the Contractor in maintaining a field set of "as-constructed" plans to be updated daily and delivered to the City upon project completion. KOA will continually document changed field conditions and not rely on the Contractor to document "as-constructed" conditions. The will report and photograph field condition changes. The CM will document and keep these "as-constructed" conditions on plans in his office. KOA will review the Contractor's submittal of "as-constructed" conditions and compare this submittal to KOA's own documentation. Discrepancies will be discussed, resolved and recorded. Completed "as-constructed" plans will be submitted to the City.

KOA will enforce the provisions of the specifications to require the Contractor to submit well coordinated operations and maintenance manuals, warranties & guarantees, bonds, extra stock and/or other items required by the contract documents such that a timely close-out of the project is implemented.

KOA will perform closeout duties including final organization of project files and submit to the City for final approval, and assist with the filing of the notice of completion and release of retention.

Materials Testing (Twining, Inc.)

Twining services will consist of soils compaction testing asphalt placement inspection, compaction testing of the ARHM, asphalt plant inspection during ARHM production, compaction testing of the water line trench backfill, and concrete testing. The following is a detailed description of the services proposed to be provided:

- Engineering review of materials submittals for use on the project in accordance with the project special provisions and the Caltrans standard specifications.
- Administer the HMA submittal process in accordance with Caltrans Section 39 requirements and the project special provisions.
- A technician will monitor the structural backfill of the waterline improvements work and perform compaction testing. The cement slurry will be tested for compressive strength and acceptance.
- A technician will monitor the removal and replacement of widening areas and inspect the subgrade. A sample of the subgrade material and aggregate base will be tested for maximum density and optimum moisture. In-Situ compaction tests will be performed on the subgrade and base material for specification compliance.
- The placement inspector will monitor temperature, thickness, uniformity, workmanship, and monitor compaction. During the placement of the ARHM, Twining will obtain one asphalt sample for approximately every 750 tons, not less than 1 per day, placed per CT 125. The material will be tested for asphalt content and gradation. One sample will be obtained for determination of stability and percent air voids. Volumetric calculations may also be provided when requested for information only.
- The plant inspector will sample the aggregate at the plant at approximately 750 ton intervals, not less than 1 per day, and will communicate to the placement inspector the specific sampling milestone. The plant inspector will also monitor the rubber binder blending and reaction process.
- Records will be maintained related to mixing temperatures, rubber binder blending temperatures, reaction temperatures, and reaction time. The plant inspector will also verify that the binder
- viscosity is within the specification range prior to it being mixed with the aggregates at the plant.
- Concrete specimens will be prepared in the field. These samples will be returned to our laboratory for curing and tested at 7- and 28- days for compressive strength in accordance with ASTM C39.

KEVIN KLAUS, P.E., LEED® AP
SENIOR ENGINEER

PROFESSIONAL EXPERIENCE

Mr. Klaus has 15 years of experience, with an emphasis on public works projects. He manages multiple projects and multiple deadlines, and has a history of improving project results by utilizing innovative and time saving techniques. His projects include roadway rehabilitation, street design, parking lots, ADA requirements, drainage, grading, storm water management (SUSMP and SWPPP), utilities, and land development projects both in the private and public sectors. Mr. Klaus works in multiple capacities as project manager, project engineer, lead engineer, design engineer, and construction engineer in both the civil and construction management disciplines. Mr. Klaus is a Registered Civil Engineer in California, Idaho and Colorado, and has his Bachelor of Science degree in Civil Engineering from Loyola Marymount University.

North Hills Parkway Street Design Services, Phase I, Moorpark, California (2010-present)

Design Project Manager. The KOA Team is preparing a complete PS&E design package to the City of Moorpark for the construction of Phase I of North Hills Parkway. Mr. Klaus is currently the acting project manager working to

complete the PS&E design package for the construction of Phase I of the North Hills Parkway. The proposed arterial road Parkway as proposed in the feasibility study dated September 2007 will extend to the north from Los Angeles Avenue near the western City boundary and continue to the east for a total project length of approximately 3 miles. Among other goals, the project involves the widening and safety upgrades of an at-grade UPRR crossing to improve traffic circulation within the City, and the construction of a railroad grade separation structure.

Firestone and Garfield Intersection Improvements, South Gate, California

Civil Engineer and Construction Manager. This project involved roadway improvements and widening at the intersection of Firestone Boulevard and Garfield Avenue, two heavily traveled major arterials (level of service "F"), in the City of South Gate. The work included removal of the deteriorated asphalt pavement and full reconstruction of an 18" PCC roadway section, widening of southbound Garfield Avenue by 12 feet north of the intersection and 5 feet south of the intersection, traffic signal upgrades, and ADA improvements. Due to the extraordinarily high traffic impacts of this project, specifically large trucks, on the two arterials involved and the 710 freeway immediately adjacent, the construction schedule was accelerated to 60 calendar days and work continued day and night. This project was successfully completed on time and on budget. Services provided by KOA staff included: planning, infrastructure design, cost estimating, construction management, and project close out.

Education

B.S. Civil Engineering, Loyola Marymount University (1997)

Year Entered Profession

1997

Year Started with Firm

2001

Registrations

Professional Engineer (Civil) CA #61403 (2001)

Professional Engineer ID #12434 (2008)

Professional Engineer CO #40458 (2008)

LEED® Accredited Professional (2009)

Professional Affiliations

American Public Works Association

Fire Station #12, Long Beach, California

Construction Manager. KOA/CBM Consulting performed Construction Management and Inspection for this brand new 12,500 sf fire station, 5200 sf emergency resource center and 125 foot wireless communications tower in the City of Long Beach. This \$6.5m project is located on a 1.2 acre lot and included demolition of existing structures and parking lots, as well as off-site improvements and utility rerouting.

Spring Street Revitalization Corridor, Signal Hill, California

Design Engineer, Assistant CM/Inspector. Spring Street is a major east-west arterial in the Cities of Long Beach and Signal Hill, California. Prior to this improvement project, nearly one mile of Spring Street was a two lane roadway without curb and gutter, sidewalks, or drainage facilities. The section immediately east of Atlantic Ave had a highly undesirable, uphill grade of 15%. Now that the revitalization is complete, Spring Street is a fully developed, 5 lane arterial. The crest of the roadway east of Atlantic Ave was lowered by 17 feet and re-graded to 6%. The asphalt intersection at Atlantic Ave and Spring St was fully reconstructed in concrete pavement. Other work included undergrounding of 2600 linear feet of SCE transmission and distribution lines, parkway improvements, traffic signal upgrades, and relocating existing gas, oil, water, sewer and other utility lines.

Arcadia Huntington Drive Capacity Improvements Project, Arcadia, California (2008-2010)

Project Manager. KOA led a team of consultants to analyze the traffic congestion at three project intersections, determine feasible capacity improvements, and prepare the plans, specifications, and estimates to construct these improvements. The scope of work included analyzing traffic queues using Synchro, preparation of conceptual alternatives, topographic survey, right-of-way verification, street improvement plans, traffic signal plans, signing and striping plans, landscaping and irrigation plans, street lighting plans, utility coordination, right-of-way acquisition and permits to enter, and construction engineering support services. Mr. Klaus served as project manager for this project

Washington Boulevard Realignment, Culver City, California

Design Engineer/Project Manager. This project involved the abandonment of the section of Washington Boulevard at Culver Boulevard and widening of the adjacent section of Ince Boulevard to accommodate the increased traffic load. This major undertaking by the City of Culver City will allow for the development of the parcel between Washington Boulevard and Culver Boulevard into a mixed use office/retail building and the expansion of the Culver Town Park.

Carson Street Sewer Replacement and Street Rehabilitation Project, Culver City, California

Design Engineer. This project was completed as part of CBM's on call Design Engineering contract with Culver City. The design included the replacement of a deteriorated VCP sewer line with a new PVC sewer line. It also included street rehabilitation plans as a separate plan set. The street rehabilitation included new curb, gutter, and sidewalk, as well as replacement and reprofiling of the asphalt in the road. The street is lined with mature ficus trees that have destroyed the majority of the existing concrete improvements and caused major challenges in the new grading plan. Construction of this project was successfully completed in the fall of 2008.

CRISPEN COLE
Senior Construction Inspector

Professional Experience

Mr. Cole has over 35 years of varied construction and construction inspection experience including bridges, rail, piers, marinas, public facilities, water, sewer, & storm drain lines, and streets and sidewalks. Cris performed numerous inspection services with CBM for Streets & Sidewalks, and Water & Sewer. In addition, he is our key inspector for Bridge, Rail and Pier projects. Mr. Cole is certified as Competent Person Underground.

Project Experience

Torrance Blvd Rehabilitation, T-43/44, Torrance, CA: Construction Observer. The scope of work consisted of the grinding and removal of existing pavement, concrete and asphalt paving, pavement slurry seal, removal and reconstruction of sections of the street, construction of curb and gutter, sidewalks, driveways, ADA ramps, irrigation and landscaping of existing medians, striping and adjustment of utilities and other work. In addition to the above the project involved the removal and replacement of 50,500 SF of residential sidewalks, and the removal and replacement of cross gutters at 9 intersections.

Residential & Arterial Overlay 2011, Thousand Oaks, CA: Construction Observer. CBM provided complete construction management and inspection services for this \$7 million residential and arterial pavement rehabilitation project. Work included repair of concrete curb, gutter, sidewalk, cross gutters, and driveways; pavement repairs; edge grinding; asphalt rubber hot mix overlay; striping and markings; and traffic signal loop detectors. Construction Cost \$7,000,000.

Arterial Roads Rehabilitation Project Fiscal Year 2010-2011, Rancho Palos Verdes, CA: Assistant Project Manager. Prepared Plans, Specifications and Estimate for the rehabilitation of Palos Verdes (PV) Drive South in the City of Rancho Palos Verdes. PV Drive South is a challenging arterial highway winding along the bluffs of the Palos Verdes peninsula overlooking the Pacific Ocean. The street varies from a fully developed 4 lane divided highway with bicycle path, to a 2 lane highway over unstable creeping subgrade soils. Rehabilitation strategies included selective removal and replacement (R&R) areas, asphalt rubber hot mix (ARHM) and conventional asphalt overlays, and microsurface application. Work included the relocation and improvement of bus pads and shelters, retaining walls, PCC repairs, striping and markings. A comprehensive traffic sign field review and replacement plan was prepared to bring all traffic signs into uniformity and conformance with MUTCD requirements. Construction Cost \$2,000,000.

Education

American University in Beirut
A.A. Business Administration, Northern
Arizona University (1975)

Year Entered Profession

1971

Year started with Firm

2008

Certifications

Qualified SWPPP Practitioner (QSP)
#22536

Certified Erosion, Sediment and Storm
Water Inspector (CESSWI) #2602

Competent Person Underground Certified

Valley Drive & Aviation Blvd, Manhattan Beach, CA: Construction Inspector. CBM provided Construction Engineering and Project Management services for the City of Manhattan Beach for these two projects including rehabilitation of Aviation Boulevard from Marine Avenue to Manhattan Beach Boulevard, and Valley Drive from 15th Street to Sepulveda Boulevard. The work included asphalt pavement milling and overlay, localized reconstruction, utility adjustments, striping and markings, and other incidental work. Both of these projects were funded with ARRA grants. CBM performed complete management throughout construction such that the project was completed in accordance with federal-aid requirements. The scope of work included daily record keeping and inspection, weekly meeting notes and reports, photographs, change order and Request for Information processing, DBE/UDBE monitoring, Quality Assurance Program (QAP) implementation, City and utility coordination, and employee interviews.

Crenshaw Blvd, Torrance, CA: Construction Inspector. Street improvements to Crenshaw Blvd from Maricopa Street to Sepulveda Boulevard. Specific improvements include AC pavement reconstruction, repair, and overlay; replacement of damaged curb, gutter, and sidewalks; and construction of ADA curb access ramps. The project will be constructed with, and in compliance with, federal-aid American Recovery and Reinvestment Act (ARRA) of 2009.

Intersection Improvements at Firestone & Garfield, City of South Gate, CA: Construction Inspector. This project involved roadway improvements and widening at the intersection of Firestone Blvd and Garfield Ave, two heavily traveled major arterials (level of service "F"), in the City of South Gate. The work included removal of the deteriorated asphalt pavement and full reconstruction of an 18" PCC roadway section, widening of southbound Garfield Ave by 12 feet north of the intersection and 5 feet south of the intersection, traffic signal upgrades, and ADA improvements. Construction Cost \$1,750,000.

Palomino Ave, Norco, CA: Public Works Road Construction, Shawnan Engineering. Widening and reconstruction. Project includes excavation through rock hillside and construction of Cal Tran's specification retaining wall.

Market Street, Riverside, CA: Public Works Road Construction, Shawnan Engineering. Complete removal and reconstruction and widening. Project includes dry stack retaining walls to 18' high, curb, gutter, storm drain and L & I.

West Lake Village, Potrero Creek Bridge Project, Thousand Oaks, CA: Superintendent / Structural, L.A. Engineering. Removal and reconstruction of existing bridge in two phases while maintaining two way traffic. Project includes driven friction pile, excavation in environmentally sensitive waterway, demolition and construction of CIP box Beam Bridge and new 12" water main, communication and electricity inside bridge.



Chris Gerber, *Vice President, Infrastructure Division*

Chris Gerber brings over 14 years of technical expertise managing quality assurance and quality control services for high profile infrastructure projects throughout the State of California. He has specialized experience encompassing all aspects of hot mix asphalt pavement construction. He has in-depth knowledge and understanding of engineering, inspection, and testing consulting on various infrastructure facilities including pavements, bridges, airfields, waste water facilities, light rail, and port projects. Mr. Gerber served as a partnering member with Caltrans on the Rubberized Asphalt Concrete Pilot Warranty project. He also participated as co-chair of the Caltrans expert task group and was warranted sole responsibility for the quality of over two and a half million tons of hot mix asphalt over several years.

Current Licenses Held

- Troxler Radiation Safety
- Radiation Safety Officer
- Asphalt Institute's Professional Development Certification
- FAA & Asphalt Institute Airport Pavement Workshop 2003
- Course CS-921 Use of Recycled Materials for Pavement Construction by Dr. Jon A. Epps, P.E.
- Performance Graded Asphalt Binder by Dr. Jon A. Epps, P.E.
- Asphalt Pavement Technologists

Education

Ventura College, Construction Technology

Project Experience

- POLB, Ocean Boulevard Improvement Project
- LAWA, LAX Crossfield Taxiway
- LAWA, LAX Taxiway S Improvements
- LAWA, LAX Runway 25L Reconstruction and Center Taxiway Relocation
- Route 710 Rehabilitation, Long Beach, California
- City of Thousand Oaks Annual Rubberized Asphalt Rehabilitation Program, Thousand Oaks, California
- Kiewit I-405 Sepulveda Pass Widening
- Caltrans District 8 On-Call
- Caltrans 08-0N7004 Hwy 18, Apple Valley
- RCTC I-215 Widening, Murrieta
- City of Santa Clarita 2010-2011 Overlay and Slurry Seal Program
- Caltrans Contract 08-4697V4 Route 138 and Route 2 Phelan, California

Project Experience Summaries

- **RCTC, I-215 South Widening:** Twining is providing Quality Assurance Materials Testing and Inspection services. Testing is performing in strict accordance with the Caltrans Construction Manual, Caltrans Test Methods, Caltrans Independent Assurance Manual, Standard Specifications (May 2006) and the Project Special Provisions. From preconstruction activities throughout the course of construction Twining acts as the materials engineer responsible for submittal reviews and approval of all construction materials that will be used on the project. Twining is providing a Quality Assurance (QA) program in accordance with the Caltrans construction manual as well as the project

specifications. The QA program will be administered by Twining through the duration the project. Mr. Gerber is serving as Project Manager for this project, providing oversight to all aspects of construction testing and inspection.

- **RCTC, Cantu Galleano Ranch Road Interchange Improvements:** The project consisted of a two-span continuous 2.80 meter deep cast-in-place pre-stressed concrete box girder bridge. Construction included northbound and southbound loop on-ramps, northbound off-ramp, and southbound off and on-ramps; and the freeway was also widened in both directions to accommodate the new ramps. Mr. Gerber worked as the Quality Control manager for this project. His daily duties consisted of supervising all QC services including compaction testing, structural steel tension and bend, asphalt pavement inspection, and project AC pay management. Mr. Gerber also acted as the liaison regarding material issues between contractor, construction manager and Caltrans.
- **City of Thousand Oaks Annual Rubberized Asphalt Rehabilitation Program, Thousand Oaks, California:** The City of Thousand Oaks has been a pioneer in the use of asphalt rubber pavements and was among the first local agencies to utilize the material. Over 75% of the city's streets have been overlaid with asphalt rubber since the early 1980's. There was a period of time in the late 1980's when the City experienced premature reflective cracking and pavement raveling. Along with the support of the Rubber Pavement Association and Applied Research Associates, Mr. Gerber performed a pavement investigation comparing previous successful projects versus the poor performing projects. Based on the research information derived from the study, Mr. Gerber assisted the City in rewriting their project specifications, implemented a mix design verification program, and implemented a proactive quality assurance program.
- **Caltrans Contract 08-4697V4 Route 138 and Route 2 Phelan, California** This project consists of the complete reconstruction and widening of approximately 10 miles of Route 138 in San Bernardino County. The project calls for 133,000 metric tons of QC/QA Type C PBA-6A asphalt concrete totaling nearly \$160 million in construction cost. The project was the first in the state to utilize the newly rewritten Type C specification on a QC/QA project. Mr. Gerber has acted as the Quality Control Manager. He has worked with the laboratory to design a Type C PBA-6A mix with 0.5% antistripping utilizing various aggregates exceeding the specification requirements and has provided an economically feasible mix for the contractor to produce. Mr. Gerber has also coordinated all field QC activities including proper sampling and quartering of samples, placement inspection, compaction testing, plant inspection, and pavement profilograph testing. Mr. Gerber has worked diligently with Caltrans to identify future testing improvements to ensure repeatability in results between two laboratories.
- **POLB, Ocean Boulevard Improvement Project:** The Ocean Boulevard/Terminal Island Freeway interchange program was completed in early 2007. As a result of this project included easing congestion and improving air quality by eliminating two Terminal Island traffic signals – at Ocean and the TI Freeway, and Ocean and Pier S Avenue. Ocean Boulevard will be raised nearly 20 feet so that east-west traffic can travel non-stop between the Gerald Desmond Bridge and Navy Way. Twining performed pavement profiling services and quality control for smoothness. Mr. Gerber provided Quality Assurance Management services for the successful delivery of this project.
- **LAWA, LAX Crossfield Taxiway:** Mr. Gerber is serving as Asphalt Pavement Technical Advisor on this project. His responsibilities have included providing oversight of quality control services including paving laboratory testing, field sampling, batch plant sampling, materials density testing, and inspection. This project includes constructing portland cement concrete (PCC) and asphalt concrete pavement, removing existing deteriorated concrete and asphalt pavement and improving storm drains. The project will also realign the existing World Way West road and construct two bridges over it.
- **LAWA, LAX Taxiway S Improvements:** This taxiway improvement includes demolishing several existing tenant buildings and asphalt and concrete apron and taxiway pavement. Twining is providing quality control testing and inspection services for the construction of a new portland cement concrete (PCC) taxiway and apron pavement as well as other miscellaneous site work. Mr. Gerber is serving as Project Technical Advisor for quality control services.
- **LAWA, LAX Runway 25L Reconstruction and Center Taxiway Relocation:** Mr. Gerber served as Project Manager for quality control/quality assurance services and as the assistant Quality Program Administrator for this project. His responsibilities included oversight of all aspects of quality control/quality assurance services including paving laboratory testing, field sampling, batch plant sampling, materials density testing, and inspection.



KOA CORPORATION
CBM Consulting

Fee Estimate

KOA will perform the work specified in the work scope above as shown in the enclosed fee table. The estimate below is based on a construction period of seventy (70) working days.

TASK / DELIVERABLE					
Hourly Rates (Fully Burdened):					
Bid Administration					
Finalize Bid Package	32			32	\$ 5,120.00
Oversee Bidding and Award to Contractor		8		8	\$ 720.00
Clerical Support			10	10	\$ 700.00
Pre-Construction Phase					
Construction Management	16			16	\$ 2,560.00
Construction Inspection		24		24	\$ 2,160.00
Clerical Support			1	1	\$ 70.00
Construction Phase					
Construction Management (8 hours per week)	112			112	\$ 17,920.00
Construction Inspection (70 working days)		560		560	\$ 50,400.00
Clerical Support			7	7	\$ 490.00
Materials Testing & Inspection (Twining)				0	\$ 13,618.18
Construction Closeout					
Construction Management	16			16	\$ 2,560.00
Construction Inspection		40		40	\$ 3,600.00
Clerical Support			1	1	\$ 70.00
Reimbursables (Mileage)					\$ 5,128.20
SUBTOTAL					\$105,116
TOTAL HOURS	176	632	19	827	
TOTAL FEE AMOUNT	\$ 28,160.00	\$ 56,880.00	\$ 1,330.00	\$ 18,746.38	\$ 105,116.38

If changes occur in the work scope or level of effort, or if our work is suspended for more than 180 days due to any circumstances beyond KOA's control, we reserve the right to revise the work scope, budget and schedule to reflect current conditions. Such revisions will be effected through mutually agreed upon amendments or modifications to this agreement.

These rates are dependant on Prevailing Wage rates as determined by the Director of the Department of Industrial Relations. Interim changes will negate these rates and an adjusted fee schedule will be issued, and shall apply should this occur.

Any work in excess of eight hours in one workday and any work in excess of 40 hours in one workweek and the first eight hours worked on the seventh day of work in any one workweek shall be at the rate of one and one-half times the regular rate of pay. Any work in excess of 12 hours in one day and any work in excess of eight hours on any seventh day of a workweek shall be paid no less than twice the regular rate of pay.



KOA CORPORATION
CBM Consulting

The proposal is valid for a ninety (90) day period.

Rates are subject to an annual 5% adjustment.

January 1, 2013

Expenses

Project expenses are billed at cost plus ten percent (10%). Project expenses include: Non-commuter automobile mileage (\$0.555 per mile), postage and special courier expenses, subsistence, reproduction, project related telephone, subcontractor services and other direct project expenses as requested by the client. Should the client desire, phone and mileage may be included in an hourly rate, which shall be negotiated and slightly higher than the billable rates indicated above.

Non-Solicitation

By accepting this proposal, Client agrees not to solicit KOA employees for direct employment with client without the explicit written approval of KOA for a period of two (2) years following employee's termination of employment with KOA. Should client desire to arrange for direct employment of KOA's employment, an equitable fee will be agreed to by and between KOA and client for KOA's costs for recruitment, training overhead and other costs associated with employee turnover.

Invoicing

Invoices will be submitted monthly, based upon our estimated percentage of completion. Accounts are past due after thirty (30) days. All work will be immediately stopped if any invoice is unpaid for sixty (60) days or more, and such delinquent invoice payments may be subject to a late payment penalty of 1.5 percent (1.5%) per month and/or turned over to a collections agency at our discretion.

Termination

The Client or KOA may terminate this agreement by giving the other party ten (10) days written notice of such termination. KOA shall receive fee payments from the Client proportionate to the services completed as of the date of termination. The Client will be entitled to receive deliverables at the level of completion relative to the fee payments received by KOA. All outstanding valid invoices shall be paid to KOA.

Insurance

KOA is fully able to meet the insurance requirements of this project. The firm has coverage in the following areas: Professional Liability (\$1 million per claim, \$2 million aggregate), Automobile Liability (\$2 million) and General Liability (\$5 million). Our Worker's Compensation coverage meets the insurance requirements of California State law.

Indemnification

KOA and the Client mutually agree to the fullest extent permitted by law, to indemnify and hold each other harmless from any and all damage, liability or cost, including reasonable attorney's fees and cost of defense arising from their own negligent acts, errors, and omissions in the performance of their services under this agreement, to the extent that each party is responsible for such damages, liabilities, and costs on a comparative basis of fault.

