NORTH COUNTY CORRIDOR EXPRESSWAY TRANSPORTATION AUTHORITY

ITEM: 4c

SUBJECT: Jacobs Engineering Contract; Task 2 and Task 3

Jacobs Engineering has completed Task 1 with amendment 1.

The following Task Order 1 deliverables have been completed:

- Aerial topographic surveys and a portion of the base mapping
- Defining the Route Adoption limits (see attached letter)
- Assist in developing the cooperative agreement with Caltrans
- Drafted the Project Charter and Risk Plan with Caltrans (These will need minor revisions based on new Route Adoption strategy)
- Defining the Environmental Strategy with Caltrans
- Issued "Notice of Preparation" for the environmental document
- Drafted "Purpose and Need" for project (Will need revision based on new Route Adoption strategy)
- Determining the appropriate traffic model and completed data collection
- Coordinating with local planning documents
- Developing Public Outreach Communications Plan, project brochure, and conducted two public scoping meetings
- Initiating environmental technical studies
- Refined the Scope, Cost and Schedule for subsequent Task Orders

Task Order 2 and Task Order 3 are proposed to run concurrently. Task Order 2 will address CEQA and Route Adoption documentation for the approved Route Adoption strategy from McHenry to SR 120. Task Order 3 will address CEQA EIR/ NEPA Tier 1 EIS for the entire corridor from SR 99 to SR 120 and a project specific scoping document for a buildable Phase 1 project (from Oakdale westerly as funding allows). The cost, scope and schedules for these two tasks are being developed will be presented at the TAC meeting.

STAFF RECOMMENDATIONS:

Review Task 2 and Task 3 and develop a recommendation to the NCC TEA Board for modification to the contract.

FISCAL IMPACT:

To be determined.

BACKGROUND:

Several meetings with Caltrans management, JPA staff, and JPA Technical Advisory Committee members resulted in a strategy that is acceptable to Caltrans and the JPA Staff. This strategy is expected to expedite the project and position the NCC Project for the 2010 STIP funding. Caltrans Environmental staff have also agreed upon the optimum delivery strategy to finish the CEQA program level environmental document on time to accompany the California Transportation Commission (CTC) Route Adoption approval. The key agreements with Caltrans are as follows:

- 1. Prepare a modified Project Report to accompany the Route Adoption CEQA approval. The level of engineering work needed to be performed has been mutually agreed between Caltrans and the JPA Staff, and is documented in the Project Charter. Note: This will have minor edits as the limits of Route adoption have changes
- 2. Prepare a modified Project Study Report (PSR) to program the first phase of the project.
- 3. Level of traffic analysis and methodology needed.

Based on these agreements, the scope of work for Task Order #2 generally consists of the following broad tasks. (Please refer to the attached Scope for detail)

- 1. Preparation of a modified Project Report for Route Adoption. This report will focus on mainline geometrics, definition of right of way requirements and preliminary costs for programming.
- 2. Preparation of a program level CEQA environmental document to precede the CTC Route Adoption action.

A schedule and fee to implement the activities in the above broad tasks is in process. This schedule will enable the NCCTEA to take the program level CEQA document and the Route Adoption request to the CTC at its November 2009 meeting and submit a project nomination for the 2010 Interregional Transportation Improvement Program (ITIP) funding. Nominations are due to Caltrans headquarters by December 2009.

Task Order #3 generally consists of the following broad tasks. (Please refer to the attached Scope for detail)

- 1. All public outreach efforts.
- 2. Tasks necessary to compete the CEQA EIR/NEPA Tier 1 EIS for the entire corridor and a project specific scoping document for a buildable Phase 1 project.
- 3. Initiate preliminary engineering design toward PS&E level that will cover the Phase 1 limits that is assumed will involve the northerly alignment only, identified as Corridor/Alternative B alignment in the Preliminary Design Report (PDR), and will generally include the area between the easterly termini of the project study area near Highway 108/120 and Claus Road to the west.



Task Order #2 Scope of Work

The scope of Task Order #2 is detailed in the original proposal and the deliverables under this Task Order are detailed below with any clarification as necessary. The subconsultant(s) assisting Jacobs in performing these tasks are shown in brackets i.e. [JBC].

- 1.0 Project Management (WBS 100.10)
- 1.2. Execution and Control (WBS 100.10.10 and 100.10.15)

Deliverables:

Project schedule update as necessary Project invoices and progress reports

1.3. Coordination and Meetings (WBS 100.10.10 and 100.10.15)

Deliverables: Agendas and meeting summaries for Progress, Project Coordination, Team Coordination, and PDT/PDST meetings

1.4. Quality Control Program (WBS 100.10.10 and 100.10.15)

Deliverables: Quality Assurance/Quality Control Reviews on deliverable products.

- 3.24 Engineering and Land Net Surveying (WBS 160.20 through 160.20.70)
 - 3.24.3. Aerial Topographical Mapping

Work begun in Task Order #1. Portion of funding reallocated to other activities in Task Order #1.

Deliverables: Project Base Mapping

3.25. Surveys and Mapping for Environmental Studies (WBS 160.30.10)

Deliverable: Aerial and site mapping for environmental studies. Digital mapping will be compiled to produce 2' contours and planimetry for 25 miles of corridor mapping.

3.26. Property Access Rights For Environmental/Engineering Studies (WBS 160.30.15)

Deliverables:

Mapping of properties requiring ROEs

4.0. Perform Environmental Studies and Prepare Draft Document [IFC – J & S]

Prepare technical memorandums or short technical reports, roughly following the outline of an environmental document, for the resource topics listed below to document the effects of the decision to adopt a new state route. Jacobs Engineering has provided a basic outline for these reports and will provide the approved Caltrans guidance for this effort. The approach for these studies, as approved by Caltrans, is included below and does not follow the technical study guidance presented in Caltrans Standard Environmental Reference.

After the studies have been approved, they will be converted into sections of the PEIR, following Caltrans staff and/or Standard Environmental Reference guidance for CEQA documents and provided to Jacobs Engineering in MS Word for inclusion in the PEIR.

The External Certifications form for environmental document quality control review certification will be signed by technical specialist reviewers and technical edit reviewer to certify that the environmental document is consistent with FHWA and Caltrans requirements and guidance.

4.2. Public and Agency Scoping Process (WBS 165.05.10) [IFC - J & S]

Deliverables:

CEQA Initial Study

Scoping Meeting Summary Report

4.3. Alternatives for Further Study (WBS 165.05.15) [IFC - J & S]

Deliverables: Alternatives Screening Report

- 5.0. General Environmental Studies (WBS 165.10 through 165.25) [IFC J & S]
- 5.1. Community Impact Analysis, Land Use, and Growth Studies (WBS 165.10.15) [IFC J & S]

Deliverables: Prepare draft, revised draft and final Community Impact Assessment (CIA) report following the Caltrans CIA handbook

5.2. Visual Impact Assessment and Scenic Resources Evaluation (WBS 165.10.20) [IFC - J & S]

Deliverable: Draft, revised draft and final Visual Impact Assessment report with photosimulations. Note: Route Adoption will use general screening using available data and spot field checks.

5.3. Noise Study (WBS 165.10.25) [IFC - J & S]

Deliverable: Draft, revised draft and final Noise Study. Note: For route adoption General bands or isopleths of potential noise impacts will be provided

5.4. Air Quality Study (WBS 165.10.30) [IFC - J & S]

Deliverable: Draft, revised draft and final Air Quality Study. Note: Available traffic data from previous studies will be used to conduct a comparative analysis for Route Adoption. No new studies will be performed.

5.5. Water Quality Studies (WBS 165.10.35) [IFC - J & S]

Deliverable: Draft, revised draft, and final Water Quality Assessment report

5.6. Energy Studies (WBS 165.10.40) [IFC - J & S]

Deliverable: Draft, revised draft and final Energy Study report

5.8. Hazardous Waste Preliminary Site Investigations (WBS 165.10.50) [IFC - J & S]

Deliverables: Draft Initial Site Assessment and Final Initial Site Assessment.

5.9. Draft Right-of-Way Relocation Impact Document (WBS 165.10.55) [IFC - J & S]

Deliverable: Draft, revised draft and final Draft Relocation Impact Report

5.10. Location Hydraulic and Floodplain Study Report (WBS 165.10.60) [IFC - J & S]

Deliverable: Draft, revised draft and final Location Hydraulic and Floodplain Study Report

5.11. Paleontology Study (WBS 165.10.65) [IFC - J & S]

Deliverable: Draft, revised draft and final Paleontology Study

5.13. Biological Studies (WBS 165.15) [IFC - J & S]

Deliverables:

Draft, revised draft and final Natural Environment Study NES Draft, revised draft and final Biological Assessment (BA)

Draft, revised draft and final Wetlands Study

7.0. Circulate Draft Environmental Document and Select Preferred Project Alternative (WBS 175.05 through 175.05.20) [IFC - J & S]

Deliverable: Draft ED (up to 200 copies)

7.1. DED Circulation (WBS 175.05)

Deliverable: Draft ED

7.1.1 Master Distribution and Invitation Lists (WBS 175.05.05)

Deliverable: Distribution list

7.1.2 Notices Regarding Public Hearing and Availability of Draft Environmental Document (WBS 175.05.10) [JBC]

Deliverable: Notices and advertisements

7.1.3 DED Publication and Circulation (WBS 175.05.15) [JBC]

Scope of Services - see WBS 2.175.05 description above

Deliverable: See above

7.2. Public Hearing (WBS 175.10.05 through 175.10.40) [J & S – IFC, JBC]

Deliverables: Public hearing collateral, public hearing logistics, Draft, revised draft and final Public Hearing Summary Report

7.3. Project Preferred Alternative (WBS 175.20) [J & S - IFC]

Deliverable: Draft, revised draft and final Preferred Alternative Memorandum



Task Order #3 Scope of Work

The scope of Task Order #3 is detailed in the original proposal and the deliverables under this Task Order are detailed below with any clarification as necessary. The subconsultant(s) assisting Jacobs in performing these tasks are shown in brackets i.e. [JBC]. 1.0 Project Management (WBS 100.10)

1.2. Execution and Control (WBS 100.10.10 and 100.10.15)

Deliverables:

Project schedule update as necessary Project invoices and progress reports

1.3. Coordination and Meetings (WBS 100.10.10 and 100.10.15)

Deliverables: Agendas and meeting summaries for Progress, Project Coordination, Team Coordination.

1.4. Quality Control Program (WBS 100.10.10 and 100.10.15)

Deliverables: Quality Assurance/Quality Control Reviews on deliverable products.

2.0. Consensus Building and Outreach (WBS 100.10.99) [JBC]

The Communications Plan will be reviewed and progress reports made at monthly project development team meetings. Adjustments to the plan will be made as issues and events warrant and opportunities are presented.

2.1. Project Development Workshops [JBC]

Plan and organize project workshops as part of the environmental process. Up to four (4) public workshops, and four (4) Public Hearings to keep the community updated on the project and comply with environmental process requirements.

Deliverables:

- Notification materials (workshop announcements, display ads, press releases, elected officials letters, web site announcements)
- Meeting agendas / PowerPoint presentations / project informational materials / exhibit boards
- Workshop and meeting summaries

2.2. Agency Coordination

Deliverables:

Meeting agendas and summaries with action item lists

2.3. Database Development and Comment Tracking [JBC]

Deliverables:

Maintain database list coded for interest and activity with contact information and issues/comments noted

Comment Tracking Reports

2.4. Combined Newsletter/Facts Sheets [JBC]

Deliverables:

Provide up to four (4) combined newsletters/fact sheets (update and conclusion of consensus building) to keep interested parties updated on project development and available information on the project development process. Up to 3,500 Combined Newsletters/Fact Sheets per issue

2.5. Website Coordination [JBC]

Deliverables: Project web site updates and log of items posted.

2.6. Media Coordination [JBC]

Deliverables: Newspaper articles and media releases and display advertisements

3.0. Perform Preliminary Engineering Studies and Draft Modified Project Report (WBS 160, 160.05.10, 160.10.80.05 & 160.10.85) [BRG, BCI]

Within the limit of Phase 1, the conceptual geometrics in the PDR shows 32 separate bridge structures will be required. The bridge structures consist of twin parallel undercrossings, canal crossings and railroad overheads as well as single overcrossings. For scoping purposes, we have identified the anticipated bridge structures beginning from the most easterly located structure and then moving to the west on the proposed alignment as follows:

- Old South Main Canal Bridge L/R
- NCC Expressway/Sierra RR Overhead L/R
- Kerney Lateral Bridge L/R
- Union Lateral Bridge L/R
- Old South Main Lateral Bridge L/R
- South Lateral Bridge L/R
- Claribel Lateral Bridge L/R
- Brichetto Lateral Bridge L/R
- Oakdale Waterford Highway Bricheto Lateral Bridge
- Albers Road Overcrossing
- Kaufman Road Undercrossing L/R
- Patterson Road Undercrossing L/R
- Bentley Road Undercrossing L/R
- Langworth Road Overcrossing
- McGee Ave Undercrossing L/R
- Claribel Road Undercrossing L/R
- STA 570+00 Mid Main Canal Bridge L/R
- Off Ramp Mid Main Canal Bridge

Note: We assume that the overcrossing structure at Claus Road is not included in the Phase 1 work.

Based on the proposed roadway geometrics and preliminary project information, the APS will be prepared in accordance to the Caltrans' Office of Special Funded Project Procedures Guide. As part of the APS tasks, a feasible type of structure will be developed with associated cost appropriate for the specific location. The preliminary foundation report and the structure foundations will be reviewed to determine preliminary foundation type. Any preliminary hydraulic report if required will be provided by Jacobs or others for the canal crossings. We will review the preliminary hydraulic report and coordinate with the project hydraulic engineer as required to develop the proper structure layout to meet the requirements in the report. The studies will be developed for one alternative alignment and includes up to 32 structures as identified above and in the PDR.

Deliverables: APS Report per bridge includes: a bridge APS exhibit, APS Checklist, an APS design memo, and Itemized cost estimates consistent with Project Report requirements.

Preliminary Foundation Memo (Type Selection)

We will review documents provided by the design team, including Caltrans As-Built LOTB's, Foundation Reports, and Geotechnical Design Reports for existing structures and roadway improvements along the project alignment. To evaluate site geology and seismic conditions, we will review our in-house local and regional geologic and seismic hazards maps pertaining to the site.

We will conduct a site geologic reconnaissance of the immediate vicinity and determine drill rig accessibility and mark boring locations for Underground Service Alert (USA). We will obtain encroachment and boring permits from Stanislaus County. We assume the County will waive the encroachment permit fee.

We propose to perform a limited subsurface exploration at the locations shown below:

Structure Areas	Subsurface Exploration	
Intersection of Claus Rd. and Plainview Rd.	One boring 50 to 75 feet	
Intersection of Claribel Rd. and McGee Rd.	One boring 50 to 75 feet	
3000 ft south of Patterson Rd. on Langworth Rd.	One boring 50 to 75 feet	
Intersection of Patterson Rd. and Bentley Rd.	One boring 50 to 75 feet	
Intersection of Patterson Rd. and Kaufman Rd.	One boring 50 to 75 feet	
Intersection of Patterson Rd. and Oakdale Waterford Hwy.	One boring 50 to 75 feet	
Intersection of Warnerville Rd. and S. Stearns Rd.	One boring 50 to 75 feet	
2000 ft east of Stoddard Rd. on Warnerville Rd.	One boring 50 to 75 feet	
Intersection of Fogarty Rd. and the Hetch Hetchy.	One boring 50 to 75 feet	

4000 ft southwest of Lancaster Rd. and OID south main canal intersection.	One boring 50 to 75 feet
1.5 miles north of Lancaster Rd. along Hwy 120/108.	One boring 50 to 75 feet

*OID-Oakdale Irrigation District

We assume that the borings can be located off of the existing roadways and that traffic control at most will consist of safety signs/cones for shoulder work without flagmen. We assume that rights-of-entry (if necessary) will be provided by others.

We will perform the following laboratory tests on relatively undisturbed samples obtained from the exploratory borings:

- Moisture Content and Unit Weight.
- Triaxial Compression for bearing capacity and lateral pile capacity.
- Sieve analysis.
- Plasticity Index.
- Soil corrosivity.

We will prepare Preliminary Foundation Memos for the project which will include the following:

- Summary of Site Geology and Subsurface Conditions.
- Project Location.
- As-Built Log of Test Borings for Existing Nearby Structures.
- Log of Test Borings for our Preliminary Subsurface Exploration.
- Preliminary Seismic Data and Evaluation (including ARS curve).
- Preliminary Liquefaction Evaluation.
- Preliminary Corrosion Evaluation.
- Preliminary Foundation Recommendations.
- Evaluation of embankment settlement, cut/fill slope stability, scour, soil corrosivity, and constructability issues.
- Recommendations for Additional Field Work and Laboratory Testing.

The preliminary Foundation Memo should only be used for advanced planning as additional subsurface exploration, laboratory testing and analysis will be required to prepare Final Foundation Reports for design of each bridge.

Deliverables:

- Draft Preliminary Foundation Memo (Type Selection) Claus Road and Mid Main Canal Structure
- Draft Preliminary Foundation Memo (Type Selection) McGee Avenue and Claribel Structures
- Draft Preliminary Foundation Memo (Type Selection) Langworth Road, Bentley Road, Kaufman Road, and Patterson Road Structures

- Draft Preliminary Foundation Memo (Type Selection) Albers and Brichetto,
 Claribel and South Lateral Structures
- Draft Preliminary Foundation Memo (Type Selection) OID South Main and Union and Kea
- Draft Preliminary Foundation Memo (Type Selection) Sierra RR and OID South Main Structure
- Final Preliminary Foundation Memo (Type Selection) Claus Road and Mid Main Canal Structure
- Final Preliminary Foundation Memo (Type Selection) McGee Avenue and Claribel Structures
- Final Preliminary Foundation Memo (Type Selection) Langworth Road, Bentley Road, Kaufman Road, and Patterson Road Structures
- Final Preliminary Foundation Memo (Type Selection) Albers and Brichetto, Claribel and South Lateral Structures
- Final Preliminary Foundation Memo (Type Selection) OID South Main and Union and Kea
- Final Preliminary Foundation Memo (Type Selection) Sierra RR and OID South Main Structure

Preliminary GDR/Materials Report

We will meet and discuss the project, issues and schedule with the design team, and attend the project kick off meeting. We will review documents provided by the design team, including Caltrans As-Built LOTB's, Foundation Reports, and Geotechnical Design Reports for existing structures and roadway improvements along the project alignment. To evaluate site geology and seismic conditions, we will review our in-house local and regional geologic and seismic hazards maps pertaining to the site.

We will perform the following laboratory testing on relatively undisturbed samples obtained during our preliminary foundation memo exploration.

• R-Value

We will prepare a Preliminary Geotechnical/Materials Report for the project alignment including the following:

- Project description
- Summary of site geology and subsurface conditions
- As-built LOTB for existing structures along the alignment
- LOTBs for our limited subsurface exploration
- Discussion of potential geotechnical/material issues for design
- Preliminary pavement sections.

The preliminary Geotechnical/Materials Report should only be used for advanced planning as additional subsurface exploration, laboratory testing and analysis will be

required to prepare Final Geotechnical and Material Design Reports for the proposal improvements.

Deliverables:

- Draft Preliminary Geotechnical/Material Report
- Final Preliminary Geotechnical/Materials Report

3.1. Update Project Information for Preferred Alternative (WBS 160.05.20) [F&P]

Collect existing AM (7-9 AM) and PM (4-6 PM) peak period intersection traffic counts at up to 30 intersections and perform peak period field surveys to identify existing geometric features, lane configurations, and traffic control devices at the intersections and roadway locations identified by the Project Team. We will also identify existing queuing issues at each of the study intersections.

Traffic Forecasting (WBS 160.10.10) [F&P]

- Use the current version of the StanCOG RTP Model to determine opening year and design year average daily traffic (ADT) volumes at existing/new roadway locations
- Initiate a focused model validation exercise in the study area, followed by the use of the model to predict changes in travel patterns in the opening and design year time period. Results to be reviewed with StanCOG and Caltrans. If the revised model meets the specified validation targets we will proceed with the future year forecasting. However, if the revised model still does not fully meet all of the Caltrans targets, the consultant team will review the progress made with Caltrans and request approval to proceed with forecasting.
- Opening year and design year daily traffic forecasts will be developed for up to five alternatives including "No Project" conditions
- Submit a technical memorandum summarizing the traffic forecasts for review and approval by the Project Development Team (PDT). Once approved, we will proceed with the technical evaluation of the alternatives

3.4. Geometric Plans for Project Report (WBS 160.10.15)

Deliverable: Preliminary mainline geometric plans, typical sections and superelevation drawings for up to four alternatives, with a focus on the Phase 1 limits that will involve the northerly alignment, identified as Corridor/Alternative B alignment in the Preliminary Design Report (PDR) dated April 2008, and will include the area between the easterly termini of the project study area near Highway 108/120 and Claus Road to the west

3.5. Construction Phasing Concept Plans (WBS 160.10.16)

Deliverables: Concept construction phasing plan for one alternative beginning from east end of project to the west with logical termini and funding available.

3.7. Conceptual Hydraulics/Hydrology Studies (WBS 160.10.25)

Deliverables: Conceptual Hydrology Study

3.8. Drainage Concept Plans (WBS 160.10.26)

Deliverables: Concept Drainage Plans (Layout only)

3.9. Storm Water Data Report (WBS 160.10.27)

Deliverables: Concept Drainage Plans (Layout only)

3.10. Traffic Operational Analysis (WBS 160.10.35) [F&P]

The intersection traffic counts, lane configurations, signal timings, and other information collected under WBS 160.05.20 will be used to develop existing AM and PM peak hour Synchro models. Synchro provides results consistent with the Transportation Research Board's 2000 *Highway Capacity Manual* (HCM) methodology. Intersections that are clustered together (less than 1000 foot spacing) will be converted to micro-simulation (using the SimTraffic software) to determine existing intersection delay and level of service. Existing traffic operations for intersections that are not clustered together will be determined directly from the Synchro LOS output. We will submit a technical memorandum summarizing the existing traffic conditions for review and comment by the Project Development Team (PDT).

The traffic forecasts developed under WBS 160.10.10 will be used to develop Synchro models (AM and PM peak hour) for up to three project alternatives including No Project conditions. The Synchro models will include the same intersections evaluated under existing conditions plus up to 30 new intersections created by the Project. We estimate that up to 30 new intersections could be studied as a result of the potential 8 to 10 interchanges that could be provided as part of the first phase of the project. Similar to existing conditions analysis, intersections that are clustered together (less than 1000 foot spacing) will be converted to micro-simulation (SimTraffic) to determine existing intersection delay and level of service. Traffic operations for the intersections that are not clustered together will be determined directly from the Synchro LOS output. Peak hour analysis will be performed for the opening year and design year under each project alternative. Results will include average delay, level of service, and estimated queue lengths for each intersection.

The consultant team will also perform AM and PM peak hour mainline and ramp junction analysis for the new expressway for up to three project alternatives including No Project conditions. The mainline and ramp analysis will be consistent with the methodologies presented in the 2000 HCM. Weaving analysis, if necessary, will be consistent with the methodologies presented in Chapter 500 (Leisch Method) of the Caltrans Highway Design Manual (HDM).

In addition to peak hour level of service analysis, the consultant team will utilize the modified StanCOG RTP Model to project changes in ADT on project area roadways as a result of the Project. Furthermore, the regional implications of the corridor will also be evaluated by examining additional measures of effectiveness (MOEs) such as vehicle

miles of travel (VMT), vehicle hours of travel (VHT), and vehicle hours of delay (VHD) with and without the Project.

Deliverables: Traffic Operations Technical Memorandum

3.11. Right-of-Way Data Sheet (WBS 160.10.40) [UFS]

Deliverables: Right-of-Way Data Sheet(s)

3.12. Determine Right-of-Way Requirements (WBS 160.10.41)

Deliverables: Tabulated Right-of-Way Requirements

3.13. Utility Location Requirements (WBS 160.10.45) [G & K]

Deliverables: Utility record drawings mapped on base sheets with contact list and utility base mapping

3.14. Railroad Study (WBS 160.10.50)

Deliverables: Railroad Information Sheet

3.15. Park and Ride Study (WBS 160.10.60) [F & P]

Deliverables: Draft and final Park and Ride Study

3.16. Traffic Studies (WBS 160.10.70) [F & P]

Prepare the Traffic Operations Report summarizing the results and findings. Submit an Administrative Draft Traffic Operations Report to JPA for one round of review and written comments. We will respond to JPA written comments and prepare the Draft Traffic Operations Report to submit to Caltrans and other PDT members for one round of review and comments. We will respond to comments on the Draft Traffic Operations Report and prepare the Final Traffic Operations Report. We will submit the final report in both hard copy and electronic format.

After approval of the Final Traffic Operations Report, we will prepare the transportation chapter of the Environmental Document. This report will build on previous work and will document the proposed project's impact on the transportation and circulation system. The report will also include a qualitative assessment of the impacts of each alternative on bicycle, pedestrian, and transit facilities within the study corridor. Mitigation measures for significant transportation impacts will be identified. We will respond to comments on the public draft environmental document.

We will also prepare the traffic chapter of the Project Report that will address the proposed Project in accordance with Caltrans guidelines and requirements. We will respond to comments on the Project Report.

Deliverables:

Traffic Operations Report
Text for the Traffic Section of the Environmental Document
Text for the Traffic Section of the Project Report

3.20. Cost Estimates for Alternatives (WBS 160.15.05) [BRG]

Deliverables: Cost Estimates for Modified Project Report

3.21. Fact Sheet for Exceptions to Design Standards (WBS 160.15.10)

Deliverables:

List of Non-Standard Features for the selected alternative Fact Sheets for Exceptions to Design Standards for selected alternative

3.22. Draft Modified Project Report (WBS 160.15.20)

Deliverables: Preliminary Draft and Final Draft of Modified Project Report

3.23. Circulate, Review and Approve Draft Modified Project Report (WBS 160.15.25)

Deliverables: Signed Draft Modified Project Report

3.4. Geometric Plans for Project Report (WBS 160.10.15)

Deliverable: Preliminary mainline geometric plans, typical sections and superelevation drawings for up to four alternatives, with a focus on the Phase 1 limits that will involve the northerly alignment, identified as Corridor/Alternative B alignment in the Preliminary Design Report (PDR) dated April 2008, and will include the area between the easterly termini of the project study area near Highway 108/120 and Claus Road to the west

3.5. Construction Phasing Concept Plans (WBS 160.10.16)

Deliverables: Concept construction phasing plan for one alternative beginning from east end of project to the west with logical termini and funding available.

3.7. Conceptual Hydraulics/Hydrology Studies (WBS 160.10.25)

Deliverables: Conceptual Hydrology Study

3.8. Drainage Concept Plans (WBS 160.10.26)

Deliverables: Concept Drainage Plans (Layout only)

3.9. Storm Water Data Report (WBS 160.10.27)

Deliverables: Concept Drainage Plans (Layout only)

3.10. Traffic Operational Analysis (WBS 160.10.35) [F&P]

The intersection traffic counts, lane configurations, signal timings, and other information collected under WBS 160.05.20 will be used to develop existing AM and PM peak hour Synchro models. Synchro provides results consistent with the Transportation Research Board's 2000 *Highway Capacity Manual* (HCM) methodology. Intersections that are clustered together (less than 1000 foot spacing) will be converted to micro-simulation (using the SimTraffic software) to determine existing intersection delay and level of service. Existing traffic operations for intersections that are not clustered together will be determined directly from the Synchro LOS output. We will submit a technical memorandum summarizing the existing traffic conditions for review and comment by the Project Development Team (PDT).

The traffic forecasts developed under WBS 160.10.10 will be used to develop Synchro models (AM and PM peak hour) for up to three project alternatives including No Project conditions. The Synchro models will include the same intersections evaluated under existing conditions plus up to 30 new intersections created by the Project. We estimate that up to 30 new intersections could be studied as a result of the potential 8 to 10 interchanges that could be provided as part of the first phase of the project. Similar to existing conditions analysis, intersections that are clustered together (less than 1000 foot spacing) will be converted to micro-simulation (SimTraffic) to determine existing intersection delay and level of service. Traffic operations for the intersections that are not clustered together will be determined directly from the Synchro LOS output. Peak hour analysis will be performed for the opening year and design year under each project alternative. Results will include average delay, level of service, and estimated queue lengths for each intersection.

The consultant team will also perform AM and PM peak hour mainline and ramp junction analysis for the new expressway for up to three project alternatives including No Project conditions. The mainline and ramp analysis will be consistent with the methodologies presented in the 2000 HCM. Weaving analysis, if necessary, will be consistent with the methodologies presented in Chapter 500 (Leisch Method) of the Caltrans Highway Design Manual (HDM).

In addition to peak hour level of service analysis, the consultant team will utilize the modified StanCOG RTP Model to project changes in ADT on project area roadways as a result of the Project. Furthermore, the regional implications of the corridor will also be evaluated by examining additional measures of effectiveness (MOEs) such as vehicle miles of travel (VMT), vehicle hours of travel (VHT), and vehicle hours of delay (VHD) with and without the Project.

Deliverables: Traffic Operations Technical Memorandum

3.11. Right-of-Way Data Sheet (WBS 160.10.40) [UFS]

Deliverables: Right-of-Way Data Sheet(s)

3.12. Determine Right-of-Way Requirements (WBS 160.10.41)

Deliverables: Tabulated Right-of-Way Requirements

3.13. Utility Location Requirements (WBS 160.10.45) [G & K]

Deliverables: Utility record drawings mapped on base sheets with contact list and utility base mapping

3.14. Railroad Study (WBS 160.10.50)

Deliverables: Railroad Information Sheet

3.15. Park and Ride Study (WBS 160.10.60) [F & P]

Deliverables: Draft and final Park and Ride Study

3.16. Traffic Studies (WBS 160.10.70) [F & P]

Prepare the Traffic Operations Report summarizing the results and findings. Submit an Administrative Draft Traffic Operations Report to JPA for one round of review and written comments. We will respond to JPA written comments and prepare the Draft Traffic Operations Report to submit to Caltrans and other PDT members for one round of review and comments. We will respond to comments on the Draft Traffic Operations Report and prepare the Final Traffic Operations Report. We will submit the final report in both hard copy and electronic format.

After approval of the Final Traffic Operations Report, we will prepare the transportation chapter of the Environmental Document. This report will build on previous work and will document the proposed project's impact on the transportation and circulation system. The report will also include a qualitative assessment of the impacts of each alternative on bicycle, pedestrian, and transit facilities within the study corridor. Mitigation measures for significant transportation impacts will be identified. We will respond to comments on the public draft environmental document.

We will also prepare the traffic chapter of the Project Report that will address the proposed Project in accordance with Caltrans guidelines and requirements. We will respond to comments on the Project Report.

Deliverables:

Traffic Operations Report
Text for the Traffic Section of the Environmental Document
Text for the Traffic Section of the Project Report

3.20. Cost Estimates for Alternatives (WBS 160.15.05) [BRG]

Deliverables: Cost Estimates for Modified Project Report

3.21. Fact Sheet for Exceptions to Design Standards (WBS 160.15.10)

Deliverables:

List of Non-Standard Features for the selected alternative Fact Sheets for Exceptions to Design Standards for selected alternative

3.22. Draft Modified Project Report (WBS 160.15.20)

Deliverables: Preliminary Draft and Final Draft of Modified Project Report

3.23. Circulate, Review and Approve Draft Modified Project Report (WBS 160.15.25)

Deliverables: Signed Draft Modified Project Report

4.0. Perform Environmental Studies and Prepare Draft Document [IFC – J & S]

Prepare technical reports and environmental document, for the resource topics listed below for the Cooridor-Wide CEQA EIR/NEPA Tier I EIS and Program Level CEQA EIR/NEPA EIS for the phase I project. These documents shall follow Caltrans Standard Environmental Reference.

The External Certifications form for environmental document quality control review certification will be signed by technical specialist reviewers and technical edit reviewer to certify that the environmental document is consistent with FHWA and Caltrans requirements and guidance.

4.2. Public and Agency Scoping Process (WBS 165.05.10) [IFC - J & S]

Deliverables:

CEQA Initial Study

Scoping Meeting Summary Report

4.3. Alternatives for Further Study (WBS 165.05.15) [IFC - J & S]

Deliverables: Alternatives Screening Report

- 5.0. General Environmental Studies (WBS 165.10 through 165.25) [IFC J & S]
- 5.1. Community Impact Analysis, Land Use, and Growth Studies (WBS 165.10.15) [IFC J & S]

Deliverables: Prepare draft, revised draft and final Community Impact Assessment (CIA) report following the Caltrans CIA handbook

5.2. Visual Impact Assessment and Scenic Resources Evaluation (WBS 165.10.20) [IFC - J & S]

Deliverable: Draft, revised draft and final Visual Impact Assessment report.

5.3. Noise Study (WBS 165.10.25) [IFC - J & S]

Deliverable: Draft, revised draft and final Noise Study.

5.4. Air Quality Study (WBS 165.10.30) [IFC - J & S]

Deliverable: Draft, revised draft and final Air Quality Study.

5.5. Water Quality Studies (WBS 165.10.35) [IFC - J & S]

Deliverable: Draft, revised draft, and final Water Quality Assessment report

5.6. Energy Studies (WBS 165.10.40) [IFC - J & S]

Deliverable: Draft, revised draft and final Energy Study report

5.8. Hazardous Waste Preliminary Site Investigations (WBS 165.10.50) [IFC - J & S]

Deliverables: Draft Initial Site Assessment and Final Initial Site Assessment.

5.9. Draft Right-of-Way Relocation Impact Document (WBS 165.10.55) [IFC - J & S]

Deliverable: Draft, revised draft and final Draft Relocation Impact Report

5.10. Location Hydraulic and Floodplain Study Report (WBS 165.10.60) [IFC - J & S]

Deliverable: Draft, revised draft and final Location Hydraulic and Floodplain Study Report

5.11. Paleontology Study (WBS 165.10.65) [IFC - J & S]

Deliverable: Draft, revised draft and final Paleontology Study

5.13. Biological Studies (WBS 165.15) [IFC - J & S]

Deliverables:

Draft, revised draft and final Natural Environment Study NES

Draft, revised draft and final Biological Assessment (BA)

Draft, revised draft and final Wetlands Study

7.0. Circulate Draft Environmental Document and Select Preferred Project Alternative (WBS 175.05 through 175.05.20) [IFC - J & S]

Deliverable: Draft ED (up to 200 copies)

7.1. DED Circulation (WBS 175.05)

Deliverable: Draft ED

7.1.1 Master Distribution and Invitation Lists (WBS 175.05.05)

Deliverable: Distribution list

7.1.2 Notices Regarding Public Hearing and Availability of Draft Environmental Document (WBS 175.05.10) [JBC]

Deliverable: Notices and advertisements

7.1.3 DED Publication and Circulation (WBS 175.05.15) [JBC]

Scope of Services - see WBS 2.175.05 description above

Deliverable: See above

7.2. Public Hearing (WBS 175.10.05 through 175.10.40) [J & S – IFC, JBC]

Deliverables: Public hearing collateral, public hearing logistics, Draft, revised draft and final Public Hearing Summary Report

7.3. Project Preferred Alternative (WBS 175.20) [J & S - IFC]

Deliverable: Draft, revised draft and final Preferred Alternative Memorandum

MASTER LIST OF DELIVERABLES

Deliverables:

Project Management (Task 1.1 - Initiation and Planning)		
	Updated Project Management Plan	
	Kick-off meeting summary	
Pro	eject Management (Task 1.2 - Execution and Control)	
	Project schedule updates	
	Project invoices and progress reports	
Project Management (Task 1.3 - Coordination and Meetings WBS 100.10.10 and		
100	0.10.15)	
	Agendas and meeting summaries for Progress, Project Coordination, Team	
	Coordination, and PIP meetings	
Project Management (Task 1.4 - Quality Control Program)		
	Quality Assurance/Quality Control Plan	

	Quality Control reviews of deliverable products, including documentation by the
	reviewers of their reviews
Pro	oject Management (Task 2.1 - Project Development Workshops)
	Notification materials (workshop announcements, display ads, press releases, elected officials letters, web site announcements)
	Meeting agendas / PowerPoint presentations / project informational materials / exhibit boards
	Workshop and meeting summaries
	oject Management (Task 2.2 - Agency Coordination)
	Agency and key stakeholder contact list
	Information and presentation materials for agency meetings
	Meeting agendas and summaries with action item lists pject Management (Task 2.3 - Database Development and Comment Tracking)
	Outline of database information for review by team and STANCOG
	, and the second se
	Database with contact information and issues/comments noted
☐ D:::	Comment Tracking Reports
	oject Management (Task 2.4 - Combined Newsletter / Fact Sheets)
□	Newsletters/ Fact Sheets
	oject Management (Task 2.5 - Website Coordination)
_	Project web page
	Web page updates
	Record of items posted to website
	oject Management (Task 2.6 - Media Coordination)
	Newspaper articles for local papers (e.g. citywide mailers)
	Media releases and display advertisements
	oject Management (Task 3.1. Updated Project Information - As It Relates To The eferred Alternative In The Project Report)
	On-going
Pro	oject Management (Task 3.2. Collect Traffic Data)
	On-going
Pro	oject Management (Task 3.3 - Traffic Forecasting)
	Traffic Forecasting Technical Memorandum
Pro	oject Management (Task 3.4 - Geometric Plans for Project Report)
	Geometric plans for four (4) alternatives.
Pro	oject Management (Task 3.5 - Construction Phasing Concept Plans)
	Concept construction phasing plans for one (1) alternative
Pro	oject Management (Task 3.6 - Value Analysis)
	Draft and Final VA Reports
Pro	oject Management (Task 3.7 - Conceptual Hydraulics / Hydrology Studies)
	Conceptual Hydrology Study
Pro	oject Management (Task 3.8 - Drainage Concept Plans)
	Concept Drainage Plans (Layout only)
Pro	oject Management (Task 3.9 - Storm Water Data Report)
	Storm Water Data Report (Draft and Final)
Pro	oject Management (Task 3.10 - Traffic Operational Analysis)
	Existing Traffic Conditions Technical Memorandum

	oject Management (Task 3.11 - Right-of-Way Data Sheet)
	Right-of-Way Data Sheet(s)
Pro	pject Management (Task 3.12 - Tabulated Right of Way Requirements)
	Tabulated Right-of-Way Requirements
_	oject Management (Task 3.13 - Utility Location Requirements)
	Utility record drawings and contact list
	Utility base mapping
Pro	oject Management (Task 3.14 - Railroad Study)
	Railroad Information Sheet
_	oject Management (Task 3.15 - Park and Ride Study)
_	Draft and Final Park and Ride Study
	oject Management (Task 3.16 - Traffic Studies)
	Traffic Operations Report
	Text for the Traffic Section of the Environmental Document
	Text for the Traffic Section of the Project Report
_	oject Management (Task 3.17 - Geotechnical Information)
_	Draft Preliminary Geotechnical/Structures Report
_	Final Preliminary Geotechnical/Structures Report
Pro	oject Management (Task 3.18 - Structure Advance Planning Study (APS)
	APS Report per bridge includes: a bridge APS exhibit, APS Checklist, an APS design
	memo, and Itemized cost estimates consistent with Project Report requirements.
_	pject Management (Task 3.19 - Preliminary Transportation Management Plan)
_	Preliminary TMP
_	oject Management (Task 3.20 - Cost Estimates for Alternatives)
	Project Report Cost Estimates
_	pject Management (Task 3.21 - Fact Sheet for Exceptions to Design Standards)
	List of Non-Standard Features for the selected alternative
_	Fact Sheets for Exceptions to Design Standards for selected alternative
	pject Management (Task 3.22 - Draft Project Report)
☐ D:::4	Preliminary Draft and Final Draft Project Report
	pject Management (Task 3.23 - Circulate, Review and Approve Draft Project Report)
	Signed Draft Project Report
<i>10</i>	oject Management (Task 3.24 - Engineering and Land Net Surveying)
_	Topographical mapping and color aerial photographs
☐ Dra	Project Base Mapping
	oject Management (Task 3.25 Surveys and Mapping for Environmental Studies)
	Aerial and site mapping for environmental studies oject Management (Task 3.26 Property Access Rights for Environmental /
	gineering Studies)
	Mapping of properties requiring ROEs
	Draft and Final ROE letters
Pro	oject Management (Task 3.27 NEPA Delegation)
	Audit input.
Pro	oject Management (Task 4.1 Project Information Review)
	Review all pertinent information to the environmental process in preparation for the
_	NEPA/CEQA Scoping process.

Pro	ject Management (Task 4.2 Public and Agency Scoping Process)
	NOI/NOP
	CEQA Initial Study
	Public advertisements and notices
	Scoping meeting materials and displays
	Scoping meetings
	Scoping Meeting Summary Report
Pro	ject Management (Task 4.3 Alternatives for Further Study)
	Alternatives Screening Report
	pject Management (Task 5 General Environmental Studies)
	pject Management (Task 5.1 Community Impact Analysis, Land Use, and Growth adies)
	Draft, revised draft and final CIA report
Pro	bject Management (Task 5.2 Visual Impact Assessment and Scenic Resources
	aluation)
	Draft, revised draft and final Visual Impact Assessment report including photo-
	simulations.
_	pject Management (Task 5.3. Noise Study)
⊔ Dec	Draft, revised draft and final Noise Study.
	Direct Management (Task 5.4 Air Quality Study)
Dro	Draft, revised draft and final Air Quality Study. oject Management (Task 5.5 Water Quality Studies)
	Draft, revised draft, and final Water Quality
_	ipject Management (Task 5.6. Energy Studies)
	Draft, revised draft and final Energy Study report
	pject Management (Task 5.7. Summary of Geotechnical Report)
_	To be included in the administrative draft environmental document. No additional
ш	technical report will be prepared.
Pro	pject Management (Task 5.8. Hazardous Waste Preliminary Site Investigations)
	Draft Initial Site Assessment
	Final Initial Site Assessment
Pro	ject Management (Task 5.9. Draft Right-of-Way Relocation Impact Document)
	Draft, revised draft and final Draft Relocation Impact Report
Pro	ject Management (Task 5.10. Location Hydraulic and Floodplain Study Report)
	Draft, revised draft and final Location Hydraulic and Floodplain Study Report
Pro	ject Management (Task 5.11. Paleontology Study)
	Draft, revised draft and final Paleontology Study
_	pject Management (Task 5.12. Wild and Scenic Rivers Coordination)
	Scope of Services - Not required.
	pject Management (Task 5.13. Biological Studies)
	Draft, revised draft and final Natural Environment Study NES
	Draft, revised draft and final Biological Assessment (BA)
	Draft, revised draft and final Wetlands Study
_	pject Management (Task 5.14. Cultural Resource Studies)
ш	Draft, revised draft, and final Area of Potential Effects (APE) Map
	Draft, revised draft, and final Historic Property Survey Report (HPSR) including appendices

	Draft, revised draft, and final Finding of Effect
	Draft, and revised draft Memorandum of Agreement (MOA)
Pro	pject Management (Task 6 Draft Environmental Document)
	Administrative ED (50 copies)
Pro	pject Management (Task 6.1. Draft Environmental Document Analysis)
	Administrative ED sections
Pro	pject Management (Task 6.2. Section 4(f) Evaluation)
_	Administrative Draft and Draft Section 4(f) Evaluation
Det	pject Management (Task 6.3. Categorical Exemption / Categorical Exclusion termination)
	Scope of Services - Not applicable – an EIS/EIR is assumed to be required,
	pject Management (Task 6.4. Environmental Quality Control and Other Reviews)
	Administrative ED
<i>Pro</i> □	Scope of Services – Internal Caltrans requirement. CONSULTANT services not required.
Pro	pject Management (Task 6.6. Environmental Coordination)
	Scope of Services – Internal Caltrans task. CONSULTANT services not required.
Pro	pject Management (Task 6.7. NEPA Delegation)
	Documentation
Pro	pject Management (Task 6.8. Required Permits During PA&ED Development)
	Administrative ED
Pro	pject Management (Task 6.9. Updated Environmental Commitments Record)
	Internal Caltrans task. CONSULTANT support services only.
Pro	pject Management (Task 6.10. NEPA Delegation)
	Provide NEPA Delegation information and document readiness forms to facilitate Caltrans review of the Administrative ED.
Dro	oject Management (Task 6.11. Other Permits)
FIC	
	Scope of Services - Not Applicable. No additional permits are assumed to be required prior to circulation of the Draft Environmental Document.
Pro	is required prior to circulation of the Draft Environmental Document. iject Management (Task 7 Circulate Draft Environmental Document and Select
	eferred Project Alternative Identification)
	Prepare, publish and distribute the Draft NEPA EIS / CEQA EIR / Section 4(f) Evaluation document (Draft ED) 200 copies
Pro	pject Management (Task 7.1. DED Circulation)
	Upon receipt of approval to circulate from StanCOG, print and distribute up to 200
	copies of the Draft ED. The Draft ED is expected to be approximately 750-pages-
	long with up to 50 alignment drawings and 25 color graphics.
Pro	pject Management (Task 7.1 Master Distribution and Invitation Lists)
	Prepare a distribution list which will be included in the Draft ED. The list will
	include elected officials, federal, state, regional and local agency representatives,
	organizations and individuals. This list will service as the distribution list for the
Pro	Draft ED. Diect Management (Task 7.1 Notices Regarding Public Hearing and Availability of
	office thanagement (Task 7.1 Notices Regarding Public Hearing and Availability of the first transfer of transfer of the first transfer of transfer
	Notices and advertisements.
	oject Management (Task 7.1 DED Publication and Circulation)
	Scope of Services - see WBS 2.175.05 description above.
	1

Pro	pject Management (Task 7.1 Federal Consistency Determination (Coastal Zone))
	Scope of Services - Not applicable. The project area does not lie within the Coastal Zone. Not Applicable.
Pro	pject Management (Task 7.2. Public Hearing)
	Public hearing collateral (agenda, presentation, presentation materials, handouts), public hearing logistics, Draft, revised draft and final Public Hearing Summary Report.
Pro	pject Management (Task 7.3. Project Preferred Alternative)
	Draft, revised draft and final Preferred Alternative Memorandum
Pro	oject Management (Task 7.4. NEPA Delegation)
	Ongoing auditing information task. As required.
Pro	pject Management (Task 8.1 Updated Draft Project Report)
	Draft Final and Final Project Report
Pro	eject Management (Task 8.2 Approved Project Report)
	Signed Project Report
Pro	pject Management (Task 8.3 Updated Storm Water Data Report)
	Updated Storm Water Data Report for Preferred Alternative
	pject Management (Task 8.4 Geometric Approval Drawings (GAD) for Selected ernative)
	Geometric Approval Drawing for Preferred Alternative
Pro	pject Management (Task 8.5 Approved Final Environmental Document)
	Draft, revised draft and final draft Final ED, including Section 4(f) Evaluation,
	Findings and Statement of Overriding Considerations and memoranda as appendices
Dro	documenting federal findings and consultations. oject Management (Task 8.6 Public Distribution of FED and Respond to Comments)
	Final ED (up to 100 copies)
	pject Management (Task 8.7 Final Right-of-Way Relocation Impact Document)
	Final ED
	pject Management (Task 8.8 Completed Environmental Document)
	Draft, revised draft and final ED
	oject Management (Task 8.8 Record of Decision (NEPA))
	Prepare a draft Record of Decision (ROD) which briefly summarizes the NEPA findings, the public process, and the reasons for selection of the preferred alternative.
	The ROD shall also summarize the impacts of the preferred alternative (project) and the mitigation measures which StanCOG and Caltrans commit to implement.
Pro	pject Management (Task 8.8 Notice of Determination)
	Prepare a CEQA Notice of Determination (NOD) form for StanCOG to submit to the State Clearinghouse and the County Clerk.
	The NOD will document the CEQA selection of the project and initiate the 30-day statute of limitations clock.
Pro	pject Management (Task 8.8 Environmental Commitments Record)
	Internal Caltrans task. CONSULTANT support services only.
Pro	eject Management (Task 8.9 NEPA Delegation)
	Provide documentation to StanCOG and Caltrans concerning status of the environmental process including audit data Caltrans requires for submittal to FHWA.
	Audit information and Caltrans forms completed as required.