Council Meeting: October 18, 2011

SUBJECT: Award of Contract for the Design of the Sunnyvale Avenue/Old San Francisco Road Intersection (Re-issue) (F1107-02)

BACKGROUND
Approval is requested to award an engineering design contract in the amount of $183,940 to BKF Engineers of San Jose for the Sunnyvale Avenue/Old San Francisco Road Intersection (Re-issue) Project. Approval is also requested for a 10% design contingency in the amount of $18,394.

DISCUSSION
Capital Project 828910 (Sunnyvale Avenue/Old San Francisco Road Left Turn Project) provides for the construction of new signalized southbound left turn access to Old San Francisco Road from Sunnyvale Avenue. Discussions of this project began during the Council meeting on June 29, 2009 as part of RTC #09-163 relating to proposed Palo Alto Medical Foundation construction in the area. On December 15, 2009, staff returned with RTC#09-312, which discussed a study that indicated there was an operational benefit to creating a left turn lane onto Old San Francisco Road from Sunnyvale Avenue to take traffic off of neighborhood streets. Council directed staff to initiate a project to construct this left turn lane.

Work anticipated for this project includes removal and replacement of sidewalk, curb, gutter and pavement as required, installation of a new traffic signal system, modifications to an existing State owned and operated traffic signal, provision of access improvements for pedestrian and bicycle users, street lighting, and new crosswalks and other pavement markings in and adjacent to the area of work.

Request for Proposals No. F1003-92 for the project design was prepared and distributed in April 2011 to seven engineering firms that were pre-qualified in the Streets and Roadways category and five pre-qualified in the Traffic Engineering category of the Sunnyvale Works! pre-qualification program. One proposal in the amount of $119,552 was received from Hatch Mott MacDonald (HMM) of Gilroy. The City evaluation team, consisting of Public Works Engineering, Transportation and Traffic and Purchasing staff, met with the Hatch Mott MacDonald design team to discuss their proposal. Based on the description of the assumptions the design team used to prepare their proposal, the evaluation team determined the City’s RFP specifications needed greater
detail in the areas of environmental documentation (CEQA/NEPA documents) and interaction with Caltrans related to the El Camino/Sunnyvale Avenue intersection, which is under its jurisdiction. The one proposal received was rejected under the expedited process established in conjunction with the Sunnyvale Works! pre-qualification program and a new RFP was issued with the clarified work scope items.

Request for Proposals No. F1107-02 was issued in July 2011 to an extended group of twenty one prequalified engineering firms. Five responsive proposals were received as follows:

- **CSG Consulting, of San Mateo** $171,184
- **Hatch Mott MacDonald, of Gilroy** $183,370
- **BKF Engineers, of San Jose** $221,476
- **Kier & Wright, of Santa Clara** $222,500
- **Mark Thomas & Co., of San Jose** $285,500

Proposals were evaluated on qualifications, experience, quality, project understanding and price. Mark Thomas & Co. and BKF Engineers, the two highest ranking proposers, were invited for interviews with the evaluation team. As a result of the interview process, BKF Engineers was unanimously selected as the highest ranked proposer. Subsequent negotiations reduced their proposal fees from $221,476 to $183,940.

Staff recommends awarding a contract to BKF Engineers for design of the Sunnyvale Avenue/Old San Francisco Road Intersection (Rebid) Project.

**FISCAL IMPACT**
Project costs are as follows:

- Project design (including bidding and construction support) $183,940
- Design contingency (10%) $18,394
- Total cost $202,334

Budgeted funds are available in Capital Project 828910 (Sunnyvale Avenue/Old San Francisco Road Left Turn Project). The project is funded by a combination of Federal Transportation grant funding administered by the Santa Clara Valley Transportation Authority (VTA), and dedicated local transportation grant matching funds.

**PUBLIC CONTACT**
Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City’s Web site.
**RECOMMENDATION**

It is recommended that Council:

1. Award a contract, in substantially the same form as the attached draft and in the amount of $183,940 to BKF Engineers for the subject project, and authorize the City Manager to execute the contract when all the necessary conditions have been met; and

2. Approve a 10% design contingency in the amount of $18,394.

Reviewed by:

Grace K. Leung, Director of Finance
Prepared by: Pete Gonda, Purchasing Officer

Reviewed by:

Kent Steffens, Director, Department of Public Works

Approved by:

Gary M. Luebbers
City Manager

**Attachments**

A. Draft Consultant Services Agreement
CONSULTANT SERVICES AGREEMENT BETWEEN CITY OF SUNNYVALE AND BKF ENGINEERS FOR DESIGN AND CONSTRUCTION SUPPORT SERVICES FOR SUNNYVALE AVENUE/OLD SAN FRANCISCO ROAD INTERSECTION PROJECT

THIS AGREEMENT dated ____________________ is by and between the CITY OF SUNNYVALE, a municipal corporation ("CITY"), and BKF ENGINEERS ("CONSULTANT").

WHEREAS, CITY desires to secure professional services necessary for investigation, analysis, design, preparation of construction drawings and contract specifications, consultation, services during construction and other services for a project known as Sunnyvale Avenue/Old San Francisco Road Intersection Project; and

WHEREAS, CONSULTANT represents that it, and its sub-consultants, if any, possess the professional qualifications and expertise to provide the required services and are licensed by the State of California to practice engineering in the required disciplines;

NOW, THEREFORE, THE PARTIES ENTER INTO THIS AGREEMENT.

1. Services by CONSULTANT

   CONSULTANT shall provide services in accordance with Exhibit "A" entitled "Scope of Work." All exhibits referenced in this Agreement are attached hereto and are incorporated herein by reference. To accomplish that end, CONSULTANT agrees to assign Natalina Bernardi, PE to this project, to act in the capacity of Project Manager and personally direct the professional services to be provided by CONSULTANT.

   Except as specified in this Agreement, CONSULTANT shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise to perform all operations necessary and required to satisfactorily complete the services required in this Agreement.

2. Notice to Proceed/Completion of Services

   (a) CONSULTANT shall commence services upon receipt of a Notice to Proceed from CITY. Notice shall be deemed to have occurred three (3) calendar days after deposit in the regular course of the United States mail.

   (b) When CITY determines that CONSULTANT has satisfactorily completed the services defined in Exhibit "A," CITY shall give CONSULTANT written Notice of Final Acceptance, and CONSULTANT shall not incur any further costs hereunder. CONSULTANT may request this determination of completion when, in its opinion, it has satisfactorily completed the Scope of Work (Exhibit "A"), and if so requested, CITY shall make this determination within fourteen (14) days of such request.

3. Project Schedule

   The Project Schedule is set forth in the attached Exhibit “A-1.”

4. Payment of Fees and Expenses

   Payments shall be made to CONSULTANT on a monthly basis as set forth in the attached Exhibit “B” entitled "Compensation Schedule." All compensation will be based on monthly billings as provided in Exhibit “B.” Compensation will not be due until said detailed billing is submitted to CITY within a reasonable time before payment is expected to allow for normal CITY processing. An estimate of the percent of total completion
associated with the various categories of the services shall be furnished by CONSULTANT with said billing. When applicable, copies of pertinent financial records will be included with the submission of billing(s) for all direct reimbursables. Compensation shall not exceed the amounts set forth in Exhibit "B" for each phase. In no event shall the total amount of compensation payable under this agreement exceed the sum of One Hundred Eighty Three Thousand Nine Hundred Forty and No/100 Dollars ($183,940.00) unless upon written modification of this Agreement. All invoices, including detailed backup, shall be sent to City of Sunnyvale, attention Accounts Payable, P.O. Box 3707, Sunnyvale, CA 94088-3707.

5. No Assignment of Agreement

CONSULTANT bind themselves, their partners, successors, assigns, executors, and administrators to all covenants of this Agreement. Except as otherwise set forth in this Agreement, no interest in this Agreement or any of the work provided for under this Agreement shall be assigned or transferred, either voluntarily or by operation of law, without the prior written approval of CITY. However, claims for money due to or to become due to CONSULTANT from CITY under this Agreement may be assigned to a bank, trust company or other financial institutions, or to a trustee in bankruptcy, provided that written notice of any such assignment or transfer shall be first furnished to CITY. In case of the death of one or more members of CONSULTANT's firm, the surviving member or members shall complete the services covered by this Agreement. Any such assignment shall not relieve CONSULTANT from any liability under the terms of this Agreement.

6. Consultant is an Independent Contractor

CONSULTANT is not an agent or employee of CITY but is an independent contractor with full rights to manage its employees subject to the requirements of the law. All persons employed by CONSULTANT in connection with this Agreement will be employees of CONSULTANT and not employees of CITY in any respect. CONSULTANT is responsible for obtaining statutory Workers' Compensation coverage for its employees.

7. Consultant's Services to be Approved by a Registered Professional

All reports, costs estimates, plans and other documents which may be submitted or furnished by CONSULTANT shall be approved and signed by a qualified registered professional in the State of California. The title sheet for calculations, specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of certificate and signature of the professional responsible for their preparation.

8. Standard of Workmanship

CONSULTANT represents and maintains that it is skilled in the professional calling necessary to perform the services and its duties and obligations, expressed and implied, contained herein, and CITY expressly relies upon CONSULTANT's representations regarding its skills and knowledge. CONSULTANT shall perform such services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California.

The plans, designs, specifications, estimates, calculations reports and other documents furnished under the Scope of Work (Exhibit "A") shall be of a quality acceptable to CITY. The criteria for acceptance of the work provided under this Agreement shall be a product of neat appearance, well-organized, technically and grammatically correct, checked and having the maker and checker identified. The minimum standard of appearance, organization and content of the drawings shall be that used by CITY for similar projects.
9. **Responsibility of CONSULTANT**

CONSULTANT shall be responsible for the professional quality, technical accuracy and the coordination of the services furnished by it under this Agreement. Neither CITY's review, acceptance nor payment for any of the services required under this Agreement shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement and CONSULTANT shall be and remain liable to CITY in accordance with applicable law for all damages to CITY caused by CONSULTANT's negligent performance of any of the services furnished under this Agreement.

Any acceptance by CITY of plans, specifications, calculations, construction contract documents, reports, diagrams, maps and other material prepared by CONSULTANT shall not, in any respect, absolve CONSULTANT for the responsibility CONSULTANT has in accordance with customary standards of good engineering practice in compliance with applicable Federal, State, County and/or municipal laws, ordinances, regulations, rules and orders.

10. **Right of CITY to Inspect Records of CONSULTANT**

CITY, through its authorized employees, representatives, or agents, shall have the right, at any and all reasonable times, to audit the books and records including, but not limited to, invoices, vouchers, canceled checks, time cards of CONSULTANT for the purpose of verifying any and all charges made by CONSULTANT in connection with this Agreement. CONSULTANT shall maintain for a minimum period of three (3) years from the date of final payment to CONSULTANT or for any longer period required by law, sufficient books and records in accordance with generally accepted accounting practices to establish the correctness of all charges submitted to CITY by CONSULTANT. Any expenses not so recorded shall be disallowed by CITY.

11. **Confidentiality of Material**

All ideas, memoranda, specifications, plans, calculations, manufacturing procedures, data, drawings, descriptions, documents, discussions or other information developed or received by or for CONSULTANT and all other written information submitted to CONSULTANT in connection with the performance of this Agreement shall be held confidential by CONSULTANT and shall not, without the prior written consent of CITY be used for any purposes other than the performance of the Project services, nor be disclosed to an entity not connected with the performance of the Project services. Nothing furnished to CONSULTANT which is otherwise known to CONSULTANT or is or becomes generally known to the related industry shall be deemed confidential. CONSULTANT shall not use CITY's name, insignia or distribute exploitative publicity pertaining to the services rendered under this Agreement in any magazine, trade paper, newspaper or other medium without the express written consent of CITY.

12. **No Pledging of CITY's Credit**

Under no circumstances shall CONSULTANT have the authority or power to pledge the credit of CITY or incur any obligation in the name of CITY.

13. **Ownership of Material**

All material, including information developed on computer(s), which shall include, but not be limited to, data, sketches, tracings, drawings, plans, diagrams, quantities, estimates, specifications, proposals, tests, maps, calculations, photographs, reports and other material developed, collected, prepared or caused to be prepared, under this Agreement shall be the property of CITY, but CONSULTANT may retain and use copies thereof.
CITY shall not be limited, in any way, in its use of said material, at any time, for work associated with Project. However, CONSULTANT shall not be responsible for damages resulting from the use of said material for work other than Project, including, but not limited to the release of this material to third parties for work other than on Project.

14. **Hold Harmless/Indemnification**

To the extent permitted by law (including, without limitation, California Civil Code section 2782.8), CONSULTANT agrees to indemnify, defend and hold harmless CITY, its officers and employees from any and all claims, demands, actions, causes of action, losses, damages, liabilities, known or unknown, and all costs and expenses, including reasonable attorneys' fees in connection with any injury or damage to persons or property to the extent arising out of any negligence, recklessness or willful misconduct of CONSULTANT, its officers, employees, agents, contractor, subcontractors or any officer, agent or employee thereof in relation to CONSULTANT's performance under this Agreement. Such defense and indemnification shall not apply in any instance of and to the extent caused by the sole negligence, recklessness or willful misconduct of CITY, its officers, employees, agents or representatives.

15. **Insurance Requirements**

CONSULTANT shall take out and maintain during the life of this Agreement policies of insurance as specified in Exhibit "C" attached and incorporated by reference, and shall provide all certificates and/or endorsements as specified in Exhibit "C."

16. **No Third Party Beneficiary**

This Agreement shall not be construed or deemed to be an agreement for the benefit of any third party or parties and no third party or parties shall have any claim or right of action hereunder for any cause whatsoever.

17. **Notices**

All notices required by this Agreement, other than invoices for payment which shall be sent directly to Accounts Payable, shall be in writing, and shall be personally delivered, sent by first class with postage prepaid, or sent by commercial courier, addressed as follows:

**To CITY:**
Mark Rogge, Assistant Director, PW City Engineers  
Department of Public Works  
CITY OF SUNNYVALE  
P. O. Box 3707  
Sunnyvale, CA 94088-3707

**To CONSULTANT:**
BKF Engineers  
Attn: Natalina Bernardi  
1650 Technology Drive, Suite 650  
San Jose, CA 95110

Nothing in this provision shall be construed to prohibit communication by more expedient means, such as by telephone or facsimile transmission, to accomplish timely communication. However, to constitute effective notice, written confirmation of a telephone conversation or an original of a facsimile transmission must be sent by first class mail, by commercial carrier, or hand-delivered. Each party may change the address by written notice in accordance with this paragraph. Notices delivered personally shall be deemed communicated as of actual receipt; mailed notices shall be deemed communicated as of three days after mailing, unless such date is a date on which there is no mail service. In that event communication is deemed to occur on the next mail service day.
18. **Waiver**

CONSULTANT agrees that waiver by CITY of any one or more of the conditions of performance under this Agreement shall not be construed as waiver(s) of any other condition of performance under this Agreement.

19. **Amendments**

No alterations or changes to the terms of this Agreement shall be valid unless made in writing and signed by both parties.

20. **Integrated Agreement**

This Agreement embodies the agreement between CITY and CONSULTANT and its terms and conditions. No verbal agreements or conversation with any officer, agent or employee of CITY prior to execution of this Agreement shall affect or modify any of the terms or obligations contained in any documents comprising this Agreement. Any such verbal agreement shall be considered as unofficial information and in no way binding upon CITY.

21. **Conflict of Interest**

CONSULTANT certifies that to the best of its knowledge, no CITY employee or officer of any public agency interested in this Agreement has any pecuniary interest in the business of CONSULTANT and that no person associated with CONSULTANT has any interest that would conflict in any manner or degree with the performance of this Agreement.

22. **California Agreement**

This Agreement has been entered into in the State of California and this Agreement shall be governed by California law.

23. **Records, Reports and Documentation**

CONSULTANT shall maintain complete and accurate records of its operation, including any and all additional records required by CITY in writing. CONSULTANT shall submit to CITY any and all reports concerning its performance under this Agreement that may be requested by CITY in writing. CONSULTANT agrees to assist CITY in meeting CITY's reporting requirements to the state and other agencies with respect to CONSULTANT's work hereunder. All records, reports and documentation relating to the work performed under this Agreement shall be made available to City during the term of this Agreement.

24. **Termination of Agreement**

If CONSULTANT defaults in the performance of this Agreement, or materially breaches any of its provisions, CITY at its option may terminate this Agreement by giving written notice to CONSULTANT. If CITY fails to pay CONSULTANT, CONSULTANT at its option may terminate this Agreement if the failure is not remedied by CITY within thirty (30) days after written notification of failure to pay.

Without limitation to such rights or remedies as CITY shall otherwise have by law, CITY also shall have the right to terminate this Agreement for any reason upon ten (10) days' written notice to CONSULTANT. In the event of such termination, CONSULTANT shall be compensated in proportion to the percentage of services performed or materials furnished (in relation to the total which would have been performed or furnished) through the date of
receipt of notification from CITY to terminate. CONSULTANT shall present CITY with any work product completed at that point in time.

25. **Subcontracting**

None of the services covered by this Agreement shall be subcontracted without the prior written consent of CITY. Such consent may be issued with notice to proceed if subcontract consultants are listed in the project work plan.

26. **Fair Employment**

CONSULTANT shall not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, condition of physical handicap, religion, ethnic background or marital status, in violation of state or federal law.

27. **Changes**

CITY or CONSULTANT may, from time to time, request changes in the terms and conditions of this Agreement. Such changes, which are mutually agreed upon by CITY and CONSULTANT, shall be incorporated in amendments to this Agreement.

28. **Other Agreements**

This Agreement shall not prevent either Party from entering into similar agreements with others.

29. **Severability Clause**

In case any one or more of the provisions contained herein shall, for any reason, be held invalid, illegal or unenforceable in any respect, it shall not affect the validity of the other provisions which shall remain in full force and effect.

30. **Captions**

The captions of the various sections, paragraphs and subparagraphs, of the contract are for convenience only and shall not be considered nor referred to for resolving questions of interpretation.

31. **Entire Agreement; Amendment**

This writing constitutes the entire agreement between the parties relating to the services to be performed or materials to be furnished hereunder. No modification of this Agreement shall be effective unless and until such modification is evidenced by writing signed by all parties.

32. **Miscellaneous**

Time shall be of the essence in this Agreement. Failure on the part of either party to enforce any provision of this Agreement shall not be construed as a waiver of the right to compel enforcement of such provision or any other provision. This Agreement shall be governed and construed in accordance with the laws of the State of California.
IN WITNESS WHEREOF, the parties have executed this Agreement.

ATTEST:

By ______________________  
City Clerk

By ______________________  
City Manager

CITY OF SUNNYVALE ("CITY")

BKF ENGINEERS ("CONSULTANT")

By ______________________  
Name/Title

APPROVED AS TO FORM:

By ______________________  
City Attorney

By ______________________  
Name/Title
The BKF Engineers' (BKF) team proposed for City of Sunnyvale's (City) Sunnyvale Avenue/Old San Francisco Road Intersection Project (Project) has been working together on the development and design of highway and roadway projects for over ten years. Through our projects, BKF has built a reputation on its ability to manage, design, process and deliver federally funded and Caltrans projects for local agencies and stakeholders. BKF has been singled out and specifically selected by clients to manage and deliver projects in urbanized areas involving complete streets, multi-modal safety improvements, right of way, schedule constraints and E-76 processing. BKF has a track record of producing cost effective designs and delivering buildable projects in these multi-jurisdictional settings. It is this experience and expertise that BKF can offer the City of Sunnyvale.

PROJECT UNDERSTANDING

The City of Sunnyvale has been successful in obtaining a Federal grant to improve the traffic operations and safety at the intersection of Sunnyvale Avenue/Old San Francisco Road Intersection. This federally funded grant will require that the Project be in compliance of federal guidelines. Caltrans Local Assistance Office is designated to ensure that projects are in compliance with grants via the E-76 approval process. Additionally, since El Camino Real (Route 82) is State facility any proposed improvements within the State right of way will require a Caltrans encroachment permit which will be issued upon Caltrans approval of the Project plans, specifications and estimate (PS&E).

The Project proposes to modify the unsignalized intersection of Sunnyvale Avenue and Old San Francisco Road. The Sunnyvale Avenue and Old San Francisco Road intersection currently allows only right turns from northbound Sunnyvale Avenue to eastbound Old San Francisco Road and from westbound Old San Francisco Road to northbound Sunnyvale Avenue. There are no permissible left turn movements allowed at the intersection. Significant amount of vehicular traffic traveling to the medical facility uses Olive Avenue, Carroll Street and Bayview Avenue which are residential roads in lieu of Sunnyvale Avenue as the neighborhood route is approximately half a mile shorter.

To improve the livability of the residential neighborhood in the vicinity of Old San Francisco Road from Sunnyvale Avenue, improvements will be implemented to minimize the cut-through traffic. The Project proposes to reconstruct the Sunnyvale Avenue/Old San Francisco Road intersection with a signalized left turn lane for southbound Sunnyvale Avenue to eastbound Old San Francisco Road. The existing traffic signal at Sunnyvale Avenue and El Camino Real will be upgraded to current standards and interconnected with the proposed Sunnyvale Avenue/Old San Francisco Road signal. The north leg of the Sunnyvale Avenue and El Camino Real (State Route 82) intersection will be modified to provide two left turn lanes for southbound Sunnyvale Avenue onto eastbound El Camino Real. Additionally, roadway improvements include enhancements which would improve the quality and safety to bicyclists and pedestrians. These improvements include removal of the existing channelizing islands at the northwest and northeast quadrant of the Sunnyvale Avenue and El Camino Real intersection and construction of new curb ramps, in compliance with ADA standards, to improve intersection safety for pedestrian. Bike lanes, sidewalks, ADA facilities and safety lighting will be constructed with landscaping enhancements proposed where right of way becomes available. The proposed work will be conducted within the existing right of way.

MANAGEMENT OF PROJECT

BKF understands the importance of proactive project management and will provide these services throughout the duration of the Project. The Project Manager who is skilled in processing federally funded projects will have assisting him an extremely qualified design team to meet the Project delivery goals. Based on BKF's clear understanding of the Caltrans and E-76 process, the Project design will be managed to not only ensure that the Plans, Specifications and Estimate (PS&E) are complete and meet the Project goals but will target critical elements of work that can significantly affect the Project cost or schedule. These critical elements will be addressed at the initial stages of the Project and will be tracked continuously throughout the design process. As in many roadway projects, critical elements of work the geometric layout of the Project. The
geometric design therefore will need to be established and confirmed very early in the Project. BKF’s project manager will focus on the completion of this task as it is vital in determining the schedule-critical items of work.

With available aerial photos supplemented by topographic field survey information, we will initiate the development of the geometric design. A primary element of the Project is confirming the operations of the proposed intersection. The spacing between the Sunnyvale Avenue and El Camino Real intersection and the Old San Francisco Road intersection is only 150 feet. The Project will need to ensure that the proposed traffic signals are coordinated to allow for continuous flow for the northbound El Camino Real traffic through the Sunnyvale Avenue and Old San Francisco Road intersection to avoid traffic back-up into the Sunnyvale Avenue and El Camino Real intersection.

The size of the intersection and location of crosswalks will be checked to provide adequate turning movement for large vehicles. At the end of this section, we have provided an exhibit demonstrating a truck turning analysis for the intersection of Sunnyvale Avenue and El Camino Real. The analysis identifies the required clear area needed for trucks, buses and passenger vehicles to make right and left turns. It also confirms that simultaneous turns through the intersections can be accomplished. Exhibit A has initially identified the use of a STAA, WB-40 truck and a single-unit truck in the analysis. This same truck turning analysis will be performed during the design process. At this time, the size of the trucks that the intersection needs to accommodate needs to be identified.

Another important aspect of the intersection layout is the incorporation of safe bicycle and pedestrian facilities. These basic geometric considerations will be finalized so that the horizontal limits of the Project can be solidified. The design work though also needs to evaluate and consider the vertical elements that affect the Project footprint. Reconstructed sidewalks will need to meet ADA requirements both horizontally and vertically. In modifying existing intersections, grades along and across sidewalks need to be evaluated to ensure they do not hinder accessibility for all pedestrians. Many times some regarding of the existing cross walks are needed to upgrade areas to current ADA requirements. Bike lanes will need to be situated, signed and striped in a manner to ensure their safe passage and interaction with vehicles and pedestrians.

With both the vertical and horizontal geometry set, the Project can focus on the schedule and cost critical items such as making adjustments for the modified intersection. At the corners of Sunnyvale Avenue and El Camino Real where the channelizing islands are being removed, the drainage will need to be analyzed. The reconstructed curb returns will add length of runoff and drainage systems need to be modified due to the new configuration.

Improvements such as lighting and landscaping will be provided for the benefit of the community and enhancement of the area. There will additional areas provided with the proposed reconstructed intersections. These areas will embellished with landscape improvements that will not complement the area but be situated in a manner to ensure that safety and sight distances are maintained.
PROJECT APPROACH

The proposed BKF work plan for the Project for the development of the Plans, Specifications and Estimate (PS&E) and Environmental Clearance considers all phases of the project from conception through the issuance of an encroachment permit as specified in the RFP. BKF understands the relationship between the approval process of preliminary design and final design as it affects the overall schedule of a project and Caltrans final approval. Having worked on multiple federally funded projects, we understand the need of developing complete plans and specifications in the early phases of design development. This allows for early submission of the project to Caltrans local assistance for E-76 approval. Ensuring that the City is continually informed is a key to avoiding scheduling delays. The following project approach outlines the tasks that will be taken for the completion and approval of the Sunnyvale Avenue/Old San Francisco Road Intersection Project.

Task 1 Project Management

BKF’s Principal-in-Charge/Project Manager (Project Manager) will be responsible for managing the project team including the subconsultant team, providing the resources to complete the job, monitoring and updating the Project budget and schedule, implementing a quality assurance/quality control program and communicating regularly with the City, Caltrans (including their Local Assistance Office, Encroachment Permit Unit and various project units), utility owners and other stakeholders. BKF’s Project Manager will keep the City informed by close communications on a day-to-day basis and be continually available to the City and Caltrans as needed. To maintain the Project schedule, BKF will act as strategic counsel by flagging issues, providing recommended solutions for discussion and implementing the accepted action. On a monthly basis, BKF’s Project Manager will review, prepare and submit status on budgets, progress, schedule, and performance and document any changes in design scope, cost or schedule. This information will be summarized in a monthly progress report and updated schedules.

BKF will ensure that coordination with the City, Caltrans and other stakeholders is enhanced via regularly scheduled meetings and focus meetings as needed. During the PS&E, meetings will take place to review the design and comments at the various stages of design. Joint resolutions meetings will be held if necessary. The joint resolutions meetings are where comments that need clarification or further information are resolved in a face-to-face meeting. All resolutions are documented in joint resolution reports and distributed in order to ensure that the subsequent project submittals meet the project expectations. As a partner with the City on this Project, BKF will be available to assist the City with informing and/or obtaining consensus among the stakeholders.

BKF’s Project Manager understands the necessary effort, communication and tenacity required in ensuring that the encroachments permit and E-76 local assistance process is effective and timely. Our extensive experience with processing design exception fact sheets, Caltrans encroachment permits, and E-76 approvals and our existing personal relationships with Caltrans staff will be an immeasurable asset to the Project.

BKF will provide project management services for each task for the entire duration of the Project. It is assumed that the Project design duration will be 8-9 months. BKF’s Project Manager will be responsible for ensuring that the Project tasks are completed in a timely manner and will use the following management activities to facilitate the Project objectives:

- **Project Administration** - Supervise, coordinate and monitor the design for conformance with CALTRANS’ and FHWA standards and policies. BKF will establish and implement a quality control procedure for design activities, perform in-house quality control reviews for each task, and submit project deliverables to the City and/or Caltrans for review in accordance with the approved schedule.

- **Agency and Subconsultant Coordination** - Coordinate with other designers, subconsultants and all involved agencies to assure timely flow of information for each task activity.

- **Kick-off Meeting** - A partnering/kick-off meeting will be scheduled with the City soon after the Notice-to-Proceed to confirm Project scope and objectives.
Project Meetings - Conduct monthly Project meetings. BKF will attend monthly progress meetings with the City. BKF will discuss the Project progress, issues which may affect the Project schedule and budget and any other agenda items that City may request for discussion. BKF will prepare the agenda, action logs, updated project schedules and meeting minutes.

Focus Meetings - Attend meetings such as design coordination meetings, and comment review meetings with the City, Caltrans, and other agencies for coordination and to resolve issues. Meetings will be held during the performance of each task or as needed by BKF, the City, Caltrans, or other agencies. A partnering/kick-off meeting will be scheduled with the City soon after the Notice-to-Proceed.

CPM Schedule - Prepare a detailed Critical Path Method (CPM) schedule for the entire project using Microsoft Project software. The Microsoft Project CPM schedule will be updated on a monthly basis and submitted at each monthly Project Meeting.

Invoices/Progress Reports - Prepare and submit budget reports, monthly progress reports, and invoices in accordance with SCTA requirements.

Encroachment Permit - Prepare Caltrans encroachment permit application for the Project. BKF's Project Manager will continually track the progress of the Caltrans process and ensure that resolution is obtained so the PS&E may be approved and processed for an E-76 authorization.

Right of Way Certification - Prepare and sign a Caltrans right of way Certification Form ensuring that all right of way, including any utility easements or temporary construction easements, required for the construction of the Project has been obtained.

Project Processing - Assist the City with the Processing of the approval and funding requirements of the Project.

Public Meeting - It will be the Project's objective of informing and obtaining support from the public and stakeholders. It is estimated that one public meeting will be held during the PS&E phase at a local facility. The meeting will provide information on the project features, design alternatives, landscaping plan and construction schedule. BKF will provide support by attending the meeting and providing exhibits depicting the Project elements.

Deliverables:
- Monthly Progress Report
- Submittal Logs
- Project Schedule and Monthly Updates
- Meeting Agendas and Minutes

Action Logs
- Joint Resolution Reports
- Right of Way Certification
- Public Meeting Supportive Information

Task 2 Preliminary Research
Immediately after receiving the Notice-to-Proceed, BKF will perform field investigations and review all available documentation. We will conduct preliminary investigations and verify right-of-way and utility locations or adjustments. This task will consist of compiling, reviewing existing data pertinent to the Project and performing investigations and studies necessary to verify Project criteria and scope. Also included are planning phase activities, identifying and requesting supplemental information and surveys, conducting site visits/field review/field trips, and obtaining information and requirements related to utilities, right-of-way, permits and geotechnical conditions. BKF team activities will include the following during this task:

Data Collection and Review - BKF will obtain and review available data and information necessary for final design of the Project. This information may be obtained from the City, Caltrans, utility companies, or other organizations. Data to be reviewed includes the following:
- Any previous report(s) or documents related to the proposed project area
- As-built plans
Utility information
Survey control data
Right-of-way information including the Caltrans maps delineating access control limits
Materials Report, if available
Traffic Studies conducted in support of Project scope

Encroachment Permit Application - BKF will prepare a Caltrans encroachment permit application for submission and processing. The permit will allow for BKF and its Project team to perform site visits and investigations required to establish the Project’s existing conditions within the State right-of-way.

Site Visits – BKF and its Project team will conduct frequent site visits to evaluate and document the existing project site conditions.

Design Surveys and Survey Control Data – BKF will provide supplemental design surveying services for the Project. BKF will review the available aerial photos and perform additional field surveys necessary to support the Project design. These surveys will include, but are not limited to cross sections, verifying utilities and drainage facilities, pavement elevations and locations, portholing, boring locations, conforms, vertical clearances, obstructions, trees, lighting fixtures, fences, retaining walls, drainage swales and ditches.

Utility Verification and Coordination – BKF will perform utility research and surveys to map the existing utilities in the Project area, positively locate utilities that potentially conflict with the proposed improvements and develop relocation plans for conflicting utilities. This level of effort will minimize construction costs and ensure the correct placement of the proposed improvements. BKF will:

- Review and update as-built utility information for the Project area
- Request utility mapping from all affected utility owners
- Update base mapping with existing utility information
- Submit utility maps to affected utility owners for verification
- Identify potential utility conflicts

Task 3 Preliminary Design
Upon completing the review of available documentation and verifying the traffic operations analysis results, BKF will initiate the geometric refinement process by evaluating the geometric design that would satisfy the Project’s need and purpose. For the preliminary design, the development of the geometry and profile of a project is not just a check of horizontal and vertical conforms. Setting the geometry properly can minimize costly project impacts. Many sensitive components to cost and schedule involve grade differentials at conforms, impacts to existing features, effects to adjacent roads and environmental impacts. The geometric design will be developed with sufficient detail to describe the existing and proposed project elements. It is essential that the base line planes produce a design that minimize cost and time consequences while meeting the Project objectives and meeting Caltrans’ and other necessary jurisdictional approval. The goal of this phase is to finalize the geometric alignments and develop Base Line Plans and Design Technical Memorandum for the City review by performing the following work:

Project Base Sheets – Project base sheets will be developed under this work task. It is assumed that available aerial photos will be used as design base sheets. The base sheets will be supplemented with the topographic field survey performed. The proposed work plan proposes to update project base sheets early in the design phase so that the base sheets may be used for the geometric development and environmental revalidation. Information concerning the disposition of existing utilities and right of way will be delineated onto the base sheets. In this manner, the preliminary geometric work performed is based on the most accurate information available and will minimize revisions in later phases.
Geometric Refinements and Development of Base Line Plans – The development of the concept design will consider the specific issues cited above and will be developed based on collectively considering existing features, the existing available right of way, coordination of above and below ground utilities, and the circulation and installation of bicycle and pedestrian facilities. Based on the review of existing information and the assessment performed, BKF will develop geometric alignment including vertical design information which addresses the assessment results and Project goals. As the geometric work is developed, BKF will be careful to comply with the Caltrans' Highway Design Manual and City standards to minimize and/or avoid the processing Design Exception Fact Sheets. The geometric alignment will be reviewed with the City to confirm that the City goals are met.

Design Technical Memorandum – Based on the work developed, BKF will compile a technical memorandum describing the scope of the improvements and performance of the intersection. BKF will assist the City with discussion with Caltrans to evaluate the proposed Project elements. Upon completion of the consultation with Caltrans, BKF will issue a report documenting the results of this collaboration including the steps required for implementation as established by Caltrans and the City as documentation on the Project criteria.

Deliverables:
- Project Base Sheets
- Design Technical Memorandum
- Base Line Plans

Task 4 Environmental Clearance

Subsequent to the development of the geometric plans, work on the environmental document will be confirmed as outlined below:

Environmental Document – As part of the preliminary work it is important to perform the work involved for the environmental clearance. BKF's Project Team will coordinate and prepare the required environmental documents and analyses to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) on the proposed Project. Since the interchange is under the jurisdiction of Caltrans, compliance with NEPA is required, as well as compliance with CEQA. It is proposed that the Project prepare a Categorical Exclusion with Section 106 Cultural Resources technical studies, which will meet the requirements of NEPA, and a Categorical Exemption, which will meet the requirements of CEQA.

For the NEPA process, the BKF Project Team will conduct a field review of the site with the Caltrans staff, if requested. In support of the document, the BKF Project Team will prepare the required Section 106 analyses for the Project, in conformance with Caltrans guidelines and requirements. The Project Team will discuss the Project with Caltrans staff to determine the exact requirements for this Project. Compliance studies may consist of the completion of an Archaeological Survey Report (ASR), a Historic Resources Evaluation Report (HRER) focusing on the built environment, and a Historic Properties Survey Report (HPSR) of the Area of Potential Effects (APE) which the Project Team will prepare and coordinate the sign-off with Caltrans staff.

The BKF Project Team will coordinate the completion and sign-off of the NEPA Categorical Exclusion with Caltrans staff. The BKF Project Team will also file the Categorical Exclusion form with the State Clearinghouse if requested by the Caltrans and/or City staff.

For the CEQA process, the BKF Project Team will prepare the CEQA Categorical Exemption forms for review and comment. The BKF Project Team will coordinate the completion and sign-off of the CEQA Categorical Exemption with City staff and will also file the Categorical Exemption form with the County Clerk if requested by the City.

It is expected that the Project will be eligible for a Categorical Exclusion under NEPA and a Categorical
Exemption under CEQA, assuming that no environmental impacts, which cannot be mitigated to a less than significant level by measures included in the project, are identified. In the event that significant, unmitigatable impacts are identified, an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) would be required. Preparation of an EIS/EIR is not included as part of this scope of work; however, an EIS/EIR could be prepared as an additional service upon your written authorization.

Traffic Technical Memorandum - BKF will use the existing available information developed in the Fehr and Peers report to draft a traffic technical memorandum. The traffic analysis work will confirm the Project scope, verify the need and purpose of the Project, provide supportive information for the environmental document and offer the traffic data required for the completion of the Project PEER. The compilation of this information will be summarized in a technical memorandum.

Deliverables:

<table>
<thead>
<tr>
<th>Traffic Technical Memorandum</th>
<th>CEQA Categorical Exemption</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPA Categorical Exclusion</td>
<td></td>
</tr>
</tbody>
</table>

Task 5  30% Design Submittal

With the Design Technical Memorandum and Base Line Plans, preliminary plans will be developed to a 30% design level to highlight the proposed improvements and functionality.

Geotechnical Work – The BKF Project Team will perform geotechnical field investigations and testing as required for roadway work. The scope of work for the geotechnical investigative work, analysis and reporting is as follows:

The BKF Project Team will review readily available geologic and soil literature in the vicinity of the Project site including review of as-built drawings and existing Log of Test Borings prior to performing any field exploration.

Permits/USA Clearances: The BKF Project Team will comply with local permit requirements and will field locate the borings and call for USA clearance.

Field Exploration: For the proposed pavement widening, The BKF Project Team will drill and collect R-value samples from five locations along the ramp and the roadway.

Laboratory Testing and Analysis: The BKF Project Team will perform R-value tests on) bulk samples and will perform engineering analyses and develop design recommendations for the proposed pavement sections. We will use the Traffic Index provided by the client. The BKF Project Team will prepare preliminary recommendations for the proposed pavement section and geotechnical recommendations for the Caltrans standard wall design.

Roadway Plan Sheets – BKF will prepare, coordinate and submit design plan sheets in imperial units for all roadway design, and assure that interface information is provided to the other members of the design team. The following drawings will be in AutoCad format:

Cover Sheet will be prepared to provide an overview of the project limits and an index of project sheets.

Layout Sheets will be prepared on 20' scale plan sheets. Skeleton base sheets will include basic horizontal and vertical layout information and identify all major construction features.

Typical Cross Sections for the roadway will be based on the approved standard sections, including pavement structural sections.
Grading Sheets will be prepared to identify areas of reconstruction and confirm limits of work.

Utility Relocation/Occupation Plans  BKF will identify and propose final locations of all utilities that are affected by the Project (e.g. water, sewer, gas, electric, cable TV, telephone) on 50’ scale plan sheets. The respective owners will conduct relocation of gas, electric, cable TV and telephone. For these utilities, BKF will provide approximate relocation requirements to Caltrans, for coordination with the appropriate utility.

Pavement Delineation and Signing Plan will be prepared on 50’ scale and will delineate the proposed striping and sign plan. A field survey will be conducted to develop an inventory of existing signs so that the disposition of existing signs may be highlighted in the plans.

Specifications outline will be developed to complement the 30% plans.

Cost Estimates - BKF will prepare a preliminary cost estimate to ensure that the magnitude of cost corresponds to the Project budget.

Quality Assurance/Quality Control (QA/QC) - BKF will perform an in-house QA/QC review of the documents submitted to the City and Caltrans. BKF's quality control review for the 30% submittal will include the review of the design package for compliance with the governing jurisdictional standards and completeness. The review will focus on ensuring that the plan elements are clearly delineated. The different project sheets will present the design in a common manner with no contradictions or variances.

Deliverables:
30% PS&E

Task 6  60% Design Submittal

All components of the final design plans, special provisions and estimate will be included during this task. With the establishment and review of the geometric design and vertical alignments, design will be production-oriented for preparation of project plans. Reports supporting the design have been prepared in the preliminary phases of work, have been drafted and can be submitted with the initial encroachment permit submittal. The plans will be developed to a 60% level in order to obtain a thorough review from Caltrans and to facilitate the encroachment permit approval process. The plans will be developed to the degree that Caltrans will accept the package for review. Development of the following plans and reports will be performed during this phase in order to provide to the City and Caltrans the initial encroachment permit submittal:

Cover Sheet will be updated.

Layout Sheets will be updated to a minimum of 60% design level. It is BKF's philosophy to develop the layouts to 95% for the 60% submittal in order for the reviews to be complete.

Typical Cross Sections will be updated.

Drainage Sheets will be prepared on 50’ scale plan sheets and will identify modifications, locations of structures and subsurface features. Elevations and details will be provided in order to establish the construction of the drainage features. In addition to the drainage plans, drainage calculations based on a 25-year event storm will be developed for submission and approval.

Utility Relocation Plans BKF will identify and propose final locations of all utilities that are affected by the Project (e.g. water, sewer, gas, electric, cable TV, telephone) on 20’ scale plan sheets. The respective owners will conduct relocation of gas, electric, cable TV and telephone. For these utilities, BKF will provide approximate relocation requirements for coordination with the appropriate utility.

Construction Detail Sheets will identify various elements of work which require additional detail or enlarged scales.
Staging Plans will be prepared as stage construction plans and traffic handling plans on 50' scale plan sheets. The Plans will identify construction area signs and any potential required detours including temporary night closures.

Pavement Delineation and Signing Plan will be updated.

Electrical Plans will be developed and augmented by field verification of the as-built plans. Based on the obtained information, BKF will prepare electrical plans which will depict the relocation of affected facilities. In addition, BKF will coordinate with PG&E in identifying electrical service points.

Traffic Signal Modification Plans will be developed. The traffic signal modification plans for Sunnyvale Avenue/Old San Francisco Road Intersection will be based on existing as-builts. Conductor schedules sheets will also be developed.

Planting Plan and Irrigation Plans will be included. The BKF Project Team will prepare planting plans and based on the preliminary plans previously developed for the public meeting. Irrigation plans also be prepared.

Specifications will be prepared for all work items necessary for the construction of the Project. BKF will assemble data and assemble the appropriate standard Special Provisions for the Project and draft non-standard Special Provisions if required. The specifications shall be in accordance with Caltrans Standard Specifications. The City will provide the “boiler plate” for the specifications.

Cost Estimates – BKF will review current information available on the Project and conduct an independent construction cost estimate in order to validate the current estimates and verify funding requirements for construction of the Project. The cost estimate will identify construction work items, quantities, unit costs, and summarize the estimated total project cost, including allowances for supplemental work, owner furnished materials, expenses, mobilization and contingencies.

Storm Water Data Report – BKF will prepare a Storm Water Data Report for all phases of the project in accordance with Caltrans current requirements. The report will focus on the storm water quality issues to construct the Project and implementation of appropriate temporary and permanent Best Management Practices (BMPs). The report will summarize the storm water quality issues, establish the hydromodifications requirements and assess the water quality impacts as a result of the Project.

Specifications will be prepared for all work items necessary for the construction of the Project. BKF will assemble data and assemble the appropriate standard Special Provisions for the Project and draft non-standard Special Provisions if required. The specifications shall be in accordance with Caltrans Standard Specifications. The City will provide the “boiler plate” for the specifications.

Cost Estimates – BKF will review current information available on the Project and conduct an independent construction cost estimate in order to validate the current estimates and verify funding requirements for construction of the Project. The cost estimate will identify construction work items, quantities, unit costs, and summarize the estimated total project cost, including allowances for supplemental work, owner furnished materials, expenses, mobilization and contingencies.

PEER – A PEER is prepared to document the engineering analysis of the proposed work. The analysis includes review of the proposed improvements to determine drainage, maintenance, operation and environmental impact on the state highway system. The PEER will contain all of the typical elements of a traffic study, including traffic forecasts, traffic operations, preliminary engineering, and cost estimates. The PEER will essentially summarize all the work prepared for the initial encroachment permit submittal. The PEER will be submitted with the 6% PS&E package for Caltrans review.

Quality Assurance/Quality Control (QA/QC) – BKF will perform an in-house QA/QC review of the documents submitted to the City and Caltrans. BKF’s quality control review for the 95% submittal will include the review of the design package for compliance with the governing jurisdictional standards and
completeness. The review will focus on ensuring that the plan elements are clearly delineated. The different project sheets will present the design in a common manner with no contradictions or variances.

Deliverables:  
60% PS&E  
Submittal to Caltrans

Task 7 90% Design

All components of the final design plans, special provisions and estimate will be included during this task. With the incorporation of City comments on the 60% Submittal, design will be production-oriented for preparation of project plans. Reports supporting the design have been prepared in the preliminary phases of work, have been drafted and can be submitted with the initial encroachment permit submittal. The plans will be developed to a 90% level in order to obtain a thorough review from Caltrans and to facilitate the encroachment permit approval process. Development of the following plans and reports will be performed during this phase in order to provide to the City and Caltrans the initial encroachment permit submittal:

PS&E will be advanced to a 90% design level. BKF will continue to coordinate and submit design plan sheets in imperial units for all roadway design, and assure that interface information is provided to the other members of the design team. The following drawings will be in AutoCad format, convertible to Microstation CADD, and will be in compliance with Caltrans' current CADD Users Manual and current Drafting and Plans Manual:

Cover Sheet will be advanced to a 90% design level to provide an overview of the project limits and an index of project sheets.

Layout Sheets will be advanced to a 90% design level. Skeleton base sheets will include basic horizontal and vertical layout information and identify all major construction features. These sheets will include the topographic base mapping provided by Caltrans. Retaining wall design will also be delineated on the layout sheets.

Typical Cross Sections will be developed to a 90% design level.

Drainage Sheets will be advanced to a 90% design level. Elevations and details will be provided in order to establish the construction of the drainage features. In addition to the drainage plans, drainage calculations based on a 25-year event storm will be developed for submission and approval.

Utility Relocation/Occupation Plans will be advanced to a 90% design level, updating plans with additional utility information and verifying utility information in the field. The respective owners will conduct relocation of gas, electric, cable TV and telephone. For these utilities, BKF will provide approximate relocation requirements for coordination with the appropriate utility.

Construction Detail Sheets Additional details will be added to be commensurate with a 90% level of design.

Staging Plans will be advanced to a 90% design level. The Plans will further identify construction area signs and any potential required detours including temporary night closures.

Pavement Delineation and Signing Plan will be advanced to a 90% design level. Additional field investigations will be conducted as required to obtain additional site information.

Electrical Plans will be advanced to a 90% design level will be developed and augmented by field verification of the as-built plans. Based on the obtained information, BKF will prepare electrical plans which will depict the relocation of affected facilities. In addition, BKF will coordinate with PG&E in identifying electrical service points.
Traffic Signal Modification Plans will be advanced to a 90% design level.

Planting Plan and Irrigation Plans will be included. The BKF Project Team will prepare planting plans and detail sheets based on the preliminary plans previously developed for the public meeting. Irrigation plans and detail sheets will also be prepared.

Storm Water Data Report – BKF will prepare a Storm Water Data Report for all phases of the project in accordance with Caltrans current requirements. The report will focus on the storm water quality issues to construct the Project and implementation of appropriate temporary and permanent Best Management Practices (BMPs). The report will summarize the storm water quality issues, establish the hydromodifications requirements and assess the water quality impacts as a result of the Project.

Specifications will be prepared for all work items necessary for the construction of the Project. BKF will assemble data and assemble the appropriate standard Special Provisions for the Project and draft non-standard Special Provisions if required. The specifications shall be in accordance with Caltrans Standard Specifications. The City will provide the “boiler plate” for the specifications.

Cost Estimates – BKF will address comments on the 60% Cost Estimate review current information available on the Project and conduct an independent construction cost estimate in order to validate the current estimates and verify funding requirements for construction of the Project.

PEER – Address Caltrans comments on the Peer Report.

Quality Assurance/Quality Control (QA/QC) – BKF will perform an in-house QA/QC review of the documents submitted to the City and Caltrans. BKF’s quality control review for the 95% submittal will include the review of the design package for compliance with the governing jurisdictional standards and completeness. The review will focus on ensuring that the plan elements are clearly delineated. The different project sheet will present the design in a common manner with no contradictions or variances.

Deliverables:
90% PS&E
Caltrans Encroachment Permit Submittal
PEER

Task 8 99% Design Submittal

The BKF Project Team will focus on resolving and incorporating all design comments resulting from the 90% submittal. A major task associated with this resolution is balancing the requirements and sorting out the needs of the stakeholders. All gaps in the design caused by changes or pending design and policy decisions will be specifically targeted for immediate resolution. Construction details for the project elements will be finalized as part of this phase of the design process.

During this task, BKF’s experienced Project Manager will closely monitor the progress of the following critical activities and the progress of finalized the design.

With the 90% PS&E comments and completed joint resolution meetings, the project plans and reports will be updated for this submittal. The individual components of the PS&E will be reviewed for completeness and compliance to standards. A complete, checked set of documents will be made available. As a result of the coordination efforts with the City and Caltrans, review time during this phase will be minimized. Prior to delivering the 99% submittal, BKF will complete its own in-house quality control review of all outgoing documents. Cost estimates and schedules will be updated and compared to the available budget.

Deliverables:
99% PS&E
Final Project Reports
Task 9 Bid Package Submittal — Duration 1.5 months

For the Final PS&E, BKF will incorporate and resolve any final remaining comments as a result of the 99% submittal in order to produce bid documents which are ready to list and advertise. All aspects of the design will be finalized in order to prepare a complete set of final and constructable bid documents.

Prior to completion of the 99% design documents, the design team will conduct additional site investigations. Given the changing environment surrounding the project area, it is crucial that the design engineers are confident that existing conditions are depicted accurately in the documents. In conjunction with the bid document preparation, the final submittal will include the preparation of supporting construction reports. This will be submittal to Caltrans for the issuance of an Encroachment Permit.

BKF will conduct a quality control review on all documents to ensure that all design elements are thoroughly addressed. BKF will package the documentation and project files for delivery. The project plans will be delivered in Microstation in compliance with Caltrans standards.

Deliverables:
Final Bid Documents
Final Cost Estimate

Encroachment Permit

Task 10 Bid Assistance

The scope for bidding assistance to be provided by the BKF Team is comprised of the following tasks:
♦ Assist City throughout the bid process and attend the Pre-Bid Meeting
♦ Provide Clarifications to the Bid Documents per Contractor inquiries

Task 11 Construction Support Services

The scope for construction support services to be provided by the BKF Team is comprised of the following tasks:
♦ Attend pre-construction meeting and field walk-through
♦ Review Contractor Submittals
♦ Respond to Contractor RFIs, Change Orders, and Drawing Revisions
♦ Perform one nursery visit to review and tag trees prior to delivery to the site
♦ Perform one site visit once all plant materials have been delivered to the site to review fine grading, plant material quality and size, plant locations and spacing, and installation procedures.
♦ Perform two additional progress reviews of landscape installation.
♦ Perform one site visit prior to the start of the landscape maintenance period to walk-through the site and create a punch list for the Contractor
♦ Perform site visits to evaluate the progress of construction
♦ Perform one site visit to review completion of punch list items
♦ Prepare record drawings
DESIGN ISSUES:
1. Short distance between intersections, approximately 150 feet
2. Potential of northbound queues extending into El Camino Real/Sunnyvale-Saratoga intersection
3. Evaluate drainage improvements required by new intersection geometry and grading
4. Installation of proper signage to eliminate confusion in SR LT traffic at El Camino Real/Sunnyvale-Saratoga caused by the new left turn signal head within the left turn pocket
5. Truck turning analysis to finalize intersection layout design
6. Analysis of ADA/accessibility impacts
7. Evaluate utility conflicts due to traffic signal equipment/foundations
8. Evaluate landscaping and irrigation impacts
9. Evaluate stopping sight distance requirements
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<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
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<tr>
<td>1</td>
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<td>Topographic Survey</td>
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<td>Supplement Aerial Photo with Survey Info</td>
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<td>Develop Base Sheets</td>
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<td>Mon 10/24/11</td>
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<td>13</td>
<td>Develop Preliminary Horizontal and Vertical Alignment</td>
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<td>Update Reports and Memos and Complete CEQA/NEPA Documentation</td>
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<td>21</td>
<td>Prepare Specifications, Including Draft Federal Specifications (Required for MTC Grants)</td>
<td>3 days</td>
<td>Mon 11/7/11</td>
<td>Wed 11/9/11</td>
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<td>22</td>
<td>Prepare Cost Estimate and Conduct QC/QA</td>
<td>3 days</td>
<td>Mon 11/7/11</td>
<td>Wed 11/9/11</td>
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<td>Submit 90% Design Submittal to City and Caltrans District (Encroachment Permit)</td>
<td>0 days</td>
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<td>Task 6 - 99% PSAE Submittal (99% Documents)</td>
<td>43 days</td>
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<td>Incorporate Comments and Develop 99% Plans</td>
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<td>Prepare Specifications, Including Final Federal Specifications (Required for MTC Grants)</td>
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<tr>
<td>29</td>
<td>Prepare Draft Right of Way Certification</td>
<td>1 day</td>
<td>Thu 1/19/12</td>
<td>Thu 1/19/12</td>
</tr>
<tr>
<td>30</td>
<td>Submit 99% Design Submittal to City and Caltrans District (Encroachment Permit)</td>
<td>0 days</td>
<td>Mon 1/23/12</td>
<td>Mon 1/23/12</td>
</tr>
<tr>
<td>31</td>
<td>City and Caltrans Review 99% Submittal</td>
<td>0 days</td>
<td>Mon 1/24/12</td>
<td>Mon 3/5/12</td>
</tr>
<tr>
<td>32</td>
<td>Task 7 - Bid Package Submittal (100% Documents)</td>
<td>36 days</td>
<td>Tue 3/8/12</td>
<td>Mon 4/23/12</td>
</tr>
<tr>
<td>33</td>
<td>Finalize Comments and Finalize Bid Package</td>
<td>1 wk</td>
<td>Tue 3/8/12</td>
<td>Mon 4/23/12</td>
</tr>
<tr>
<td>34</td>
<td>Finalize Specifications, Including Final Federal Specifications</td>
<td>2 days</td>
<td>Fri 3/8/12</td>
<td>Fri 3/12/12</td>
</tr>
<tr>
<td>35</td>
<td>Finalize Cost Estimate and Conduct QC/QA Review</td>
<td>2 days</td>
<td>Fri 3/8/12</td>
<td>Fri 3/12/12</td>
</tr>
<tr>
<td>36</td>
<td>Finalize Right of Way Certification and Obtain Signatures</td>
<td>1 day</td>
<td>Mon 3/12/12</td>
<td>Mon 3/12/12</td>
</tr>
<tr>
<td>37</td>
<td>Submit Bid Package to Caltrans Local Assistance and District (Encroachment Permit)</td>
<td>0 days</td>
<td>Mon 3/12/12</td>
<td>Mon 3/12/12</td>
</tr>
<tr>
<td>38</td>
<td>Receive Caltrans Encroachment Permit</td>
<td>2 wks</td>
<td>Mon 3/13/12</td>
<td>Mon 3/26/12</td>
</tr>
<tr>
<td>39</td>
<td>Request for Authorization (RFA) Review - Caltrans Local Assistance</td>
<td>3 wks</td>
<td>Tue 3/27/12</td>
<td>Mon 4/16/12</td>
</tr>
<tr>
<td>40</td>
<td>Request for Authorization (RFA) Review - FHWA</td>
<td>1 wk</td>
<td>Tue 4/17/12</td>
<td>Mon 4/23/12</td>
</tr>
<tr>
<td>41</td>
<td>E-76 Approval</td>
<td>0 days</td>
<td>Mon 4/23/12</td>
<td>Mon 4/23/12</td>
</tr>
<tr>
<td>42</td>
<td>Meet MTC &quot; Obligation Deadline&quot; - Submit E-76 to MTC by 4/30/2012 for Guaranteed STP/CMAQ Funding</td>
<td>0 days</td>
<td>Mon 4/23/12</td>
<td>Mon 4/23/12</td>
</tr>
</tbody>
</table>
INSURANCE REQUIREMENTS FOR CONSULTANTS

Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work by the Consultant, his agents, representatives, or employees.

Minimum Scope and Limits of Insurance: Consultant shall maintain limits no less than:

1. **Commercial General Liability:** $1,000,000 per occurrence and $2,000,000 aggregate for bodily injury, personal injury and property damage. ISO Occurrence Form CG 0001 is required.

2. **Automobile Liability:** $1,000,000 per accident for bodily injury and property damage. ISO Form CA 0001 is required.

3. **Workers' Compensation and Employer's Liability:** $1,000,000 per accident for bodily injury or disease.

4. **Errors and Omissions** Liability Insurance appropriate to the Consultants Profession: $1,000,000 per occurrence and $2,000,000 aggregate.

**Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared and approved by the City of Sunnyvale. The consultant shall guarantee payment of any losses and related investigations, claim administration and defense expenses within the deductible or self-insured retention.

**Other Insurance Provisions**

The **general liability** and **automobile liability** policies are to contain, or be endorsed to contain, the following provisions:

1. The City of Sunnyvale, its officials, employees, agents and volunteers are to be covered as additional insureds with respects to liability arising out of activities performed by or on behalf of the Consultant; products and completed operations of the Consultant; premises owned, occupied or used by the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the City of Sunnyvale, its officers, employees, agents or volunteers.

2. For any claims related to this project, the Consultant's insurance shall be primary. Any insurance or self-insurance maintained by the City of Sunnyvale, its officers, officials, employees, agents and volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the City of Sunnyvale, its officers, officials, employees, agents or volunteers.

4. The Consultant's insurance shall apply separately to each insured against whom claim is made.
or suit is brought, except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, cancelled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the City of Sunnyvale.

Claims Made Coverage

If the General Liability and/or Errors & Omissions coverages are written on a claims-made form:

1. The retroactive date must be shown, and must be before the date of the contract or the beginning of contract work.

2. Insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the contract work.

3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, the Consultant must purchase an extended period coverage for a minimum of five years after completion of contract work.

4. A copy of the claims reporting requirements must be submitted to the City of Sunnyvale for review.

Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A: VII, unless otherwise acceptable to the City of Sunnyvale.

Verification of Coverage

Consultant shall furnish the City of Sunnyvale with original a Certificate of Insurance effecting the coverage required. The certificates are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates are to be received and approved by the City of Sunnyvale prior to commencement of work.