Statement of Qualifications

PREPARED FOR THE

STANISLAUS COUNTY
DEPARTMENT OF PUBLIC WORKS

for
ALL-INCLUSIVE PA&ED SERVICES
on the
NORTH COUNTY CORRIDOR PROJECT

RAJAPPAN & MEYER
CONSULTING ENGINEERS

LSA
LSA ASSOCIATES, INC.

with support from

BENDER ROSENTHAL
CRAWFORD ASSOCIATES
FEHR & PEERS TRANSPORTATION CONSULTANTS
GRAY BOWEN
JUDITH BUETHE COMMUNICATIONS
MHA ASSOCIATES
STANTEC CONSULTANTS

AUGUST 2, 2013

RAJAPPAN & MEYER
CONSULTING ENGINEERS

August 2, 2013

Mr. Colt Esenwein, P.E.
Stanislaus County Department of Public Works
1716 Morgan Road
Modesto, CA 95358

RE: LETTER OF INTEREST AND STATEMENT OF QUALIFICATIONS
FOR ALL-INCLUSIVE PA&ED SERVICES
ON THE NORTH COUNTY CORRIDOR PROJECT

Dear Mr. Esenwein:

Rajappan & Meyer Consulting Engineers, Inc. (R&M), in association with LSA Associates, Inc. (LSA), is pleased to offer our Letter of Interest and Statement of Qualifications to provide consulting services for the completion of PA&ED on the North County Corridor (NCC) Project. We understand the importance of NCC to Stanislaus County and the communities of Oakdale and Riverbank, and we feel the County deserves a highly skilled, reliable and dedicated consulting team to deliver the project. We feel we are that consultant team the County is seeking, and we look forward to this opportunity to continue our strong working relationship with the Public Works Department. Our team leaders, similar project experience, local knowledge and reputation with Caltrans will all combine to ensure a successful completion of the PA&ED phase.

THE RIGHT TEAM

R&M is a California Corporation in business since 1994, with our exclusive focus on transportation project development for public agencies. We have been working on major projects in Stanislaus and San Joaquin Counties since 1998, starting with the award-winning $15 million Route 99/Jack Tone Road interchange in Ripon, and most recently, the $420 million I-5 North Stockton Widening Project, which involves widening of 22 bridges and eight miles of freeway.

R&M will be the prime consultant for the NCC PA&ED effort, responsible for program management, civil and structural engineering, drainage and stormwater, railroad coordination, Project Report and Caltrans approvals. Our primary partner in this effort will be LSA, to lead the environmental evaluation, documentation and clearance efforts. LSA has prepared every major environmental document for R&M in San Joaquin and Stanislaus Counties, and brings 30 years of EIR/EIS experience from major corridor projects throughout California. Our partnership has prepared over 20 environmental and project approval documents in California, and has an outstanding reputation for high quality and responsive services with Caltrans Central Region Environmental Branch and District 10.

R&M's sole business is transportation (highway, bridge) project planning, development and design. We are the most experienced transportation planning and design firm in San Joaquin County and Stanislaus County, having been the Prime Consultant for over approvals and design of $1 billion in local road, highway and bridge projects. Some of these include:

- *I-5 North Stockton Corridor Widening Project - City of Stockton (PSR, PA&ED, PS&E) - $450 m.*
- *Route 99/Arch Road interchange - San Joaquin COG (PSR, PA&ED, PS&E) - $40 m.*
- *Route 99/Jack Tone Road Interchange –City of Ripon (PSR, PA&ED, PS&E) - $ 20m.*
- *I-205 Auxiliary Lanes – SJCOG – (PSR, PA&ED, PS&E) $20 m.*
- *Route 4 Crosstown Freeway Extension – SJCOG (PS&E) - $110 m.*
- *Route 120/McKinley Avenue interchange – City of Manteca (PA&ED, PS&E) – $ 40 m.*
- *I-205/Lammers Interchange - City of Tracy (PSR, PA&ED) – $65 m.*
- *Hammett Road/SR 99 Interchange – Stanislaus County (PSR, PA&ED, PS&E) - $45 m.*
- *Kiernan Avenue/SR 99 Interchange – Stanislaus County (PSR, PA&ED, PS&E) - $40 m.*
- *In addition, construction was recently finished on the $40 million Willow Road Extension and new interchange with US-101 (a project very similar to new alignment features of the North County Corridor) in San Luis Obispo County (District 5). R&M and LSA prepared the EIR, EA, PR and PS&E.*

We will be supported by seven other specialty subconsultants, the majority of whom have worked closely with R&M and LSA in the past on a variety of projects to provide superior project deliverables from environmental clearance to right of way acquisition and final design. Team members and their attributes include:

- *Bender Rosenthal, Inc., Sacramento, to evaluate right of way impacts and prepare Right of Way Data Sheets and estimates. BRI is the right of way consultant to R&M on the Route 4 Freeway Extension Project in Stockton, as well the SR 99/Kiernan and Hammett Interchanges.*

- *Crawford Associates, Modesto, for geotechnical and hazardous materials reports. Principals at Crawford Associates were responsible for the geotechnical and hazardous materials reports for the North County Corridor Project.*

- *Fehr & Peers Transportation Consultants, Walnut Creek, for traffic forecasts, traffic operations and analysis, electrical engineering and TMP Data Sheet. F&P has been responsible for all traffic forecasts and operations evaluations for the NCC Project. In addition, F&P is the traffic consultant to R&M on virtually all our work in San Joaquin and Stanislaus Counties.*

- *Gray-Bowen, Walnut Creek, for funding evaluations and project positioning. Although funding has been promised by CTC to the North County Corridor it will be advantageous to have Gray-Bowen as an advocate to secure final design, right of way and construction funding in the next two years. They have provided similar services on the Atwater Merced Expressway in Merced County, SR 219 in Stanislaus County, the SR 49 Bypass in Amador County, and the SR 4 Bypass in Calaveras County.*

- *Judith Buethe Communications (JBC), Stockton, for public outreach and consensus building. JBC has been responsible for all public outreach and communications on the North County Corridor Project to date. In addition, JBC is the public outreach consultant to R&M on all our work in San Joaquin and Stanislaus Counties.*

- *Martin Hsu Associates (MHA), Desert Hot Springs, for value analysis and reporting. MHA has been responsible for all Value Analysis on R&M's projects in San Joaquin and Stanislaus Counties including the I-205/Lammers interchange in Tracy, the I-5 North Stockton Corridor, and the SR-99/Kiernan Avenue Interchange for Stanislaus County.*

- *Stantec, Inc., Modesto, for surveying, mapping, right of way engineering, utility investigations and landscape/aesthetics. Stantec is currently the survey and utility consultant for R&M on the Route 4/ Route 160 Interchange project in Antioch for CCTA and for the I-205/ Lammers Interchange in Tracy. Principals in the Modesto office have been intimately involved with a wide variety of projects in Stanislaus County and bring extensive local knowledge and political savvy to our team.*

THE RIGHT MANAGEMENT

Mr. Keith G. Meyer, P.E. will be the Consultant Team Manager. Keith has been the Vice President of R&M for 19 years, and possesses 40 years of highway, bridge, interchange and freeway project management experience, including four major corridor projects in California (San Joaquin Hills Corridor), Arizona (Outer Loop Freeway) and Colorado (E-470 and C-470), and over 120 interchanges in his career. He has extensive Caltrans District 10 experience in highway and bridge project development planning, project implementation, design management, construction management, and public outreach Mr. Meyer is a hands-on manager and has managed planning studies, preliminary engineering, and final design plans for over $3 billion in freeway, bridge, highway interchange, and local street design projects. He is also among the most knowledgeable engineering consultants regarding Caltrans, FHWA, and environmental project development procedures and has prepared dozens of project study reports, project reports, constructability evaluations and other engineering approval documents. His experience includes management of all R&M projects in Stanislaus and San Joaquin Counties as discussed in this Proposal. He is available immediately to lead the team through PA&ED completion.

Mr. Rob McCann will be the team's Environmental Manager. Since joining LSA in 1989, Rob has been a leader in establishing LSA's reputation for excellence in the successful completion of environmental documents for transportation projects, particularly those requiring approval by Caltrans and FHWA. Rob will be responsible for overseeing the activities of the environmental team, leading to approval of the EIR/EIS and related approvals. Over the years, Mr. McCann has developed an outstanding working relationship with various Caltrans Districts' Environmental Planning staff through his work on a variety of projects, including numerous on-call services contracts. Rob was the Environmental Manager for LSA on the SR 99/Jack Tone Road interchange, and has been the Environmental Manager on several major corridor projects in California, including the Riverside County Mid County Parkway EIR/EIS (a new 16 mile freeway) and the SR-91 Corridor Improvement Project EIR/EIS in Riverside and Orange Counties. His extensive experience on large corridor projects and expertise in the NEPA/404 integration process makes him ideally suited to oversee the North County Corridor EIR/EIS environmental team.

Other key managers to deliver our work plan will include experienced individuals who are all well-known to the Stanislaus County Public Works Department:

- Martha Dadala, P.E. (R&M), to manage the alignment design, engineering studies and project report preparation and approval by Caltrans District 10. Martha managed both the Kiernan/99 and Hammett/99 PA&ED documents and has been with R&M for 14 years.
- Edward Heming (LSA), to manage the day to day environmental studies and coordination with Caltrans Central Region Environmental.
- Eddie Barrios, P.E. (F&P), to manage the traffic forecasting and operations analysis process. Eddie has been responsible for all traffic work to date on NCC.
- Ben Crawford, G.E. (Crawford), to manage geotechnical and hazardous waste studies. Ben has been responsible for all geotechnical work to date on NCC.
- Bill Gray (Gray-Bowen), to handle funding approvals. Bill was the key person instrumental in funding the noted projects in Stanislaus, Merced and San Joaquin Counties.
- Judith Buethe (JBC), to manage the public outreach process. Judith has been responsible for all outreach activities to date on NCC.
- Chris Vierra, P.E. (Stantec), to manage the coordination of Stantec's surveys, right of way engineering and utility evaluations. Chris will also be a key local resource to the County for property owner discussions and local approvals.

Our Statement of Qualifications contains all requested sections (Project Understanding and Approach, Project Management and Key Personnel, Staff Availability and Team Experience) within the 20-page limit. Due to each subconsultant having their own billing rates, I have placed those in a separate tab at the end.

In closing, Rob and I are very excited about our team, its capabilities, knowledge and enthusiasm that we bring to the NCC Project. We also are confident that we have the experience necessary to successfully guide the project through a complicated refinement and selection of alternatives, public outreach, as well as the environmental documentation process with Caltrans and permitting agencies. The timing for the work is perfect given our current staff availability, and we believe our staff's record of success in delivering projects in Stanislaus and San Joaquin Counties will provide for a smooth and enjoyable process.

Again, thank you for providing us with this great opportunity to continue our work for Stanislaus County. We look forward to hearing from you.

Sincerely,

RAJAPPAN & MEYER CONSULTING ENGINEERS, INC.

Keith G. Meyer, P.E.
Vice President

Statement of Qualifications

1 Project Understanding & Approach

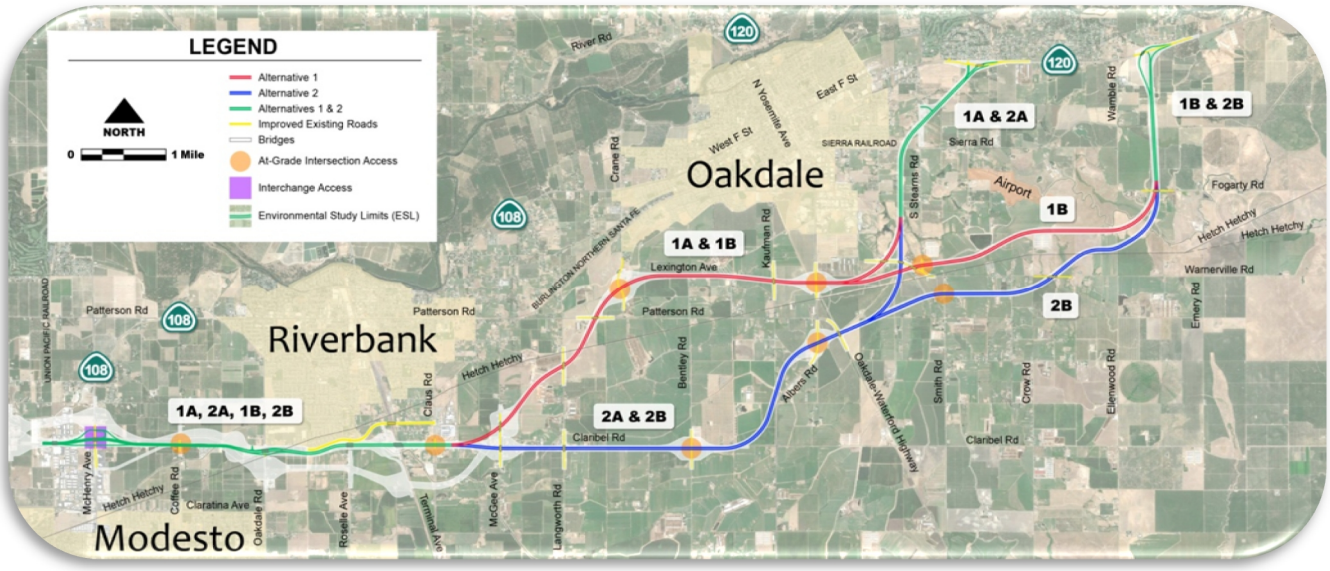
Project History

The North County Corridor (NCC) Project (SR-99 to SR-120) is a high-priority project for Stanislaus County, its communities and the growing urbanized cities of Modesto, Oakdale, and Riverbank. The purpose of the project is to ultimately build a west-east roadway that would improve regional network circulation, relieve existing traffic congestion, reduce traffic delay, accommodate future traffic, benefit commerce and enhance safety.

In April 2010, a program level Final Environmental Impact Report (FEIR) was approved by Caltrans for Route adoption and in May 2010, the California Transportation Commission adopted the NCC as the new State Route 108. This action also secured $91 million in programming capacity for construction. Jacobs Engineering and JPA staff continued working on the project collecting data and developing reports for the technical studies required for the project level environmental report.

The original environmental phase studied a roadway alignment for a west-east facility from SR-99 north of the City of Modesto to SR-120 approximately six miles east of the City of Oakdale. This new roadway would be approximately 25 miles in length from a location on State Route 99 in the vicinity of Kiernan Avenue/Salida community to a location on State Route 120 approximately six miles east of the City of Oakdale. Various roadway alignment alternatives were considered along with the "No Action" alternative during this project study. Public Scoping Meetings were conducted in September 2010. An initial screening of the alternatives resulted in alignment alternatives that were presented to the public at a project information meeting in June 2011.

In May 2013, Fehr & Peers submitted a Draft Year 2022 and 2042 Traffic Demand Forecasts for North County Corridor PA&ED, which showed that there was not a significant impact to traffic west of McHenry Avenue on Claribel Avenue. At the June 2013 PDT meeting, it was unanimously decided to revise the scope of the NCC by changing the project limits to between Tully Road and State Route 120. Four expressway alignment alternatives are now under consideration, shown on the following map:



Initial access points assumed in the traffic forecasting for each alternative are as follows. These may change as the traffic operations reports are completed.

ALTERNATIVE 1A: NORTH + WEST	ALTERNATIVE 1B: NORTH + EAST	ALTERNATIVE 2A: SOUTH + WEST	ALTERNATIVE 2B: SOUTH + EAST
ACCESS POINTS • Interchange - McHenry • Intersection - Coffee • Interchange - Oakdale • Cul de sac Claribel and provide ramp onto NCC • Intersection - Claus • Intersection - Crane • Intersection - Albers • Intersection at new road connection to Stearns Intersection at SR-120 plus connectors to/from East SR-120	ACCESS POINTS • Interchange –McHenry • Intersection - Coffee • Interchange – Oakdale • Cul de sac Claribel and provide ramp onto NCC • Intersection - Claus • Intersection – Crane • Intersection – Albers • Intersection - Stearns • Intersection – SR-120 plus connectors to/from East SR-120	ACCESS POINTS • Interchange –McHenry • Intersection - Coffee • Interchange – Oakdale • Cul de sac Claribel and provide ramp onto NCC • Intersection - Claus • Intersection – Bentley • Intersection – Albers • Intersection at new road connection to Stearns Intersection at SR-120 plus connectors to/from East SR-120	ACCESS POINTS • Interchange –McHenry • Intersection - Coffee • Interchange – Oakdale • Cul de sac Claribel and provide ramp onto NCC • Intersection - Claus • Intersection – Bentley • Intersection – Albers • Intersection - Smith • Intersection – SR-120 plus connectors to/from East SR-120
GRADE SEPARATIONS • Roselle • Terminal Ave. plus RR • McGee/Eleanor • Langworth • Patterson • Kaufman • Warnerville • Sierra Road plus RR • Stearns	GRADE SEPARATIONS • Roselle • Terminal Ave. plus RR • McGee/Eleanor • Langworth • Patterson • Kaufman • Warnerville • Fogarty • Sierra Road plus RR	GRADE SEPARATIONS • Roselle • Terminal Ave. plus RR • McGee/Eleanor • Langworth • Oakdale/Waterford Hwy • Warnerville • Sierra Road plus RR • Stearns	GRADE SEPARATIONS • Roselle • Terminal Ave. plus RR • McGee/Eleanor • Langworth • Oakdale/Waterford Hwy • Warnerville • Fogarty • Sierra Road plus RR

Environmental Approach

The County is now requesting engineering and environmental services to prepare updated and finalized PA&ED deliverables for the re-scoped NCC Project. The scope of services to be provided include all studies and activities for providing alternative analyses, developing the draft and final project report, providing environmental studies, and developing the draft and final environmental document for the project. This work must be performed in accordance with the California Department of Transportation (Caltrans) guidelines including the Caltrans Project Development Procedures Manual, Local Programs Guidelines, Local Assistance Procedures Manual, Standard Environmental Reference, 2010 Highway Design Manual, all governing local agency guidelines and criteria, and other appropriate manuals for the PA&ED process.

In order to re-start the PA/ED process for the NCC Project and get it moving towards approval of a preferred alternative, the R&M/LSA team will conduct an initial "triage" effort to verify the status and acceptability of all technical work products prepared to date. This review effort will also verify the status of all critical processes that need to be completed in order for Caltrans to approve the Draft EIR/EIS for public circulation. Critical questions that will be addressed in this "triage" effort include:

- Has all data collected to date been reviewed and accepted by Caltrans for use in the technical studies?
- Does any data collected need to be updated (e.g. records search for hazardous waste)?
- Had the JD been verified by the Corps?

- What effort will be required to get the preliminary engineering and traffic data at a stage where is can be used for the analysis of impacts?
- Section 106 compliance: What coordination has occurred with the SHPO and Native American tribes?
- NEPA/404 Integration: Have formal checklist approval been obtained for Purpose and Need and the range of alternatives?
- Have any Section 4(f) properties been identified that may pose a constraint to the alternatives or that would require identification of avoidance alternatives?

Much of this "triage" effort has already been initiated by the R&M/LSA team in preparing this SOQ; therefore, this effort can be completed within two weeks of a Notice to Proceed. Once completed and agreed-upon by the County, we will have a clear understanding of the critical path in the project schedule so that consultant team and agency resources can be focused accordingly in re-initiating and completing the technical work effort.

Once the assessment is complete and a new critical path schedule is established, the R&M/LSA team will initiate work on revising technical studies that have been drafted, and completing draft technical studies for which only initial data was gathered or where no work was initiated at all. The first step in this effort will be to prepare an updated alternatives description to reflect the minor change in project limits adopted by the PDT on June 5, 2013, as well as any other pertinent changes that have occurred since the original description was drafted. This updated alternatives description will be submitted to the County and Caltrans for approval, and will be used consistently in all of the technical studies.

The R&M/LSA team will work closely with Caltrans and the County to make sure that necessary agency coordination is undertaken and completed pursuant to the 2006 NEPA/404 Integration MOU to ensure that there are no "surprises" from any of the federal resource agencies at the time the Draft EIR/EIS is completed. Once the data is verified and an updated alternatives description is complete, the R&M team will then complete the technical studies for approval by the County and Caltrans, prior to completion of the First Administrative Draft EIR/EIS. Based on our review of the information provided with the SOQ, key technical issues to be addressed include, but are not necessarily limited to:

- <u>Biology.</u> Key challenges for the biology work will be determining the extent of the existing survey effort and the nature of the results, since this information will be crucial for determining how to proceed. Options include: continue surveys, discontinue surveys and assume presence, or a hybrid.
- <u>Cultural Resources.</u> Key challenges for the cultural resources work will be determining whether an Extended Phase 1 investigation is required and, if so, the locations and extents of the investigation. Another challenge will be to gain approval of the Historic Resources Evaluation Report without access to many properties (owners refused to provide access) that contain potentially historic structures.

Once the technical studies have been approved, the R&M/LSA team will prepare the First Administrative Draft EIR/EIS and will work proactively with Caltrans to carry the document through the required internal and external QC review processes as described in Chapter 37 of the SER.

The following elements of our approach have been applied by LSA on other Caltrans' EIR/EISs in California and have improved the quality of the document and helped expedite the review and approval process.

- Early submittal of a revised Chapter 1 (Purpose and Need) and Chapter 2 (Alternatives) for review by Caltrans District and Central Region Environmental staff in advance of the formal submittal of the complete First Administrative Draft EIR/EIS. This early review ensures that there are no revisions/corrections required that may "ripple through" the entire EIR/EIS document.
- After the technical studies are completed but in advance of the formal submittal of the complete First Administrative Draft EIR/EIS, schedule a workshop meeting with Caltrans District and HQ QC reviewers to discuss recommended significance determinations under CEQA. This workshop will help expedite the preparation of and ultimately Caltrans' review of Chapter 4 (CEQA Considerations) of the EIR/EIS.
- Following receipt of Caltrans' comments on the First Administrative Draft EIR/EIS, the R&M/LSA team will schedule a meeting to review any comments that require clarification or discussion prior to submittal of the Second Administrative Draft EIR/EIS. This will be done for all document submittals as a means to eliminate "back and forth" submittals that would impact schedule and budget.
- Concurrent with the submittal of the Second Administrative Draft EIR/EIS for District and HQ QC review, the document will be circulated to the three federal Cooperating Agencies (USACE, USEPA, and USFWS) for review. An early review by the Cooperating Agencies is consistent with NEPA requirements and helps to minimize comments from the federal agencies on the Draft EIR/EIS as well as expedite the later Checkpoint 3 step in the NEPA/404 process (identifying a preliminary LEDPA).
- Following completion of the public circulation period of the Draft EIR/EIS, the R&M/LSA team will review the comments and flag issues that require discussion with and/or policy direction from the County and Caltrans. A meeting will be scheduled to discuss these comments in advance of the submittal of the first draft of the complete Responses to Comments document. Having this early discussion will help expedite the preparation of and ultimately Caltrans' review of the Responses to Comments.
- To help facilitate our schedule, a joint Final EIS and ROD will be prepared consistent with Section 1319 (Accelerated Decision-making in Environmental Reviews) of MAP-21.
- Finally, based on LSA's recent experience in delivering the Final EIR/EIS on the $1.1 billion SR-91 CIP in District 8 and consistent with FHWA's "Every Day Counts" initiative, it is strongly recommended that a brief weekly conference call including key staff from the County, Caltrans, and the R&M/LSA team be scheduled at a regular day and time, and that an action item log be maintained to ensure that all critical path follow up actions by all parties are promptly completed. This type of frequent and proactive communication fosters a spirit of collaboration and teamwork necessary to deliver a project of the scope and magnitude of the North County Corridor Project.

Alternatives Evaluation

Once environmental impacts and traffic operations benefits are known, then a review process can be followed which may be able to narrow the number of alternatives down to those most environmentally feasible, acceptable to the community and beneficial to the motoring public and community. Areas of evaluation, as developed during prior NCC planning efforts, will include:

<u>Purpose and Need.</u> This criterion includes screening measures to determine if the alternative would result in operational traffic conditions that would support the stated Purpose and Need of the proposed action. Traffic modeling for each alternative will provide the data to complete the analysis. Elements to consider related to mobility include:

- Travel time,
- Travel speed,
- Corridor Level of Service (LOS),
- Primary Intersection LOS, and
- Screenline Volume Reduction.

Engineering Considerations. This criterion includes evaluation of the safety and function of the proposed transportation system. Conceptual designs will be used to evaluate alternative issues that may affect the performance of the proposed project or reduce conflicts between modes of transportation.

- Operation of State Route 108: Would the alternative maintain a State Route 108 mainline LOS D or better?
- Connectivity: Would the alternative provide improved transportation network connectivity?
- Convenience/Accessibility: Would the alternative provide additional transportation options for the traveling public?
- Driver Expectancy: Would navigation of the alternative be understood and provide expected movements?
- Safety: Would the alternative reduce the number of movements with the potential conflict with one another?

Environmental Considerations. This criterion includes consideration of both impacts to the community and the natural environment.

- Agricultural Impacts: Which alternatives would affect farmlands under the Williamson Act contract or on prime agricultural soils?
- Air Quality Impacts: What air quality impacts would result under each alternative?
- Biological Impacts: Would the alternative affect rare, endangered, or threatened species, and if so, to what extent? Would wetland resources be affected? What plant and animal species would be affected?
- Cultural Resources/Historic Resources Impacts: Would archaeological resources be affected by the alternative? How many structures more than 45 years of age would be affected by each alternative? (based on year built data)
- Community Cohesion/Land Use/Growth Impacts: Would each alternative divide an established community, and if so, how?
- Emergency Services Impacts: Which alternatives would negatively increase anticipated emergency response times?
- Geology/Soils/Seismicity Impacts: Would an alternative result in impacts to the area's underlying geological conditions, soils, or seismicity?
- Hydrology/Water Quality Impacts: Which alternatives may result in impacts to local and regional hydrology and water quality?
- Noise Impacts: Which alternatives may result in noise impacts to surrounding land uses?
- Right-of-way Impacts: Would the alternative result in acquisitions? (number of partial and full acquisitions, number of commercial and residential acquisitions)
- Visual impacts: Would the alternative create substantial visual impacts?
- Feasibility of Implementation: Are their physical, political or funding constraints?
- Would the alternative be consistent with adopted transportation and land use plans?
- Is there support by the local municipalities for the alternative?

Planning For a Successful Approach

The primary goal of the PA&ED services for the North County Corridor Project interchange project is to develop an implementable design, based on sound engineering, reliable cost estimates and thorough technical studies. It is necessary to work closely with Caltrans District 10, Central Region and Headquarters, and other agency approvals for the development of Environmental Documentation and PA&ED. One of the most important aspects to our process is maintaining close coordination and communication with the design team including the transportation planners, environmental planners, civil designers, R/W consultants, utility coordinator, bridge designer, Caltrans functional

units and the County. The end goal is to ensure delivery of the final PA&ED phases with consistency, uniformity, and quality. R&M and LSA will create this working partnership as the Team Manager to keep the project on schedule with a high degree of communication and high quality work products.

PROJECT MANAGEMENT STRATEGY

R&M's method for expediting planning and design review approach includes several proven management techniques, such as:

- *Maintain a Detailed Critical Path Schedule.* Clearly our key to schedule success on our work to date for many clients has been development of a detailed planning and design milestone schedule. This allows all task members to understand and plan ahead for deliverable dates.
- *Technical Study Focus Sessions.* Successfully used on all projects, early review of technical elements and discussion at specialized focus meetings will allow the Technical Reports to be reviewed with "no surprises".
- *Hold Frequent Coordination Meetings.* A successful approach on our most complex projects others has been to have alternating PDT meetings and local agency meetings or conference calls on a regular 4-week basis. We would alternate weeks so that, overall, project meetings took place every two weeks. This level of communication has greatly helped to speed reviews, solve problems or fulfill data requirements.
- *Follow Up.* For both information needed from R&M and information required from Caltrans or local agencies, it is a practice of R&M to follow up immediately with phone calls, fax, e-mail or office visits as necessary to deliver or obtain information. Action Item data logs will be provided.
- *Commit to Success.* Perhaps more than anything is the attitude with which we enter an assignment. All team members have agreed to a successful team approach to the project and to maintain that commitment throughout the life of the project.

QUALITY ASSURANCE PROCESS

R&M maintains a rigorous Quality Assurance / Quality Control Plan (QA/QCP) for general application, with additional plans developed specifically for large projects to ensure adherence to the highest standards of quality assurance throughout the life of the project work. The control procedures are applicable equally to all participating members of the consultant team, subject to approval by the Project Manager of alternate quality control plans as may be proposed for use by the individual team members. In addition to normal checking procedures of drawings, reports and specifications, a number of project team "workshops" are typically held to review and resolve design details at interdisciplinary interfaces. Formal reviews will be conducted prior to submittal of each technical study as well as Draft and Final Reports. Each consultant is responsible for performing their design work in accordance with the QA/QCP.

BUZZSAW® PROJECT DESIGN TEAM WEB SITE

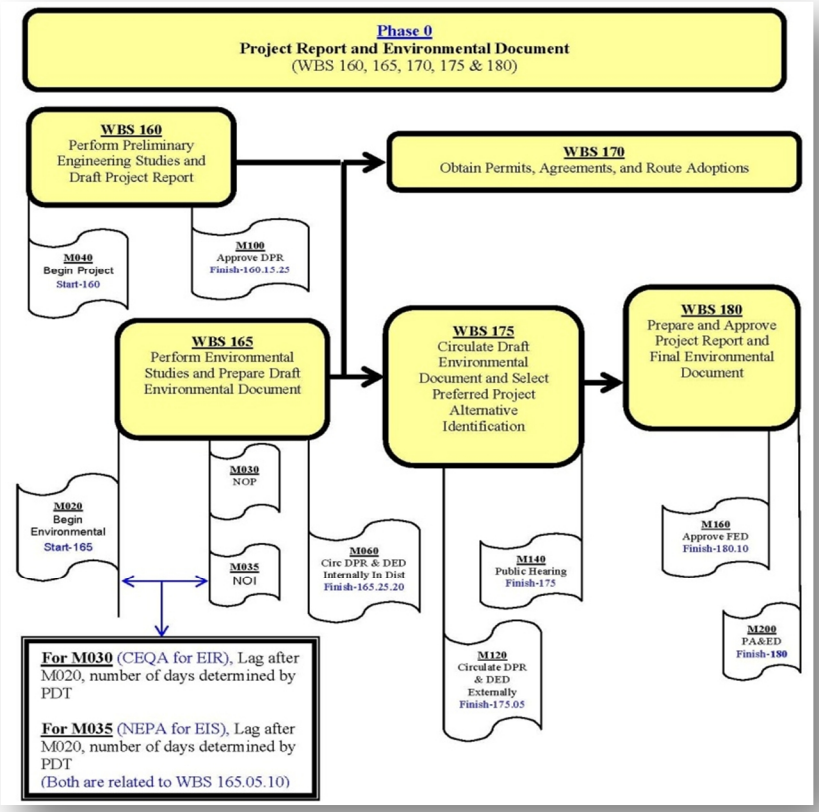
The Autodesk Buzzsaw® FTP program is an immensely successful online file storage and information sharing system process that will be utilized as the primary formal mode of submittals and inquiries among project team members, including Caltrans, Stanislaus County and its local partners. The process has been successfully used on the last eight PA&ED projects done by R&M and LSA. R&M/LSA submittals to Central Region Environmental are now made on Buzzsaw.

PROJECT DEVELOPMENT ACTIVITIES

The primary goals of this phase are to build on the work already prepared and to refine the assessment, preliminary design, environmental evaluations, obtain environmental clearance, design, acquire right of way and construct the project. If possible, further alignment review will be developed to reduce the number of alignment options, desirably to no more than two. Caltrans and the County will provide input to the design process for refinements to accommodate their desired improvements.

Our priority will be to eventually establish and develop a preferred geometric alternative that provides for the most cost-effective solution, within the budget and schedule, and reflective of all agency inputs. This will be done concurrently with the environmental analysis (known as "at risk design") in order to obtain the fastest delivery schedule and to ensure the environmental analysis is reflective of the most complete design.

One of the most important aspects to the design process is maintaining close coordination and communication with the design team including the transportation planner, environmental planner, civil designer, R/W consultant, utility coordinator, bridge designer, Caltrans, the County and other local agencies. Our Scope of Work for the PA&ED services is divided into five tasks, which are summarized below and approach and organized to satisfy the PA&ED processes of Caltrans under WBS 160, 165, 170, 175 and 180.



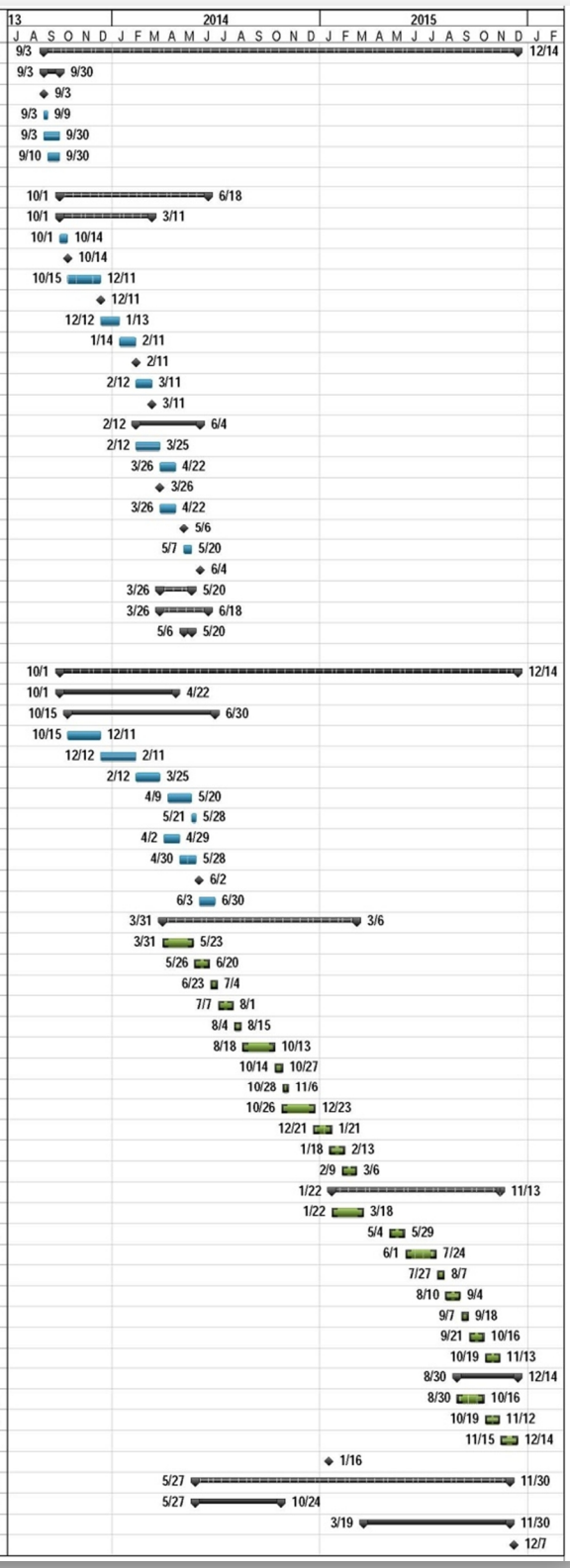
Milestone Schedule

The County's has stated it desires a 2 ½ year schedule for PA&ED approval. Looking at the current status of deliverables, approval times required by Caltrans District 10 and Central Region Environmental, and considering acceleration techniques described above, we believe this is achievable. The following are major milestones, with a more detailed Gantt chart for PA&ED on the following page.

MILESTONE	DATE
M020 - BEGIN ENVIRONMENTAL	Sep - 2013
M100 - APPROVE DPR	Oct - 2014
M120 - CIRCULATE DED	Oct - 2014
M160 - APPROVE FED	Sep - 2015
RECORD OF DECISION	Nov - 2015
M200 - PA & ED COMPLETE	Dec - 2015

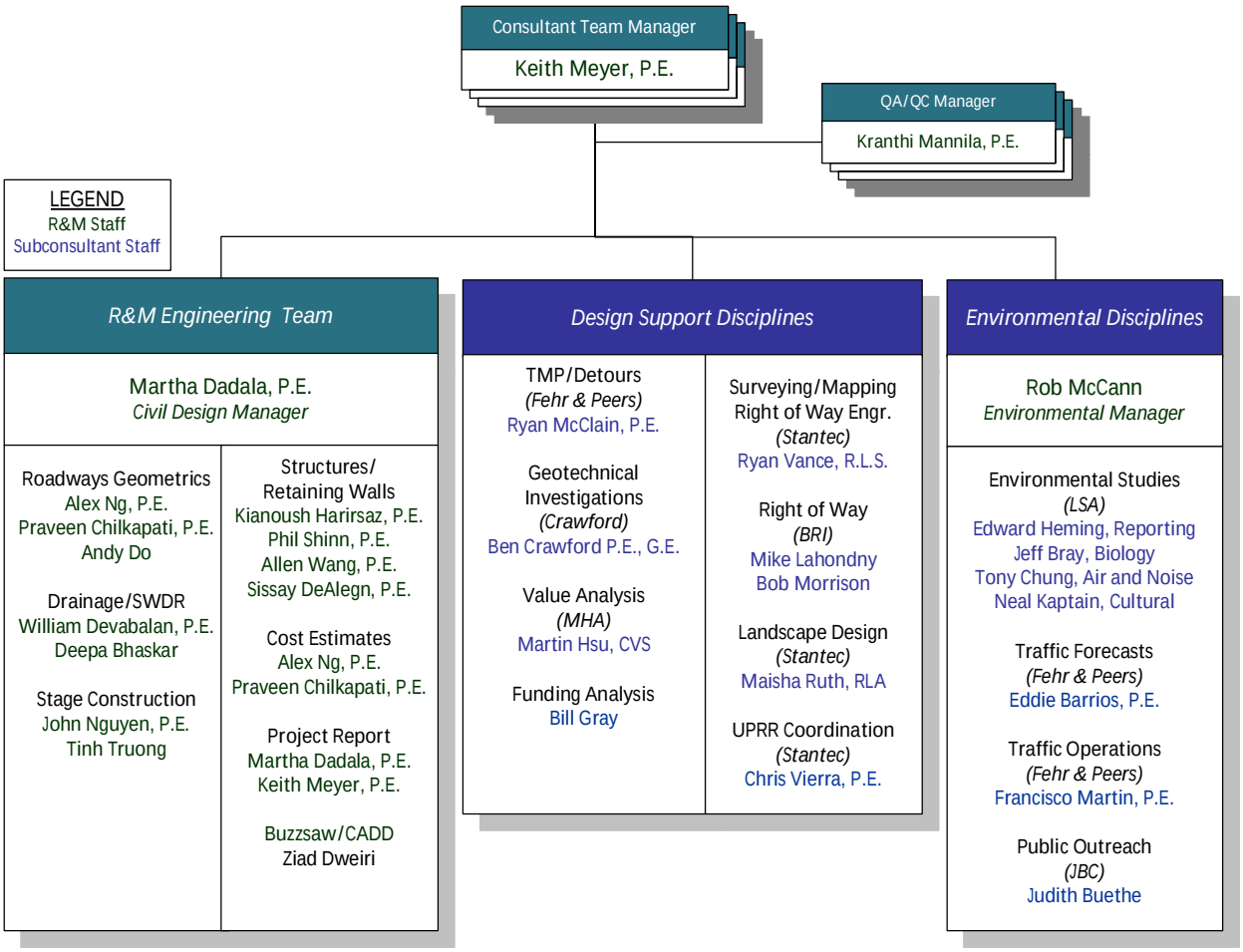
Proposed Project Timeline

ID	Task Name	Start	Finish	Duration
1	**ENVIRONMENTAL AND PRELIM ENG**	**Tue 9/3/13**	**Mon 12/14/15**	**576 days**
2	**TASK 1 - PROJECT MANAGEMENT**	**Tue 9/3/13**	**Mon 9/30/13**	**20 days**
3	**CONTRACT NTP DATE**	**Tue 9/3/13**	**Tue 9/3/13**	**0 days**
4	Develop Baseline CPM	Tue 9/3/13	Mon 9/9/13	1 wk
5	Develop Project Management Plan	Tue 9/3/13	Mon 9/30/13	4 wks
6	Subconsultant Agreements	Tue 9/10/13	Mon 9/30/13	3 wks
7				
8	**TASK 2 - INVESTIGATIONS AND GAD**	**Tue 10/1/13**	**Wed 6/18/14**	**180 days**
9	**Traffic Forecasts and Operations**	**Tue 10/1/13**	**Tue 3/11/14**	**110 days**
10	Revise Traffic Forecast Report	Tue 10/1/13	Mon 10/14/13	2 wks
11	Final Traffic Forecast Report	Mon 10/14/13	Mon 10/14/13	0 days
12	Prepare Draft Traffic Operations Analysis	Tue 10/15/13	Wed 12/11/13	8 wks
13	SUBMITTAL DRAFT OPS REPORT	Wed 12/11/13	Wed 12/11/13	0 days
14	Caltrans Review	Thu 12/12/13	Mon 1/13/14	4 wks
15	Prepare Revised Traffic Operations Report	Tue 1/14/14	Tue 2/11/14	4 wks
16	Submit Final Operations Report	Tue 2/11/14	Tue 2/11/14	0 days
17	Caltrans reviews Final Operations Report	Wed 2/12/14	Tue 3/11/14	4 wks
18	Caltrans approves Final TOR	Tue 3/11/14	Tue 3/11/14	0 days
19	**Update GAD**	**Wed 2/12/14**	**Wed 6/4/14**	**80 days**
20	Update GAD	Wed 2/12/14	Tue 3/25/14	6 wks
21	Update Advance Planning Studies	Wed 3/26/14	Tue 4/22/14	4 wks
22	SUBMITTAL DRAFT GAD	Wed 3/26/14	Wed 3/26/14	0 days
23	Caltrans Review GAD	Wed 3/26/14	Tue 4/22/14	4 wks
24	GAD Review Meeting	Tue 5/6/14	Tue 5/6/14	0 days
25	Revise GAD	Wed 5/7/14	Tue 5/20/14	2 wks
26	Caltrans Approve GAD	Wed 6/4/14	Wed 6/4/14	0 days
27	**Drainage Process**	**Wed 3/26/14**	**Tue 5/20/14**	**40 days**
31	**Right of Way Engineering**	**Wed 3/26/14**	**Wed 6/18/14**	**60 days**
35	**Other Submittals**	**Tue 5/6/14**	**Tue 5/20/14**	**10 days**
38				
39	**TASK 3 - ENVIRONMENTAL DOCUMENT**	**Tue 10/1/13**	**Mon 12/14/15**	**556 days**
40	**Initiate Studies**	**Tue 10/1/13**	**Tue 4/22/14**	**140 days**
47	**Draft Environmental Reports**	**Tue 10/15/13**	**Mon 6/30/14**	**178 days**
48	Air Quality	Tue 10/15/13	Wed 12/11/13	8 wks
49	Noise	Thu 12/12/13	Tue 2/11/14	8 wks
50	Natural Environment Study	Wed 2/12/14	Tue 3/25/14	6 wks
51	Draft Relocation Impact Statement	Wed 4/9/14	Tue 5/20/14	6 wks
52	Package Reports	Wed 5/21/14	Wed 5/28/14	1 wk
53	Caltrans Report Review	Wed 4/2/14	Tue 4/29/14	4 wks
54	Final Reports	Wed 4/30/14	Wed 5/28/14	4 wks
55	Submit Final Reports to Caltrans for Approval	Mon 6/2/14	Mon 6/2/14	0 days
56	Caltrans Approval of Reports	Tue 6/3/14	Mon 6/30/14	4 wks
57	**Draft EIR/EIS**	**Mon 3/31/14**	**Fri 3/6/15**	**236 days**
58	Prepare Admin Draft DEIR/DEIS	Mon 3/31/14	Fri 5/23/14	2 mons
59	Caltrans Staff Review	Mon 5/26/14	Fri 6/20/14	1 mon
60	Revise Admin DEIR/DEIS	Mon 6/23/14	Fri 7/4/14	2 wks
61	Caltrans Senior Review	Mon 7/7/14	Fri 8/1/14	1 mon
62	Revise Admin DEIR/DEIS	Mon 8/4/14	Fri 8/15/14	2 wks
63	Caltrans QA/QC review	Mon 8/18/14	Mon 10/13/14	8 wks
64	Revise DEIR/DEIS	Tue 10/14/14	Mon 10/27/14	2 wks
65	Branch Chief Review/Signature	Tue 10/28/14	Thu 11/6/14	1.6 wks
66	Public Circulation DEIR/DEIS	Sun 10/26/14	Tue 12/23/14	41 days
67	Develop RTC	Sun 12/21/14	Wed 1/21/15	1 mon
68	Caltrans review of RTC	Sun 1/18/15	Fri 2/13/15	1 mon
69	Select Preferred Alternative	Mon 2/9/15	Fri 3/6/15	1 mon
70	**Final EIR/EIS**	**Thu 1/22/15**	**Fri 11/13/15**	**210 days**
71	Prepare FEIR/FEIS	Thu 1/22/15	Wed 3/18/15	2 mons
72	Caltrans review FEIR/EIS	Mon 5/4/15	Fri 5/29/15	0.95 mons
73	Caltrans QA/QC and Legal Review	Mon 6/1/15	Fri 7/24/15	2 mons
74	Revise FEIR/EIS	Mon 7/27/15	Fri 8/7/15	2 wks
75	Caltrans QA/QC/Legal Review and Approval	Mon 8/10/15	Fri 9/4/15	1 mon
76	Caltrans signature FEIR/FEIS and pub NOA	Mon 9/7/15	Fri 9/18/15	2 wks
77	Public Availibility of EIS	Mon 9/21/15	Fri 10/16/15	1 mon
78	Response to comments on FEIS	Mon 10/19/15	Fri 11/13/15	1 mon
79	**Record of Decision**	**Sun 8/30/15**	**Mon 12/14/15**	**73 days**
80	Prepare and Approve ROD/Statute of Limitations	Sun 8/30/15	Fri 10/16/15	1.75 mons
81	Prepare and File NOD	Mon 10/19/15	Thu 11/12/15	0.95 mons
82	ECR	Sun 11/15/15	Mon 12/14/15	1 mon
83	**PUBLIC HEARING**	**Fri 1/16/15**	**Fri 1/16/15**	**0 days**
84	**TASK 4 - PROJECT REPORT**	**Tue 5/27/14**	**Mon 11/30/15**	**383 days**
85	**Draft PR**	**Tue 5/27/14**	**Fri 10/24/14**	**107 days**
94	**Final PR**	**Thu 3/19/15**	**Mon 11/30/15**	**179 days**
101	**Caltrans Approves PR - PA/ED COMPLETE**	**Mon 12/7/15**	**Mon 12/7/15**	**0 days**



2 Project Manager and Staff Experience

Our consultant team for the Corridor Planning, Environmental and design phase work is comprised of senior and support staff from each firm. The following chart depicts our proposed staff organization for the work. A key to our organizational philosophy and success is to have an R&M principal manage every project. This has been important to our clients as they have a single senior company representative available at all times to provide management, issue resolution, immediate decisions and guidance, all keys to a successful project and relationship.



Communication within the team is accomplished through weekly conference status calls and staff meetings. When necessary, video conferencing is used. Stanislaus County will be invited to participate in each weekly meeting. Action items are assigned and followed up weekly. A huge part of our team communication is based on using the Buzzsaw file sharing web site, which allows the entire team to have the latest files for use in their respective efforts.

Project Management

CONSULTANT TEAM MANAGER - KEITH G. MEYER, P.E. – R&M

Keith has been the Vice President of R&M for 20 years, and possesses 40 years of highway, bridge, interchange and freeway project management experience, including four major corridor projects in California (San Joaquin Hills Corridor), Arizona (Outer Loop Freeway) and Colorado (E-470 and C-470), and over 120 interchanges in his career. He has extensive Caltrans District 10 experience in highway and bridge project development planning, project implementation, design management, construction management, and public outreach Mr. Meyer is a hands-on manager and has managed planning studies, preliminary engineering, and final design plans for over $3 billion in freeway, bridge, highway interchange, and local street design projects. He is also among the most knowledgeable engineering consultants regarding Caltrans, FHWA, and environmental project development procedures and has prepared dozens of project study reports, project reports, constructability evaluations and other engineering approval documents. His experience includes management of all R&M projects in Stanislaus and San Joaquin Counties as discussed in this Proposal. He is available immediately to lead the team through PA&ED completion. Keith has been the project manager on the following recent PA&ED projects:

- *I-5 North Stockton Corridor Widening Project - City of Stockton EIR/EA - $450 m.*
- *Route 99/Arch Road interchange - San Joaquin COG ND/FONSI - $40 m.*
- *Route 99/Jack Tone Road Interchange –City of Ripon ND/FONSI- $ 20m.*
- *I-205 Auxiliary Lanes – SJCOG – (PSR, PA&ED, PS&E) CE/CE - $20 m.*
- *Route 120/McKinley Avenue interchange – City of Manteca ND/FONSI – $ 40 m.*
- *I-205/Lammers Interchange - City of Tracy EIR/EA – $65 m.*
- *Hammett Road/SR 99 Interchange – Stanislaus County ND/FONSI - $45 m.*
- *Kiernan Avenue/SR 99 Interchange – Stanislaus County ND/FONSI - $40 m.*
- *Willow Road Extension and US-101 Interchange – San Luis Obispo County EIR/EA - $50 m.*

At other firms prior to 1994, Mr. Meyer was the Project Manager for the $160 million SR-87 Guadalupe Freeway Extension through Downtown San Jose, the General Management Consultant for the $1 billion San Joaquin Hills Toll Road in Orange County, and part of the General Design Consultant teams for the $1 billion E-470 Beltway in Denver, the $300 million C-470 Freeway in Denver and the $850 million Outer Loop Freeway in Phoenix.

ENVIRONMENTAL MANAGER - ROB MCCANN - LSA

Since joining LSA in 1989, Rob has been a leader in establishing LSA's reputation for excellence in the successful completion of environmental documents for transportation projects, particularly those requiring approval by Caltrans and FHWA. Rob will be responsible for overseeing the activities of the environmental team, leading to approval of the EIR/EIS and related approvals. Over the years, Mr. McCann has developed an outstanding working relationship with various Caltrans Districts' Environmental Planning staff through his work on a variety of projects, including numerous on-call services contracts. Rob was the Environmental Manager for LSA on the SR 99/Jack Tone Road interchange, and has been the Environmental Manager on several major corridor projects in California, including the Riverside County Mid County Parkway EIR/EIS (a new 16 mile freeway) and the SR-91 Corridor Improvement Project EIR/EIS in Riverside and Orange Counties. His extensive experience on large corridor projects and expertise in the NEPA/404 integration process makes him ideally suited to oversee the North County Corridor EIR/EIS environmental team.

Key Staff

MARTHA DADALA, P.E. – Civil Design Manager – R&M
Years with R&M: 14
Ms. Dadala will be the Senior Civil Design Manager for the project. She is a Senior Civil Engineer who has worked on projects in the US and overseas. She has over 20 years of experience in design, coordination, and execution of civil engineering works in the following areas: geometric design of highways; infrastructure development; catchment area analysis; drainage design; pavement design; geometric design of interchanges; and geometric design of at-grade intersections. *Her project design experience includes the I-205/Lammers Road/Eleventh Street Interchange (PSR, PR), SR 4 Crosstown Freeway Extension Project (PS&E), the I-5 North Corridor Improvements, City of Stockton, I-205 Auxiliary Lanes (PSR, PR & PS&E), SJCOG, I-5/Eight Mile Road Interchange, Stockton, the SR 99/Kiernan Interchange PSR and PA&ED, and the SR 99/Hammett Road PSR and PA&ED.*

KIANOUSH HARIRSAZ, P.E. - Senior Structural Design Manager – R&M
Years with R&M: 15
Mr. Harirsaz is a Structural Design Manager with R&M. He has over 30 years of experience in the design and management of a broad range of structural projects, including bridges, earth retaining structures, underground hydraulic related structures, buildings, and heavy industrial structures. *His recent structural design management includes SR-4 Crosstown Freeway Extension Project, Route 99/Kiernan Road interchange, Route4/Route 160 interchange ramp project, I-5 North Stockton Widening Project in the City of Stockton, I-205 Auxiliary Lanes, SJCOG and I-5/Eight Mile Road Interchange, Stockton, I-880 Corridor HOV Lane Project.*

MIKE LAHODNY - R/W MANAGER - BRI
Mike Lahodny is a Right-of-Way specialist with over 44 years of experience. Prior to joining Bender Rosenthal, Inc (BRI), Mr. Lahodny worked for the California Department of Transportation (Caltrans) for 35 years in the Right-of-Way Division. Mr. Lahodny served as the Caltrans Assistant Right-of-Way Chief for North and Central Regions, overseeing Right-of-Way delivery for Districts 1, 2, 3, 9 and 10. Mr. Lahodny has an in-depth knowledge of the legal aspects, development and administration of the Uniform Act and Right-of-Way process and procedures. He was directly involved in delivery of Right-of-Way appraisals, appraisal review, and acquisitions; and understands the pressing issues facing the delivery of small and large Right-of-Way intensive projects. He also has extensive experience and expertise in teaching various International Right of Way Association Appraisal courses.

EDDIE BARRIOS, P.E., T.E. - Traffic Operations Analysis – F&P
Eddie Barrios, P.E., Senior Associate in Fehr & Peers' Walnut Creek office, has over 15 years of experience in project development studies (PSR and PA/ED), micro-simulation, and transportation planning and engineering studies. He has served as Project Manager or Project Engineer on over 30 project development studies in several Caltrans Districts including District 4, 5, and 10. Several of the mainline projects that Eddie has been involved with have included high-occupancy vehicle (HOV) facilities and/or ramp metering. Some of his relevant projects include: North County Corridor, *11th Street/Grant Line Road Roundabout Project (San Joaquin County, CA), I-205/Chrisman Road Interchange PSR/PDS (Tracy, CA), I-5 North Stockton PA/ED (Stockton, CA) State Route 99/Pelandale Avenue PA/ED (Modesto, CA), I-205/Lammers Road Interchange PA/ED (Tracy, CA), State Route 132 East/West Connectivity Project.*

WILLIAM R GRAY – Funding – Gray Bowen

Bill will be Gray Bowen's Principle in Charge and strategic advisor and resource to the team. Bill has developed and successfully implemented project delivery and/or financing strategies to advance a number of complex, high profile projects on the state highway system including the *SR 99 Atwater Merced Expressway, SR 37/White Slough project in Vallejo, the SR 41 freeway project in Madera County, the I-680 Sunol Grade HOV lane project in Alameda County, the SR 121/Maxwell Bridge project in Napa, the Sutter Creek Bypass in Amador County, and several projects on SR 4 in Contra Costa County.* With close to 40 years of working knowledge and experience

JUDITH BUETHE - Project Communications - JBC

Judith Buethe, founder and owner of JBC, has more than 30 years of private and public sector experience in public relations, and consensus building. Judith designs and implements effective strategic public involvement plans, public meetings and open houses, public outreach and education, cross-cultural communications, social marketing, meeting facilitation, stakeholder identification, media relations, newsletters, direct mail campaigns, advertising, events (large and small), consensus development, and staffed Hotlines. She has designed and facilitated formal focus groups, regional surveys, and walked door-to-door in mobile home parks to survey tenants and satisfy environmental justice requirements. Among the more than 250 public participation programs designed and implemented in the Central Valley and Foothills include Projects in and around Manteca, e.g., *SR120/McKinley PSR, and major improvement projects on interstates and state highways, e.g., SR99/Arch Road to SR120, Interstate 5 North Stockton Corridor.*

EDWARD HEMING - Environmental Task Manager - LSA

Mr. Heming is a senior environmental planner at LSA Associates, Inc., with 6 years of experience in environmental planning, urban planning, and geographic information systems and 3 years of experience in hazardous materials assessment and abatement. Mr. Heming has managed numerous projects including several projects for both environmental planning and hazardous materials assessment and abatement. Mr. Heming is responsible for managing projects and writing environmental documentation including EIRs/EISs, MNDs, CEs and other documents. He has experience in public and private sector planning and project management. This experience involves administrative tasks, workload management, management of associate staff, staff development, and interoffice coordination on Environmental Impact Reports (EIRs). He has managed the following projects: *North Stockton I-5 Widening and Interchange Improvements in Stockton; Kiernan Avenue/SR-99 Interchange in Salida; Hammett Road/SR-99 Interchange.*

RYAN VANCE – Survey/Geomatics Manager - Stantec

Ryan is a Professional Land Surveyor and is the Survey/Geomatics Manager for Stantec in Modesto. Ryan has nearly 20 years of surveying experience-performing boundary, topographic and ALTA surveys. He has extensive use of GPS total stations, conventional total stations and AutoCAD LDD/Civil 3D software. Ryan also has experience with construction surveys and layouts for roadway infrastructure, site development projects, and heavy civil construction.

CHRIS VIERRA, P.E. LEED – Utility Engineering – Stantec – Property Negotiations

Mr. Vierra has more than 20 years of transportation and utility planning, design, and management experience. As the managing principal for the Urban Development group based in the Modesto, California, his experience includes project entitlement, environmental permitting, master infrastructure planning, project design, project management, and providing leadership and direction for multi-discipline design teams. Mr. Vierra is well regarded for his ability to effectively communicate with governmental agencies in areas that relate to the project through his experience and understanding of public policy issues.

3 Staff Availability

The R&M/LSA Team can meet a widely varying task load and potentially compressed schedules because of a large base of professionals, a tested system of project methods and documentation, and a flexible management approach. This allows technical personnel to work on several projects at one time without sacrificing quality. Our major projects currently underway will be substantially complete by September 2013 and therefore can apply full resources to the project. We rely on a constant influx of new projects to maintain consistent and qualified staff have more than adequate capacity to accommodate the planning and design needs of this project.

Key personnel assigned to the project will be available to the extent proposed for the duration of the project, and no person designated as "key" will be removed or replaced with out the prior written concurrence by Stanislaus County.

Key Team Member	Company	Role	2013	2014	2015
Keith Meyer, P.E.	R&M	Project Manager	50%	60%	70%
Martha Dadala, P.E.	R&M	Design Manager	80%	80%	80%
John Nguyen, P.E.	R&M	Design Manager	60%	70%	80%
William Devabalan, P.E.	R&M	Drainage	70%	100%	100%
Alex Ng, P.E.	R&M	Geometrics	80%	70%	100%
Kianoush Harirsaz, P.E.	R&M	Structures	50%	60%	100%
Phillip Shinn, P.E.	R&M	Structures	50%	60%	100%
Mike Lahodny	BRI	Right of Way	50%	60%	80%
Bob Morrison	BRI	Right of Way	50%	60%	80%
Ryan McClain , P.E.	F&P	TMP/Detours	40%	50%	80%
Eddie Barrios, P.E.	F&P	Traffic Forecasts	50%	50%	80%
Francisco Martin, P.E.	F&P	Traffic Operations	50%	50%	80%
Martin Hsu, P.E. CVS	MHA	Value Analysis	50%	50%	70%
Judith Buethe	JBC	Public Outreach	50%	50%	80%
Rob McCann	LSA	Environmental Manager	40%	50%	50%
Edward Heming	LSA	Environmental	50%	50%	50%
Jeff Bray	LSA	Biology	50%	50%	50%
Tony Chung	LSA	Air & Noise	50%	50%	50%
Neal Kaptain	LSA	Cultural	50%	50%	50%
Ryan Vance, R.L.S.	STANTEC	Surveying/Mapping	50%	50%	50%
Chris Vierra, P.E.	STANTEC	Drainage Design	40%	50%	50%
Ben Crawford, P.E., G.E.	CRAWFORD	GDMR/Foundations	40%	50%	50%
Bill Gray	GRAY-BOWEN	Funding	30%	30%	30%

4 Team Experience

The consultant team proposed for PA&ED Services includes R&M as the prime consultant, LSA as the major teaming partner, and seven key specialty subconsultants:

TEAM MEMBER	LOCATION	RESPONSIBILITIES
Rajappan & Meyer Consulting Engineers, Inc.	San Jose	Prime Consultant PA&ED management Civil and structural engineering Geometric design Cost estimates, drainage design Pavement evaluation Stormwater design Stage construction design Soundwall design Project Report preparation Drainage reports and design Railroad coordination Structures independent check
LSA Associates	Rockville Irvine	Environmental Management Environmental analysis Environmental technical reports Environmental permitting EIS and EIR Preparation
Bender Rosenthal, Inc	Sacramento	Right of way appraisals Right of way data sheets Optional right of way acquisition Relocation Studies
Crawford Associates, Inc	Modesto	Foundation reports Geotechnical investigations Hazardous materials reports
Fehr & Peers Transportation Consultants	Walnut Creek	Traffic forecasts Traffic operations analysis Traffic signal and lighting design TMP Preparation
Gray Bowen	Walnut Creek	Funding Opportunities
Judith Buethe Communications	Stockton	Public outreach support Communications services
Martin Hsu Associates	Desert Hot Springs	Value Analysis and Reporting

TEAM MEMBER	LOCATION	RESPONSIBILITIES
Stantec Consultants	Modesto	Surveying, and mapping Right of way engineering Utility coordination services Aesthetic design Landscaping, irrigation design

Prime Consultant Information

RAJAPPAN & MEYER CONSULTING ENGINEERS, INC.

Rajappan & Meyer Consulting Engineers, Inc. (R&M), established in 1994, is a specialized transportation project development, engineering, and design firm headquartered in San Jose, California with offices in Walnut Creek and Oakland. R&M provides consulting services to cities, counties, state organizations, and private corporations throughout Northern California to develop and design highway and street projects. R&M provides complete in-house expertise in project management, transportation engineering, interchange and roadway planning and design, and a specialized expertise in Caltrans project development and design procedures, preparation of PSR's, PR's, Environmental Documents and PS&E. A wide range of capabilities allows us to be involved in all phases of project work … from initial planning, feasibility studies, financing plans, design plans and contract document preparation through to construction support.

Strengths:

- Consultant Team Management
- Project Management and Reporting
- Freeway and Interchange Geometric Design
- Hydrology and Drainage Studies
- Cost Estimates and Scheduling
- Stage Construction Planning
- Structural Engineering and Design
- PS&E Preparation and Management
- PID and PA/ED Management
- Funding Applications
- Traffic Operations Analysis
- Utility Coordination and Relocation
- Public Involvement Support
- PSR and PR Preparation
- Retaining Wall Design
- Design Exceptions and Fact Sheets

Local Experience:

R&M's sole business is highway, bridge and interchange project development and design. Not only do all of our projects encompass extensive public agency coordination, permits, public outreach, and PA&ED approval, we bring the required knowledge and leadership skills necessary to manage the process with responsible agencies, including:

- Caltrans District 10
- Caltrans HQ design and Design Engineering Services
- Caltrans Central Region Environmental Branch
- Stanislaus County Public Works Department
- Stanislaus Council of Governments
- Union Pacific Railroad
- City of Modesto
- US Army Corps of Engineers
- Central Valley Flood Protection Board
- BNSF Railways

Primary Partner Information

LSA ASSOCIATES, INC.

LSA Associates, Inc. (LSA) is an environmental and planning consulting firm that provides professional consulting services to both public institutions and private interests. We have extensive previous experience throughout the Sacramento Valley region, and with an office in Rocklin. LSA provides a complete range of services, and only require outside services where special circumstances occur. The Environmental Division has prepared several hundred EIR/EIS documents and is thoroughly familiar with the California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) processes. Within this division, LSA has experts in air quality assessments and the regulatory environment, as well as analytical noise modeling capabilities to support both land development and transportation infrastructure projects. LSA has been the Environmental Consultant for R&M on all of our projects in the Central Valley, including the Route 99/Arch Road and Jack Tone Road interchange, I-5 North Stockton Corridor Project and Hammer Lane, Otto Drive, Eight Mile Road and North Gateway interchanges, the I-205 Auxiliary Lanes Project, and the SR 99/Kiernan and Hammett Interchanges.

Subconsultant Information

BENDER ROSENTHAL, INC.

BRI is a Sacramento-based real estate appraisal, Right of Way (ROW) acquisition and relocation firm specializing in ROW management and planning services. BRI is currently the right of way consultant to R&M on the Route 4 Freeway Extension Project in Stockton, and the SR 99/Kiernan and Hammett Interchanges in Stanislaus County.

CRAWFORD & ASSOCIATES

The principals of the firm bring significant experience in Geotechnical Engineering, Design, and Construction Services on projects ranging from transportation, bridges, water and wastewater facilities, pipelines, tanks and pump stations, schools, hospitals, residential, and commercial projects. Principals at CAI have provided Geotechnical Engineering Services on the following nearby projects: North County Corridor Stanislaus County, StanCOG SR 132 West Expressway including preliminary recommendations for Carpenter Overcrossing, Emerald Avenue Undercrossing, and State Route 99 Flyover, and Hills Ferry Road Bridge Replacement in Stanislaus County.

FEHR & PEERS TRANSPORTATION CONSULTANTS

Fehr & Peers specializes in providing transportation planning and traffic engineering services to public and private sector clients. F&P has been the traffic forecasting and operations subconsultant to R&M on the I-5 North Stockton Corridor Project and Hammer Lane, Otto Drive, Eight Mile Road and North Gateway interchanges, the I-205/Lammers Interchange, the I-205 Auxiliary Lanes Project, and the SR 99/Kiernan and Hammett Interchanges.

GRAY-BOWEN

Gray-Bowen provides a unique blend of transportation consulting and strategic project planning services. Examples include Atwater Merced Expressway in Merced County, SR 219 in Stanislaus County, SR 4 and SR 4 Bypass in Eastern Contra Costa, the SR 49 Bypass in Amador County, the SR 4 Bypass in Calaveras County, the SR 41 project in Madera County and the Merced-Atwater Expressway in Merced County.

JUDITH BUETHE COMMUNICATIONS

Established in 1989, Judith Buethe Communications (JBC) has developed a unique specialty for public outreach services in the Central Valley. JBC has been the Public Outreach consultant for R&M on all projects in San Joaquin and Stanislaus Counties.

MHA, INC.

MHA is a California based organization whose primary focus is Value Analysis/Value Engineering (VA/VE). The VE methodology is promoted and applied in a highly professional manner to many different project types. MHA has performed more than 180 VA/VE projects, including team studies, training seminars, SAVE-approved training workshops, facilitator services and VE program development. *MHA has been responsible for all Value Analysis on R&M's projects in San Joaquin and Stanislaus Counties including the I-205/Lammers interchange in Tracy, the I-5 North Stockton Corridor, and the SR-99/Kiernan Avenue Interchange for Stanislaus County.*

STANTEC, INC.

Stantec, founded in 1954 is a global design and engineering firm with approximately 12,000 employees. Stantec has Northern California offices located in Modesto, Sacramento and the Bay Area. Stantec is fully equipped with the latest in surveying technology from robotic total stations to L1/L2/Glonass capable GPS systems. This project will be serviced from their Modesto office providing surveying, mapping and civil engineering. Stantec is currently the Survey and Utility consultant for R&M on the Route 4/ Route 160 Interchange project in Antioch for CCTA and for the I-205/Lammers Interchange in Tracy.

R&M Relevant Project Experience

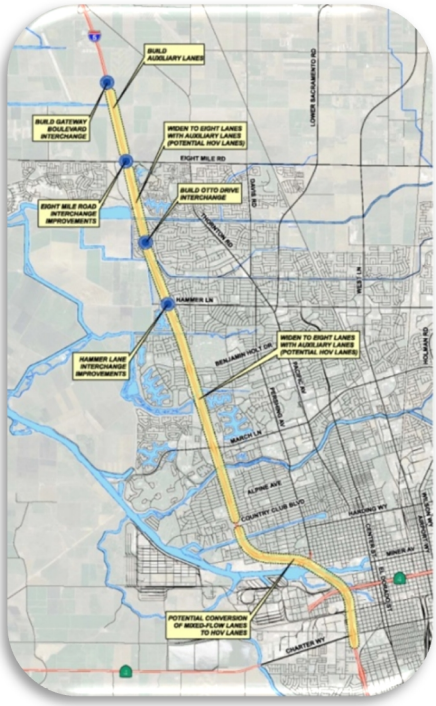
Rajappan & Meyer Consulting Engineers, Inc. (R&M) is among the most qualified and experienced firms for preparation of Corridor Plans, PSR, PR, PA/ED, Preliminary Engineering, and final PS&E on highway and interchange projects in the Northern California and particularly in Stanislaus and San Joaquin Counties. Our exclusive focus as a company is on highway, interchange and freeway project development, approval and design. We have been the Prime Consultant for over $2 billion in transportation construction projects in Northern California and over $1 billion in the Central Valley.

I-5 / NORTH STOCKTON CORRIDOR/HOV WIDENING PROJECT

City of Stockton

R&M was retained by the City of Stockton to prepare environmental documentation, project report and final design for a $450 million project to widen 8 miles of I-5 to eight lanes, implement HOV lanes from Charter Way to Eight Mile Road. The freeway widening includes complete pavement replacement for CRCP and new inside lane in each direction, widening of 22 bridge structures and construction of a new HOV lane for 11 miles. R&M completed the PSR, Supplemental PSR/PDS, EIR/EA and PA/ED and PS&E. Phase 1 PS&E was approved for advertisement in October 2010, to widen the freeway, construct 15 bridges, auxiliary lanes and implement the first freeway HOV lanes in San Joaquin County. An FHWA Modified Access Report, FHWA Financial Plan and FHWA Cost Estimate Review was successfully prepared by R&M, and major investment cost estimates were approved by FHWA. LSA prepared the EIR/EA for the project. R&M was responsible for the design of the I-5 bridge widenings at Country Club Drive, Alpine Road, March Lane, Hammer Lane and Eight Mile Road.

KEY POINTS: This work included all-encompassing project planning, environmental clearance, project permitting and project design, all managed by R&M. This project will create one of the largest projects to be constructed in District 10, with construction ongoing until 2016. Funding by CMIA, SJCOG and SHOPP programs were received based on applications by R&M. Extensive coordination with Caltrans District 10, FHWA and permitting agencies was successfully achieved.



VALUE: $90 Million (Package 1) & $65 Million (Package 2)
DURATION: 2005 - 2013
R&M STAFF: Keith Meyer, John Nguyen, Martha Dadala, Alex Ng, Kianoush Harirsaz, Allen Wang, Philip Shinn
SUBS: F&P, JBC, LSA (EIR/EA), MHA
REFERENCE: Eric Alvarez, City of Stockton – (209) 937-8228 - Eric.Alvarez@ci.stockton.ca.us
Scott Guidi, Caltrans District 10 - (209) 948-7829 - scott_guidi@dot.ca.gov

ROUTE 99/KIERNAN INTERCHANGE PROJECT
Stanislaus County, Caltrans District 10

R&M, as Prime Consultant, completed all planning and design elements for preliminary design, PSR, PA&ED and PS&E for a $40 million reconstruction of the existing interchange and local roads on Route 99 at Kiernan Avenue (SR219) in Salida. The purpose of this project is to meet anticipated traffic growth from planned housing and business development as well as regional traffic growth. The project includes reconstruction of 1.5 miles of Kiernan Avenue from the UPRR tracks in Salida to past Sisk Road in Modesto, and includes local intersection improvements, geometric design, traffic studies, design exception fact sheets, right of way data sheets. The PSR was completed by R&M in 2008. The Project Report, Environmental Document and PA&ED were completed in 2011 and right of way acquisition and final design were completed in 2012. The project is under construction starts from 2013 to 2016. 10 right of way parcels were acquired.

KEY POINTS: This project provided interchange and 1.5 miles of intersection improvements with an innovative SR 99 ramp solution tailored to the local operational needs. The structure was the first use of California Super Girder in District 10. Designed to 2010 HDM and SSPs. This project also included relocation of a pump station.
VALUE: $40 Million
DURATION: 2005 - 2013
R&M STAFF: Keith Meyer, Martha Dadala, John Nguyen, Kianoush Harirsaz, Allen Wang
SUBS: LSA, F&P, JBC, BRI, MHA
REFERENCE: Chris Brady, Stanislaus County - (209) 262-5887 - bradyc@co.stanislaus.ca.us
Christina Hibbard, Caltrans Dist. 10 - (209) 948-7889- christina_hibbard@dot.ca.gov

I-205 / LAMMERS ROAD INTERCHANGE PROJECT

City of Tracy, Caltrans District 10

Since 2000, R&M has been the Prime Consultant for preliminary design and preparation of the PSR and Project Report for construction of a new interchange on I-205 at Lammers Road and two miles of local street connections and intersection improvements. The interchange, located between 11th Ave. and Grant Line Road, will be a major interchange replacement with new connections to I-205 and Byron Road. A new eight-lane bridge over I-205 will be required for the project, and widening of I-205 will be required over the Union Pacific Railroad. R&M completed geometric design, traffic studies, design exception fact sheets, right of way data sheets and PSR in 2005. The Project Report was approved in late 2012. R&M also successfully prepared the Concept Approval Report for FHWA acceptance of the new interchange location. R&:M was retained in 2013 to prepare final design and right of way acquisition documents for the interchange. The design schedule will be from May 2013 to May 2015.

KEY POINTS: This project provided interchange and 3 miles of intersection improvements with an innovative I-205 Interchange tailored to the local operational needs. INNOVATION: The structure will be include California Super Girder and will be designed to 2010 HDM and SSPs. This project also included UPRR coordination for widening of the Janney Overhead on I-205.

DESIGN FEE: PA&ED - $1.5 Million PS&E - $4.0 Million

SCHEDULE: Final Design June 2013 to December 2015

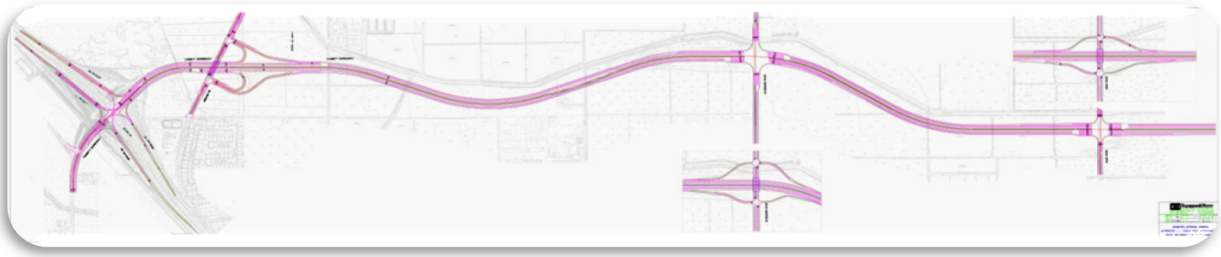
R&M STAFF: Keith Meyer, Martha Dadala, Kianoush Harirsaz

SUBS: F&P, JBC, Geocon, LSA (PEAR), Stantec

REFERENCE: Zabih Zaca, City of Tracy - (209) 831-6452 - zabih.zaca@ci.tracy.ca.us
Scott Guidi, Caltrans District 10 - (209) 948-7829 - scott_guidi@dot.ca.gov

ROUTE 99/HAMMETT INTERCHANGE AND SALIDA EXPRESSWAY

Stanislaus County



R&M, as Prime Consultant, completed preliminary design and preparation of a Project Study Report and Project Report for reconstruction of the existing interchange on Route 99 at Hammett Road. R&M developed geometric design, traffic studies, design exception fact sheets, right of way data sheets for the Project Study Report and Environmental Document. In addition R&M developed preliminary alignment, profile and cost estimates for the western end of the Salida Expressway, which will tie into the Hammett/Route 99 interchange.

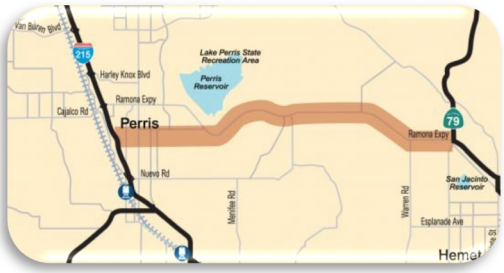
R&M developed mapping, plan profile and traffic analysis of the 6-8 lane expressway alignment from Route 99 to Dale Road, a distance of four miles. Access points were identified in conjunction with alignment studies.

KEY POINTS: This project provided interchange and 4 miles of intersection improvements with an innovative SR 99 ramp solution tailored to the local operational needs.
VALUE: $40 Million
DURATION: 2005 - 2012
R&M STAFF: Keith Meyer, Martha Dadala, Kianoush Harirsaz, Allen Wang
SUBS: LSA, F&P, JBC, BRI
REFERENCE: Chris Brady, Stanislaus County - (209) 262-5887 - bradyc@co.stanislaus.ca.us
Christina Hibbard, Caltrans Dist. 10 - (209) 948-7889- christina_hibbard@dot.ca.gov

LSA Associates Corridor Experience

MID COUNTY PARKWAY

Riverside County Transportation Commission



The MCP project is a key west-east regional transportation corridor in western Riverside County that will provide a direct and continuous route connecting major population and employment centers through the Cities of Perris and San Jacinto. In addition to the project's high visibility within the local community, the project also received a great deal of attention at the national level as it was a project on the Executive Order (EO) 13274 priority list for environmental stewardship and streamlining. In October 2003, RCTC, the Corps, the United States Environmental Protection Agency (EPA), USFWS, CDFW, FHWA, and Caltrans signed a Partnership Agreement to memorialize the efforts of the partnering agencies to work together in a spirit of cooperation, respect, and reasonableness to produce a high-quality product that meets the needs and schedule of the project proponent, as well as those of the other partner agencies. LSA has worked diligently as the Environmental Lead with RCTC, FHWA, Caltrans, the federal resource agencies, and other members of the project team to provide creative solutions for complex issues for this new transportation facility.

STATE ROUTE 91 CORRIDOR IMPROVEMENT PROJECT (CIP)

Riverside County Transportation Commission

The Riverside County Transportation Commission (RCTC) in cooperation with Caltrans contracted a multi-disciplinary team to prepare engineering and environmental documents for the SR-91 CIP. LSA was responsible for the preparation of the environmental technical studies and the Draft and Final Environmental Impact Reports/ Environmental Impact Statements (EIRs/EISs). The SR-91 CIP included preliminary engineering for preparation of a Caltrans Project Approval Document (Project Report) and the EIR/EIS for improvement of existing SR-91 (between the SR-91/SR-241 Interchange in Orange County and Pierce Street in Riverside County) and I-15 (between the I-15/Cajalco Road and the I-15/Hidden Valley Parkway interchanges in Riverside County). The improvements included the addition of one general purpose lane in each direction with either maintaining the existing high occupancy vehicle (HOV) lanes or the extension of the existing two express lanes from Orange County into Riverside County.

RAJAPPAN & MEYER
CONSULTING ENGINEERS

HOURLY CHARGE RATES
for Fixed Billing Rate Contracts
2013

Hourly Rates*

Professional Classifications	Billing Rate Per Hour
Principal Manager	$ 315.00
Deputy Principal	$ 300.00
Structural Design Manager	$ 180.00 - 205.00
Civil Design Manager	$ 167.00 - 192.00
Senior Structural Engineer	$ 172.00 - 187.00
Senior Civil Engineer	$ 103.00 - 125.00
Project Engineer II	$ 90.00 - 110.00
Project Engineer I	$ 70.00 - 85.00
Asst. Project Engineer	$ 63.00 - 70.00
Admin	$ 53.00 - 88.00

**Billing rates include direct salary, overhead, fringe benefits and allowance for profit on labor.*

Services and Expenses

Computer/CADD Systems	$ 12.00/hour
Mileage	$ .50/mile
Fax	$ 2.00/sheet
Copies	$ .12/sheet
In-house Plots	$ 6.00/sheet
In-house Color Plots	$12.00/linear foot

Other Direct Costs

Photocopying, blueprints, photo developing (at cost)

Cost Reimbursement Costs

Commercial services (e.g., printing, computer time, laboratory fees, materials and suppliers) are billed as other direct reimbursement costs

Subconsultants

Subconsultants billed at direct cost +3% processing fee

BENDER ROSENTHAL, INC.
COMMERCIAL VALUATION AND RIGHT OF WAY SERVICES

4400 Auburn Boulevard, Suite 102
Sacramento, CA 95841
main: 916.978.4900 • *fax:* 916.978.4904
www.benderrosenthal.com

2013 BILLING RATES

Below are our standard 2013 rates for additional services required. These costs may vary depending on changes in the scope in work:

Cydney G. Bender, MAI	$210/hr.*
David Wraa, MAI	$210/hr.*
Bob Morrison, PE, CA Real Estate Broker	$210/hr*
Designated Members of the Appraisal Institute (MAI/SRA)	$210/hr.*
Senior Project Manager	$175/hr.
Quality Control Auditor	$160/hr.
Senior Appraiser	$135/hr.
Relocation Specialist	$145/hr.
Senior Acquisition Agent	$135/hr.
Acquisition Agent	$120/hr.
Appraiser	$105/hr.
Other Associated Professional Staff	$ 80/hr.
Researchers	$ 80/hr.
Administrative/Production	$ 70/hr.

*NOTE: For court or briefing preparation, depositions, any pre-trial conferences, court appearances, and related activities, the hourly rate is $420 per hour.

Rates for appraisal services vary based on land use and type of acquisition. Appraisal services are generally completed on a lump sum basis rather than hourly rate.

All direct and indirect costs will be billed at cost plus 10%.

Crawford & Associates, Inc.
Geotechnical Engineering, Design and Construction Services

Fee Schedules

2013 Fee Schedule

Professional Hourly Fees

Benjamin D. Crawford – Principal Geotechnical Engineer	$145
Rick Sowers – Principal Engineer / Engineering Geologist	$145
David Castro, PE – Project Manager	$115
Field Staff – Project Engineer / Geologist	$95
Drafting	$75
Project Assistant	$55

Laboratory Testing Schedule

Sieve Analysis	$100
Sieve Analysis (#200 wash only)	$70
Expansion Index	$130
Plasticity Index	$140
Moisture Density	$45
R-Value	$300
Direct Shear (3 points)	$420

Additional lab test pricing available upon request

Reimbursable

Mileage is billed at current IRS mileage rate

Outside costs are billed at cost plus 10% markup

GRAY·BOWEN

FEE SCHEDULE
Effective January 1, 2013

	Hourly Rate
President – William Gray	$290.00
Senior Vice President – Terry Bowen	$276.00
Senior Advisor – Mike Evanhoe	$290.00
Vice President – Leo Scott	$270.00
Associate Professional	$255.00
Vice President – Trudy Presser	$265.00
Senior Engineer/Project Manager III – Jim Edmunds	$210.00
Associate Engineer/Project Manager II	$195.00
Assistant Engineer/Project Manager I	$184.00
Project Coordinator – Karen Gleeson	$146.00
Project Analyst – Roni Hattrup	$146.00
Administration/Research	$112.00
Word Processing/Data Entry	$96.00
Clerical/ Messenger	$78.00
Consultation/Representation	TBD

Rates subject to change on January 1, 2014. Hourly rates include office overhead (routine clerical, local travel (mileage), etc.). Expenses (parking, tolls, printing, out of area travel, telephone, express mail, delivery, authorized entertainment, etc.) will be billed at cost plus 10%.

Gray·Bowen, Inc. reserves the right, in its discretion, to sub-contract portions of its projects to other qualified professionals. All costs and fees for any sub-contracted services will be billed at cost plus 10%.

Judith Buethe
Communications

Judith Buethe Communications

Schedule of Costs and Fees Format

Name	Hourly Rate	Fringe Benefits 20%	Overhead 80%	G&A 30%	Fee (10%)	Specific Rate of Compensation
Judith Buethe Principal/Proj. Mgr.	50.00	10.00	40.00	15.00	11.50	126.50
Miranda Winters Deputy Project Mgr.	30.00	6.00	24.00	9.00	6.90	75.90
Melissa Williams Creative Director	26.99	5.40	21.59	8.10	6.21	68.28
Loreen Huey Admin. Asst.	18.70	3.74	14.96	5.61	4.30	47.31
Stefan Williams Clerical	13.26	2.65	10.61	3.98	3.05	33.55
Keegan Williams Clerical	13.26	2.65	10.61	3.98	3.05	33.55

Note: Prepared for implementation on 07/29/13

Judith Buethe

P.O. Box 773, Stockton, CA 95201-0773 445 West Weber Avenue, Suite 221, Stockton, CA 95203
PHONE 209.464.8707 FAX 209.942.3080 www.buethecommunications.com

FEHR PEERS

2013-2014

(July 2013 through June 2014)

Hourly Billing Rates

Classification	**Hourly Rate**
Principal	$200.00 - $315.00
Senior Associate	$175.00 - $230.00
Associate	$120.00 - $195.00
Senior Engineer/Planner	$125.00 - $175.00
Engineer/Planner	$95.00 - $135.00
Senior Technical Support	$120.00 - $165.00
Senior Administrative Support	$100.00 - $125.00
Administrative Support	$90.00 - $120.00
Technician	$80.00 - $130.00
Intern	$50.00 - $90.00

- *Other Direct Costs / Reimbursable expenses are invoiced at cost*
- *Personal auto mileage is reimbursed at the then current IRS approved rate (56.5 cents per mile as of Jan 2013).*
- *Voice & Data Communications (Telephone, fax, computer, e-mail, etc.) are invoiced at cost as a percentage of project labor.*

effective 6/29/2013
Fehr & Peers reserves the right to change these rates at any time with or without advance notice.

LSA ASSOCIATES, INC.
4200 ROCKLIN ROAD, SUITE 11B
ROCKLIN, CALIFORNIA 95677

916.630.4600 TEL
916.630.4603 FAX

BERKELEY
CARLSBAD
FORT COLLINS
FRESNO
IRVINE
PALM SPRINGS
PT. RICHMOND
RIVERSIDE
SAN LUIS OBISPO

HOURLY BILLING RATES EFFECTIVE JUNE 2013

Job Classification							Hourly Rate Range[1,2]
Planning	**Environmental**	**Transportation**	**Air/ Noise**	**Cultural Resources**	**Biology**	**GIS**	
Principal	Principal	Principal	Principal	Principal	Principal	Principal	$125–300
Associate	Associate	Associate	Associate	Associate	Associate	Associate	$85–200
Senior Planner	Senior Environmental Planner	Senior Transportation Planner/Engineer	Senior Air Quality/ Noise Specialist	Senior Cultural Resources Manager	Senior Biologist/Botanist/ Wildlife Biologist/Ecologist /Soil Scientist/ Herpetologist/ Arborist	Senior GIS Specialist	$85–175
Planner	Environmental Planner	Transportation Planner/Engineer	Air Quality/ Noise Specialist	Cultural Resources Manager	Biologist/Botanist/ Wildlife Biologist/ Ecologist/Soil Scientist/ Herpetologist/ Arborist	GIS Specialist	$70–125
Assistant Planner	Assistant Environmental Planner	Assistant Transportation Planner/Engineer	Air Quality/ Noise Analyst	Cultural Resources Analyst	Assistant Biologist/Botanist/ Wildlife Biologist/ Ecologist/Soil Scientist/ Herpetologist/ Arborist	Assistant GIS Specialist	$55–90
Field Services							
Senior Field Crew/Field Crew							$50–85
Office Services							
Research Assistant/ Technician							$35–60
Graphics							$90–120
Office Assistant							$60–90
Word Processing/ Technical Editing							$75–95

[1] The hourly rate for work involving actual expenses in court, giving depositions or similar expert testimony, will be billed at $400 per hour regardless of job classifications.

[2] Hourly rates are subject to review at least annually, on or about June 1 of each year, and may be adjusted to reflect changing labor costs at LSA's discretion at that time.

mha, inc.

Martin Y. Hsu, PE, CVS & Associates, Inc.

64305 Silver Star Avenue, Desert Hot Springs, CA 92240

Tel: 214-223-4139

Fax: 760-671-4361

Email: Martin@MartinHsu.net

2013 Billing Rates

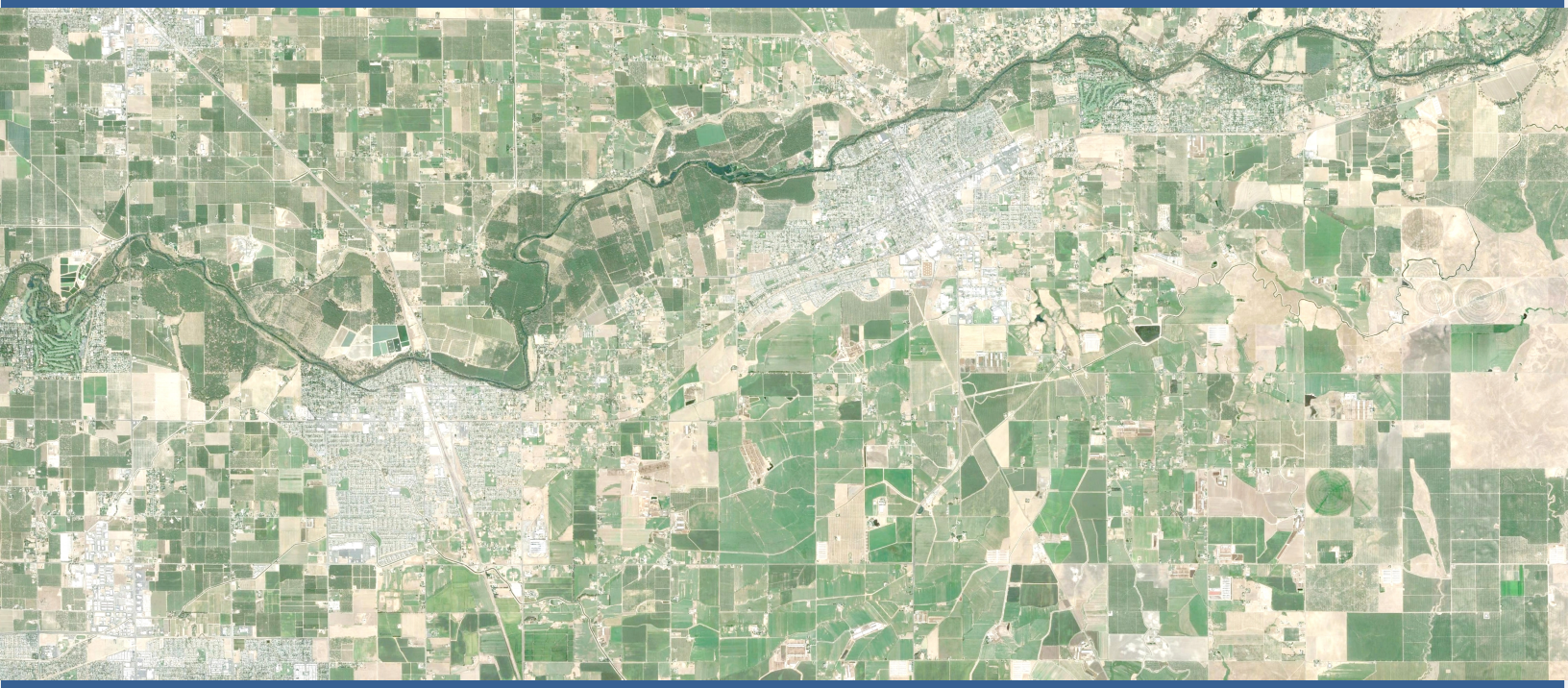
Classification	Rate	OH	Profit	Billing Rate
CVS Team Leader	$65.00	160%	10%	$185.90
Technical Writer/Proof Reader	$30.00	160%	10%	$85.80
Clerical	$22.00	160%	10%	$62.92

Stantec **2013 Fee Schedule**

LEVEL	HRLY RATE	DESCRIPTION
1 2	$52 $59	**Entry-level position** . Works under the supervision of a senior professional . Recent graduate from an appropriate post-secondary program or equivalent . Generally, less than four years experience
3 4 5	$65 $72 $80	**Junior-level position** . Independently carries out assignments of limited scope using standard procedures, methods and techniques . Assists senior staff in carrying out more advanced procedures . Completed work is reviewed for feasibility and soundness of judgment . Graduate from an appropriate post-secondary program or equivalent . Generally, one to three years experience
6 7 8	$87 $95 $104	**Fully qualified professional position** . Carries out assignments requiring general familiarity within a broad field of the respective profession . Makes decisions by using a combination of standard methods and techniques . Actively participates in planning to ensure the achievement of objectives . Works independently to interpret information and resolve difficulties . Graduate from an appropriate post-secondary program, with credentials or equivalent . Generally, three to six years experience
9 10 11	$113 $122 $133	**First level supervisor or first complete level of specialization** . Provides applied professional knowledge and initiative in planning and coordinating work programs . Adapts established guidelines as necessary to address unusual issues . Decisions accepted as technically accurate, however may on occasion be reviewed for soundness of judgment . Graduate from an appropriate post-secondary program, with credentials or equivalent . Generally, five to nine years experience
12 13 14	$144 $156 $167	**Highly-specialized technical professional or supervisor of groups of professionals** . Provides multi-discipline knowledge to deliver innovative solutions in related field of expertise . Participates in short and long range planning to ensure the achievement of objectives . Makes responsible decisions on all matters, including policy recommendations, work methods, and financial controls associated with large expenditures . Reviews and evaluates technical work . Graduate from an appropriate post-secondary program, with credentials or equivalent . Generally, ten to fifteen years experience with extensive, broad experience
15 16 17	$177 $196 $231	**Senior level consultant or management** . Recognized as an authority in a specific field with qualifications of significant value . Provides multidiscipline knowledge to deliver innovative solutions in related field of expertise . Independently conceives programs and problems for investigation . Participates in discussions to ensure the achievement of program and/or project objectives . Makes responsible decisions on expenditures, including large sums or implementation of major programs and/or projects . Graduate from an appropriate post-secondary program, with credentials or equivalent . Generally, more than twelve years experience with extensive experience
18 19	$272 $357	**Senior level management under review by Vice President or higher** . Recognized as an authority in a specific field with qualifications of significant value . Responsible for long range planning within a specific area of practice or region . Makes decisions which are far reaching and limited only by objectives and policies of the organization . Plans/approves projects requiring significant human resources or capital investment . Graduate from an appropriate post-secondary program, with credentials or equivalent . Generally, fifteen years experience with extensive professional and management experience
Survey Crews	$150 $220 $290	1-Person Crew, Prevailing Wage 2-Person Crew, Prevailing Wage 3-Person Crew, Prevailing Wage

RAJAPPAN & MEYER

CONSULTING ENGINEERS



RAJAPPAN & MEYER CONSULTING ENGINEERS

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