MEETING DATE: 06/09/08

AGENDA ITEM: Approval of a Professional Services Agreement with Willdan for Engineering Design Services for the Sepulveda Boulevard Widening Project (Playa Street /Jefferson Boulevard intersection to Green Valley Circle), P-881

ATTACHMENTS

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Proposal to the City of Culver City

Engineering Design Services for the Sepulveda Boulevard Widening Project

(Playa Street/Jefferson Boulevard to Green Valley Circle), P-881

Revised as of April 28, 2008

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March 20, 2008

Mr. Hong Wang, P.E.
Senior Civil Engineer
Culver City Public Works Department
Engineering Division, City Hall 2nd Floor
9770 Culver Boulevard
Culver City, CA 90232-0507

Subject: Proposal to Provide Engineering Design Services for the Sepulveda Boulevard Widening Project (Playa Street/Jefferson Boulevard to Green Valley Circle), P-881
Revised as of April 28, 2008.

Dear Mr. Wang:

Willdan is pleased to submit this proposal in response to your Request for Proposal (RFP) to provide engineering design services for the City's Sepulveda Boulevard Widening Project (Playa Street/Jefferson Boulevard to Green Valley Circle). This proposal was prepared in accordance with the City's RFP dated January 29, 2008.

We believe that we are highly qualified to undertake this assignment for the following reasons:

- As a municipal consulting firm, with many of the principals and key staff members being former public works officials, we are fully aware of the City's needs and desires in undertaking of this type of project.

- The firm has provided engineering services for the design and construction management of numerous roadway widenings, resurfacing, pavement rehabilitation, and concrete repair projects, both locally and federally funded, throughout Southern California. The project team is familiar with all of the design and construction methods that could be selected to minimize costs and maximize pavement life.

- We propose to provide the required services for the project from our Los Angeles Regional office located in the City of Industry. The proximity of our office to the City of Culver City will ensure timely response to the City as questions may arise during the design. Willdan has in-house pavement engineering staff specializing

in preparation of deflection study analysis, structural overlay section development and pavement reports.

- Our firm previously served as City Traffic Engineer for Culver City and our traffic traffic engineering staff have a prior working relationship with City staff providing traffic engineering support services for traffic study review. Therefore, we are familiar with City's procedures and needs.

- Due to Willdan's exclusive public sector orientation and position as contract city engineer in many Los Angeles County cities, our staff members have special insight into the issues and challenges facing the City. Specifically, we have had the unique opportunity to monitor the performance of virtually every pavement strategy from design to construction, and 15 to 20 years into the life of the improvements. Thus, we are well versed in what to expect from any pavement rehabilitation strategy.

As a multidisciplinary firm, we have a full complement of resources in-house to provide accurate and complete professional engineering services for every phase of your Sepulveda Boulevard Widening Project.

The services requested by the City include project design management services, pavement engineering, utility coordination, survey, landscaping, traffic engineering, and preparation of plans and specifications for the Sepulveda Boulevard Widening Project as listed in the City's RFP.

Willdan understands the City of Culver City is seeking proposals from qualified engineering design firms that can undertake the project management, conceptual design, preparation of construction drawings and technical specifications for a major street widening project on Sepulveda Boulevard from Playa Street / Jefferson Boulevard to Green Valley Circle. Sepulveda Boulevard is a major north/south arterial corridor with an average daily traffic count of 50,000 vehicles. Sepulveda Boulevard parallels the San Diego Freeway (I-405) through Culver City and is a major alternative route taken by commuters to access Los Angeles International Airport. This project is being done to alleviate an existing bottle-neck and provide for a third southbound lane within the existing right-of-way on this segment of Sepulveda Boulevard within the project limits. A portion of this project on Sepulveda Boulevard is within the City of Los Angeles.

Project Understanding

Willdan understands this is a two-phase project. Phase 1 includes the research, survey, utility coordination, preparation of the conceptual/preliminary plans, and presentations exhibits at community and City Council meetings. Phase 2 would be the final design and construction drawings, specifications, and bid documents. The City intends to award the contract for design services by spring 2008.

The services for this project include civil design, traffic engineering, survey, utility coordination, and preparation of technical specifications for the project.

Roadway Improvements

To gain the necessary roadway width to accommodate the third southbound lane, the roadway cross section will need to be widened throughout the project limits, except between Playa Street/Jefferson Boulevard to Sawtelle Boulevard the roadway will be restriped only to add a third southbound lane. Roadway widening from Playa Street/Jefferson Boulevard to Green Valley Circle will be accommodated by narrowing sidewalk and the landscape median as follows:

- Playa Street/Jefferson Boulevard to Slauson Avenue: west and east sidewalk (1 foot each side), entire to partial median removal
- Slauson Avenue to Fwy. 90: west and east sidewalk (up to three 3 feet), entire to partial median removal
- Fwy. 90 to Green Valley Circle: west and/or east side of median, west and/or west of sidewalk, as deemed necessary.

The widening will require relocation of storm drain catch basins and overhead utilities. Handicap access ramps between Playa Street/Jefferson Boulevard to Green Valley Circle will be assessed and upgraded to meet current ADA standards if required.

Modifications to the Fox Hills Mall's entrance is anticipated to be completed by November 2008. Proposed modifications include relocating the existing mall entrance 300 feet to the north. The modifications to the traffic signal, roadway and median will be incorporated into the design as existing improvements. Details to join and match this work will be included in the plans for Sepulveda Boulevard accordingly.

The existing pavement will be rehabilitated or replaced with new concrete (PCC) pavement.

Landscape Improvements

As part of the improvements, the City would like to increase turning and travel way lanes thus resulting in the modification of existing medians at various locations. It is anticipated that some of the mature trees must be removed to accommodate for the new alignments. As an option, those trees identified to be removed (except Eucalyptus) could be boxed up and relocated somewhere within the modified medians. In addition, it is understood that irrigation modifications will be implemented to align with the renovated medians.

Another important aspect to this project will be the preservation of mature trees as they exist in place. Willdan understands the importance of tree stability when specific roots

are severed due to curb re-alignments/modification. In some cases the possibility of cutting major tree roots (structural and/or feeder roots) becomes high when the modified curb median creeps closer to the tree root crown.

Traffic and Street Lighting Improvements

The traffic improvements of this project will include traffic signal modifications, street lighting, traffic control, signing and striping improvements from Playa Street/Jefferson Boulevard to Green Valley Circle. Specifically, the project will include the preparation of signing and striping plans to include an additional 3rd travel lane in the southbound direction on Sepulveda Boulevard from Sawtelle Boulevard to Green Valley Circle. The signing and striping plans will include loop replacements at signalized intersections, where traffic signal modifications are not required. Traffic signal modification plans will be required at the intersections of Sepulveda at Jefferson/Playa, Sepulveda at Slauson, Sepulveda at the Sizzler driveway, and Sepulveda at Green Valley. It is our understanding that the relocation of the red light camera system for the intersection of Sepulveda at Slauson will be performed by others. The existing city owned street lighting standards will be relocated in the areas where Sepulveda Boulevard will be widened to accommodate for the six lanes of travel. It is anticipated that the limits of the street lighting relocation will be from Playa Street/Jefferson Boulevard to Green Valley Circle. Traffic control plans will be prepared for the construction of project for the street widening and median reconstruction portion of the project.

We appreciate the opportunity to submit this proposal and look forward to discussing your needs and our qualifications. If you have any questions or need additional information, please contact Adel M. Freij at (562) 908-6262.

Respectfully submitted,

WILLDAN

Adel M. Freij, P.E.
Vice President

William C. Pagett, P.E.
Senior Vice President

KR:mh
95610-08\06-140\P08-071R1

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PROJECT TEAM

A very talented and experienced project team has been selected to ensure the City's goals, both in quality and project schedule, will be met. As with any project, a project manager will be required to direct the project to successful completion. Willdan has selected a highly qualified individual for this role.

PROJECT MANAGER

Mr., Adel Freij, P.E., Vice President/Manager of Program and Construction Management Services, has been designated as the **Project Manager** for the project. Mr. Freij will work closely with the City staff and Willdan staff in order that project commitments are fulfilled. Mr. Freij has overseen the design and construction management of many municipal public works and street reconstruction and rehabilitation projects. He will ensure that Willdan's staff is efficiently utilized and dedicated to fulfilling the terms of any agreement entered into with the City. Mr. Freij has over 20 years of civil engineering experience.

Mr. Tom Kirk, P.E., Senior Engineer, will serve as **Deputy Project Manager.** Mr. Kirk is an accomplished Project Manager for public works design and construction projects, known for providing innovative quality engineering services and meeting clients' needs in every circumstance. As a senior Engineer, he has more than 27 years of project/construction management and design experience, including roadway widening and street reconstruction and rehabilitations; traffic signals improvements; flood control and drainage; bridges; infrastructure improvements; and right-of-way acquisition.

TEAM MEMBERS

CIVIL ENGINEERING DESIGN

Willdan has assembled the following team of highly qualified civil engineering design specialists:

Mr. Tom Kirk, P.E., Senior Engineer, will also serve as **Project Engineer/Pavement Engineer** and will be responsible for overseeing development of the plans, specifications and estimates, and pavement related analyses to determine structural sections and other elements of pavement design and materials required for the project. Mr. Kirk has 27 years experience on similar projects throughout California. Mr. Kirk was instrumental in developing Willdan's Pavement Management System (PMS) and has provided pavement engineering for over 200 projects. Mr. Kirk will personally prepare the technical specifications and design the cross sections for PCC pavement and AC joiner strips, and provide PCC joint design, including impacts of joints demanded by the

traffic control plan and ultimate wheel path alignments on the overall structural integrity of the pavement slabs. He is highly experienced with Caltrans' latest rehabilitation overlay design manual and has innovative overlay thickness evaluation software conforming to those guidelines, which provide for various interlayer treatments to limit overlay thickness; something that will be crucial to this project. He routinely performs value engineering analysis for all of his clients based on numerous options.

Mr. Abner Catig, Senior Design Manager, will be the **Lead Design Engineer** on the project. Mr. Catig will be responsible for the design and preparation of plans, technical specifications, and estimates (PS&E) for the project. He has more than 27 years experience in public works design, including design of street widenings, reconstruction and streetscape improvements, flood control and drainage improvements, grading and site plans, hydrology studies, sewer improvements and storm drains. He possesses extensive knowledge of California Department of Transportation (Caltrans), and Los Angeles County Department of Public Works (LACDPW) design criteria and guidelines. Mr. Catig works closely with drafters and technicians to develop a comprehensive and accurate product.

Mr. Calvin Catig, Senior Design Manager, will assist Mr. Abner Catig in the preparation of civil design plans. His duties include preparing plans, specifications and estimates (PS&E) for public works projects. His experience encompasses grading and site plans, flood control and drainage improvements, highways, hydrology studies, streets, sewers systems, storm drains, and water systems. Mr. Catig has over 21 years of civil engineering experience.

Utility coordination will be provided by **Mr. Edward Cox, Utility Coordinator.** Mr. Cox has provided full utility coordination on projects for Willdan, including many similar types as the City's Sepulveda Boulevard Widening Project. He has developed an excellent reputation with the utility company representatives at various levels of their organizations, and is extremely capable in developing and arranging special coordination procedures. Mr. Cox has over 28 years of public works experience.

TRAFFIC ENGINEERING DESIGN

Leading the **Traffic Engineering** section for the project will be **Mr. Lew Gluesing, P.E., T.E., P.T.O.E.** Mr. Gluesing supervises engineers and technicians, providing traffic engineering services throughout California and in support of our Arizona and Nevada offices. Mr. Gluesing has 41 years of experience in traffic and transportation engineering, including state highway, neighborhood traffic management, traffic circulation, impact and parking studies, design and operations, municipal engineering, and operational analyses. To date, Mr. Gluesing has supervised the completion of more than 8,000 projects, for a variety of larger and smaller-scaled projects. He has personally designed more than 700 new and modified traffic signal installations, as well

as two traffic signal master computer systems, employing various interconnect and communication facilities.

Ms. Vanessa Muñoz, P.E., T.E., P.T.O.E., Supervising Engineer, will serve as the **Lead Design Engineer** for preparation of the traffic design elements of the project. Ms. Muñoz has more than 11 years of experience in the traffic and transportation field, with specialization in the preparation of traffic design plans, specifications, and estimates, and traffic analyses. Her area of expertise includes traffic signals design and modification, signing and striping, and street lighting. She has designed over 300 signalized intersections for local cities, outside agencies, and Caltrans projects, and has managed a variety of projects covering street improvements and traffic design.

Mr. Bob Burch, Senior Design Manager, will assist Ms. Muñoz in the traffic engineering design for the project. Mr. Burch offers 15 years of design and traffic-related experience. Mr. Burch has experience with both AutoCAD and MicroStation. Specifically, his experience relates to preparing PS&Es for traffic signals, signing and striping, street lighting, traffic control, and stage construction projects. During this time, Mr. Burch has prepared numerous PS&E projects utilizing the Caltrans Standards.

Mr. Jeffrey Lau, E.I.T., Design Engineer II, will provide technical support for the project. Mr. Lau offers 3 years of traffic-related experienced and is proficient in both MicroStation and AutoCAD. Mr. Lau has provided fieldwork and CADD design service for street lighting, traffic signals, signing and striping plans.

Mr. Juan Avila, Design Engineer I, will provide technical support for the project. Mr. Avila possesses over 3 years of traffic engineering experience and has assisted with field work and drafting on a variety of traffic engineering projects ranging from design to traffic studies. Mr. Avila is proficient in software programs such as MicroStation, AutoCAD.

SURVEYING

Mr. David O. Knell, P.L.S. (Lead Survey/ROW Engineer) Vice President/Division Manager of the Surveying and Mapping Division, has over 37 years of public land surveying experience. Mr. Knell has worked extensively with Southern California counties and Caltrans preparing legal descriptions and maps used for right-of-way acquisition and recordation. He will be responsible for the design cross-sectional survey, aerial topography, and the preparation of right-of-way documents as necessary for this project.

Ms. Susy Barrientos, Survey Analyst, will assist with survey services. Ms. Barrientos' duties include CAD drafting for various projects, including right-of-way drawings, subdivision maps, and other survey related drawings. Parcel maps, tract maps, and surveys are some of the other items she has worked on.

Mr. William Coffman, Survey Party Chief, will perform field survey for the project. Mr. Coffman has over 19 years experience in the survey field. He has worked on a variety of jobs, including topographic, alignment, quantity, and boundary surveys.

LANDSCAPE ARCHITECTURE

Mr. John J. Hidalgo, R.L.A., Manager of the Landscape Architect Division, will be responsible for design of the landscaping elements of the project. Mr. Hidalgo has more than 21 years of diverse experience in urban streetscapes, park design and full range of landscape architectural projects. Mr. Hidalgo will monitor the general progress of the landscape architecture department's portion of the project and will thoroughly review all major documents prior to submittal to the City and other agencies. Mr. Hidalgo's experience extends from project planning and development to design, construction, and maintenance.

Mr. Bryan Nguyen, R.L.A., Associate Landscape Architect, will assist in the landscape design portion of the project and will be responsible for production of PS&E. Mr. Nguyen will be responsible for administering the various tasks involved with the landscape development. He has over 14 years of landscape and graphic design experience. Mr. Nguyen's experience includes the development of conceptual landscape plans and the preparation of construction documents, including specifications and estimates.

Mr. David Hayes, R.L.A., Landscape Architect and Consulting Arborist, will be responsible for arborist services. Mr. Hayes possesses more than 45 years of professional experience in public and private practice, and also several years of experience as a commercial arborist. His expertise encompasses park and recreation planning and development, urban beautification through streetscape design and highway planting, and urban forestry. Mr. Hayes' technical knowledge includes irrigation system design, landscape planting, grading and drainage, sports and area lighting, and arboriculture. Additionally, Mr. Hayes is familiar with park accessibility issues and program requirements at the local, state, and federal levels.

CONSTRUCTABILITY REVIEW

Mr. Jason Brown, R.C.I., Construction Review and Quality Control Manager, will be responsible for constructability review and quality control of plans. Mr. Brown serves as both a Construction Manager and Supervising Public Works Observer for Willdan; his duties include the inspection and management of large-scale public works improvement projects. His experience includes the construction administration and inspection of subdivisions, traffic signals, storm drains, sanitary sewers, ARHM overlay, conventional asphalt overlays, and street beautification projects. In addition, Mr. Brown has

experience with specially funded projects, such as ISTEA and CDBG. Mr. Brown has over 18 years of public works observation experience.

QUALITY ASSURANCE/QUALITY CONTROL

Mr. Steven R. Leathers, P.E. is a **Vice President and the Division Manager of Infrastructure Engineering** at Willdan will be responsible QA/QC for the project. He has over 17 years engineering experience and 3 years of construction experience, including inspection, estimating, and quality control. He is primarily responsible for the management and design of transportation and public works projects, including water, sewer, storm drain, and highway improvements. Mr. Leathers also manages our design-build projects for the Department of Defense and performs constructability reviews as part of our formal QA/QC program.

GEOTECHNICAL SERVICES

Mr. Vincent Ip, P.E., G.E., Vice President and Principle Geotechnical Engineer of Arroyo Geotechnical (part of Willdan Group, Inc.), will provide geotechnical services. Mr. Ip has more than 20 years of hands-on experience in the environmental and geotechnical engineering fields. He has successfully managed and completed many projects in both public and private sectors that included landfills, military base cleanup and pollution abatement, water and wastewater facilities, grade separations, road widening, commercial and industrial buildings, public schools, and essential service buildings. He also has extensive experience in today's urban infill mixed-use development projects that often consist of mid- and high-rise buildings with multi of levels of basement. His area of technical expertise includes ground motion study, liquefaction analysis, conventional shallow and deep foundation design and retrofit, Load and Resistance Factor Design (LFRD) method for highway bridge substructures design, shoring design, and ground improvement methods.

Resumes for the project team members are presented in the Appendix.

STAFF AVAILABILITY MATRIX	
Key Personnel	**Availability**
Adel Freij, P.E.	30%
Abner Catig	35%
Calvin Catig	35%
Tom Kirk, P.E.	40%
Lew Gluesing, P.E., T.E., P.T.O.E.	35%
Vanessa Muñoz, P.E., T.E., P.T.O.E.	35%
Bob Burch	35%
Jeffrey Lau, E.I.T.	35%
Juan Avila	35%
Jason Brown, R.C.I.	35%
Ed Cox	35%

David Knell, P.L.S.	35%
Susy Barrientos	35%
William Coffman	35%
John Hidalgo, R.L.A.	35%
Bryan Nguyen, R.L.A.	35%
David Hayes, R.L.A.	35%
Steven Leathers, P.E.	35%
Vincent Ip, P.E., G.E.	35%

PAST EXPERIENCE OF TEAM

The Willdan team members have worked together on many street improvement projects, some specific projects include the City of Carson's 223rd Street Improvements Project, the City of Santa Clarita's Whites & Soledad Canyon Improvements Project, the City of Indian Wells' Highway 111 Street Improvements Project, and the City of La Canada Flintridge's Town Center Street Improvement Design Project, to name a few. Full descriptions of these projects are presented in the Experience section of the proposal.

SUBCONSULTANTS

Due to the technical nature of the engineering services required to complete plans, specifications and construction cost estimate for the Sepulveda Boulevard Widening Project, Willdan proposes to complete the work utilizing our existing in-house team of experienced design professionals. Willdan will however, utilize Aero Tech Surveys, Inc. to perform aerial surveys.

AERO TECH SURVEYS, INC.
6810 Airport Drive, Riverside, CA 92504
Phone: (951) 785-0160 Fax: (951) 785-0554

Aero Tech Surveys, Inc. is a full service photogrammetry corporation that has been serving the needs of private engineering firms, as well as government agencies on the local, state and federal level since 1975. The capability to perform all phases of a photogrammetric project entirely within the jurisdiction of our office allows maximum control over the quality and timing of the final product.

FLYING AND PHOTOGRAPHY

Aero Tech Surveys, Inc. operates its own turbo charged, multiengine aircraft and can provide aerial photography from altitudes of 500 to 26,000 feet. Our state of the art aerial camera systems provide us with a choice of focal lengths to suit the needs of any photo assignment, and return consistent, high resolution, optically flat photography for display purposes or aerial mapping.

PHOTOLAB SERVICES

Aero Tech Surveys, Inc. operates its own photolab facility. Services include processing of aerial negatives, contact printing and production of glass and film diapositives. We also furnish aerial photo enlargements, plan and profile sheets, duplication, enlargement and reduction of line and photo mylars, with screening, tinting or half toning.

MAPPING

Aero Tech Surveys, Inc. operates state of the art analytical and digitally converted analog stereoplotting systems. All mapping is generated in digital format and can be readily translated for use with many of the CADD/GIS/Design packages currently utilized in the engineering profession. Computer plotted or scribed final mylars can also be produced to suit client specifications.

COMPUTER SERVICES

Aero Tech Surveys, Inc. maintains a full time staff of computer professionals. Our staff can provide data translation and reduction, custom programming, media conversion, contour generation/interpolation from field data or Raster Scan DTM's, 3D rotations, volume computations and outside consulting services. We operate modern, high-speed computers produced by Digital Equipment Corporation and I.B.M.

PERSONNEL

Aero Tech Surveys, Inc. employs a staff of dedicated professionals representing years of experience and expertise in the fields of photogrammetry, surveying, engineering and computer operations. Their high level of personal concern and ability to function as a team allows us to deliver consistent, high quality products and services.

CITY OF CULVER CITY
PROFESSIONAL ENGINEERING DESIGN SERVICES
for the

SEPULVEDA BOULEVARD WIDENING PROJECT (PLAYA STREET/JEFFERSON BOULEVARD TO GREEN VALLEY CIRCLE

PAVEMENT OVERLAY REHABILITATION

TASK / CLASSIFICATION	Adel Freij, Project Manager	Abner Catig, Senior Design Manager	Calvin Catig, Senior Design Manager	Tom Kirk, Senior Engineer	Pavement Technician	Jun Manio, Senior Drafter	Ed Cox, Utility Coordinator	Lew Giuesing, Traffic Division Manager	Vanessa Munoz, Supervising Engineer	Bob Burch, Senior Design Manager	Jeffrey Lau Design Engineer II	Juan Avila Design Engineer I	David Knell, Survey Division Manager	Susy Barrientos, Survey Analyst	Two-Man Survey Field Party	John Hidalgo, Landscape Division Manager	Bryan Nguyen, Associate Landscape Architect	Dave Hayes, Arborist	Jason Brown, Supv. Public Works Observer	Steve Leathers, Division Manager	Word Processing
1 - General																					
1.1 Kick-off Meeting	6	4		6			4		4	4						4					
1.2 Research Records/Field Review	4	8	16	2		24				3	20	20		4		5	16				
1.3 Survey	4												16	44	64						
1.4 Utility Coordination	4						80														8
1.5 Pavement Engineering	4			62	16																6
1.6 Community/City Council Meetings	20	16		20						16						16	8				
2 - Preliminary/Conceptual Design	16	32	66	24		108		5	24	28	10	90				24	60	16			8
3 - Final PS&E	48	112	165	50		168		14	32	152	248	122				40	150	12	16	20	24
4 - Construction Support																					
4.2 Pre-bidding	4	6	8	4					4		4					4	4				2
4.2 As-builts	2		4	2		16		1	1			16				2	6				
NOT-TO-EXCEED	112	178	281	170	16	316	84	20	65	203	282	248	16	48	64	95	244	30	16	20	48

* Aerial survey performed by Aero Tech Surveys, Inc.
** Includes cost of equipment rental, traffic control, and lab testing.

CITY OF CULVER CITY
PROFESSIONAL ENGINEERING DESIGN SERVICES
for the

SEPULVEDA BOULEVARD WIDENING PROJECT (PLAYA STREET/JEFFERSON BOULEVARD TO GREEN VALLEY CIRCLE

PCC PAVEMENT ALTERNATIVE

TASK / CLASSIFICATION	Adel Freij, Project Manager	Abner Catig, Senior Design Manager	Calvin Catig, Senior Design Manager	Tom Kirk, Senior Engineer	Pavement Technician	Jun Manio, Senior Drafter	Ed Cox, Utility Coordinator	Lew Ghesing, Traffic Division Manager	Vanessa Munoz, Supervising Engineer	Bob Burch, Senior Design Manager	Jeffrey Lau Design Engineer II	Juan Avila Design Engineer I	David Knell, Survey Division Manager	Suey Barrientos, Survey Analyst	Two-Man Survey Field Party	John Hidalgo, Landscape Division Manager	Bryan Nguyen, Associate Landscape Architect	Dave Hayes, Arborist	Jason Brown, Supv. Public Works Observer	Steve Leathers, Division Manager	Word Processing
1 - General																					
1.1 Kick-off Meeting	6	4		6			4		4	4						4					
1.2 Research Records/Field Review	4	8	16	2		24				3	20	20		4		5	16				
1.3 Survey	4												16	52	88						
1.4 Utility Coordination	4						80														8
1.5 Pavement Engineering	6			82	16																6
1.6 Community/City Council Meetings	20	16		20						16						16	8				
2 - Preliminary/Conceptual Design	16	32	68	24		112		6	24	28	10	90				24	60	18			8
3 - Final PS&E	56	128	191	50		234		22	42	192	272	203				40	150	12	16	20	24
4 - Construction Support																					
4.2 Pre-bidding	4	6	8	4					4		4					4	4				2
4.2 As-builts	2		4	2		16		1	1			16				2	6				
NOT-TO-EXCEED	122	194	287	190	16	386	84	28	75	243	306	329	16	56	88	95	244	30	16	20	48

* Aerial survey performed by Aero Tech Surveys, Inc.
** Includes cost of equipment rental, traffic control, and lab testing.

APPROACH

Willdan has served local cities for many years providing street widening, medians and traffic signal upgrades along with pavement rehabilitation design and full construction management services for over several hundred projects in the past 25 years. The professionals selected for this project are highly experienced in civil design, traffic design, pavement engineering, landscape architecture, and construction engineering. Our experience in selecting and applying pavement rehabilitation methods in the most cost-effective manner is extensive.

The following statements emphasize Willdan's unique qualifications and project approach:

1. Willdan as contract city engineer for a large number of cities over the last 40 years has almost continuously been involved in one or multiple major arterial widening and/or median project at any given time. Many such projects were engineered by Willdan for a multitude of other cities as well. Our experience would be difficult to match, especially considering that key staff proposed for this project have been with Willdan on such assignments for a minimum of 18 years each.

2. The firm has provided engineering design and construction management services for hundreds of roadway improvement, rehabilitation and resurfacing projects throughout Southern California. The resurfacing of streets with medians is a special challenge that Willdan deals with on a regular basis, usually with a several projects underway at any given time. Our experience with asphalt-rubber hot mix (ARHM) is unsurpassed, dating back to the first asphalt rubber project bid in Southern California in 1989.

3. Our firm has the in-house capability to perform all of the work required for the project, including pavement engineering staff to analyze deflection test data, and develop structural overlay sections that precisely suit the needs of the City and the unique demands of the site. At Willdan, the pavement report is developed concurrently with the overlay design plans, to ensure that the recommendations in the report meet the needs of the project.

Willdan has been at the forefront for many years in developing new and more cost-effective approaches to upgrading pavement structures of deteriorated streets. During this time, design specifications have been tested and refined for various processes using methods and materials proven to be economical and effective in their application. Research of rehabilitation strategies was the focus to establish a complete inventory of rehabilitation techniques, and determine the precise value and applicability of each technique. Members of the project team carry on this research with every project, and

track the resultant pavement performance over decades. Willdan maintains a comprehensive working library of the latest pavement rehabilitation methods. Members of our staff strive to stay current with such developments and apply them to design projects with minimum costs and maximum pavement life.

4. Due to the fact that we serve as the City Engineer in a number of communities where many similar projects have been constructed, our staff members have the benefit of continuous feedback about pavement design performance and construction techniques.

5. Willdan has completed numerous streetscape projects within the last five years. Most notable is the Richard Nixon Expressway in the City of Yorba Linda, CA. At a cost of $28 million, this four-mile section of roadway, which combined a freeway with a conventional highway, was relinquished by the State of California Department of Transportation and turned control to the City of Yorba Linda. With funds from federal, state and local agencies, the City improved the roadway as part of the countywide "Street Smart" program administered through the Orange County Transportation Authority. The project involved land acquisition for roadway widening and sound attenuation walls. Since the City of Yorba Linda presents itself as a semi-rural community, the landscape design that Willdan successfully implemented included California natives plantings along with semi-arid drought tolerant plant species. The general elements of the project included, varied widths of parkways 10 to 40 feet wide, meandering sidewalks and 14 feet wide street medians. Within the four-mile segment, included were recreational trails that link up with the existing trails throughout the city. Willdan's tasks included, landscape conceptual plans, schematic plans, construction drawings, specifications, cost estimates, bidding assistances, construction support and record drawings preparation.

6. The Los Angeles area Traffic and Transportation Division of Willdan specializes in providing traffic engineering and transportation planning services to governmental agencies in California. The Division's experience and expertise covers nearly all facets of traffic and transportation engineering, from handling citizen complaints to managing multi-million dollar capital improvement projects. In addition to their independent projects, this division provides transportation services to support the office's public works design services, planning services, and contract administration services. The division also provides traffic and transportation support for a variety of projects managed at the company's corporate headquarters in Anaheim and offices located in Anaheim, Lancaster, San Bernardino, Ventura, and Sacramento, California; Phoenix, Arizona; and Las Vegas, Nevada.

7. Our role as City Engineer provides Willdan's staff with design and construction management experience that includes the full range of construction methods for

nearly every possible site condition. Willdan obtains direct and important feedback, such as:

- ✓ the most efficient construction method to implement on each type of project;
- ✓ the actual performance of the different rehabilitation methods over extended periods; and
- ✓ special field conditions to circumvent during construction through special contract provisions.

8. It is Willdan's policy to maximize the resources that exist within our organization to provide the highest quality product. In the area of design, one very effective technique is that the final review of plans and specifications is performed independently by our construction management group. A highly experienced construction engineer will perform an independent review of the contract documents to ensure the project is fully constructible and the contract is without ambiguities.

In addition to our extensive design engineering experience, Willdan has the construction experience to match every type of street condition. Our construction and design professionals have worked together closely over the years to develop the highest quality time tested construction procedures. Close attention to details such as crack treatments, interlayer placement and removal area selections, are crucial to a durable finished pavement.

PROJECT APPROACH

Willdan's approach to this assignment will be to first meet with the City to discuss and obtain all project requirements and to learn the City's and resident's precise goals and needs. Preliminary research will then be performed to gather information regarding the roadways, including existing as-built plans and survey information. This will also include conducting utility investigations, contacting the utility companies to obtain record drawings, and notifying them of the proposed project.

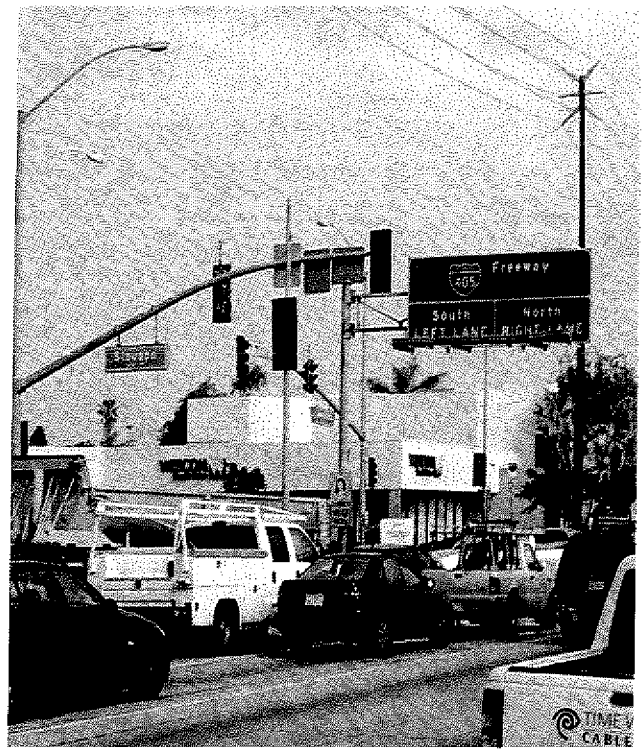
Aerial mapping and ground survey will be performed as well. Right-of-way will be ascertained and survey markers that will be disturbed by the project will be identified and ties set. Existing striping will be surveyed from Playa Vista Street/Jefferson Boulevard to Sawtelle Boulevard.

The depth of substructures will be identified as necessary. However, the majority of the street improvements will be on the surface, therefore, it is not anticipated that underground substructures will be impacted. It was noted that waterlines may exist

close to the corners at Sepulveda Boulevard/Slauson Avenue. Willdan will work with the water company to determine the specific locations of the water line and their depth by measuring the valve stem.

Willdan will prepare a proposed geometric layout and submit it to the City for approval.

The project design team will study the site closely to identify the best overall alignment for Sepulveda Boulevard based on constraints caused by existing improvements. For example, based on field reconnaissance, it was noted that a directional freeway sign for I-405 currently exists in the median on the south side of the street at Slauson Avenue. Street widening at this intersection may need to be increased by 1 foot on each side of the street over that which is currently proposed in order to maintain a 4-foot wide median within which the sign post can remain, otherwise a costly sign bridge would need to be constructed. With a 4-foot median, the sign can simply be removed and then relocated to within the new median, with foundations constructed in accordance with Caltrans standard drawings.



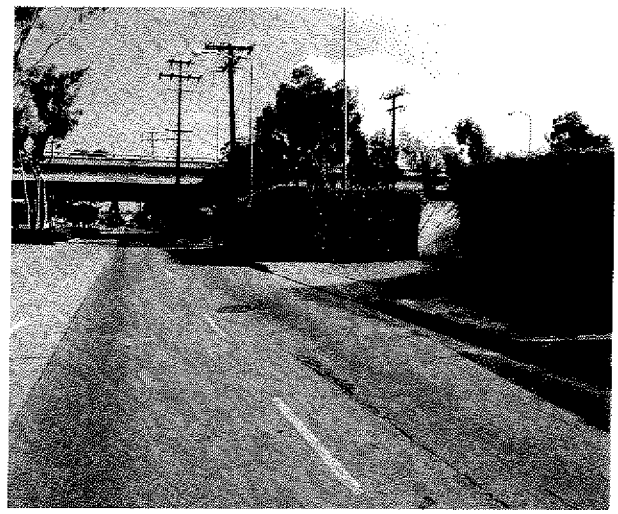
Another key issue that will control the project schedule and perhaps increase project costs more than anticipated is the Southern California Edison (SCE) utility pole relocation or undergrounding that will be required due to the widening. During the course of developing the geometric layout all affected utility poles will be identified in an attempt to mitigate a utility conflict if possible. Subsequently, after development of the geometric layout, it will be prudent to meet with SCE in the very early in the plan development stage to begin the process to either relocate or underground the poles. This coordination can be handled by our Utility Coordinator.

Upon approval of the geometric layout, a complete set of plans and profiles incorporating all aspects of the approved geometric alignment will be developed accordingly, including cross-sections for the street improvements. All pertinent existing and proposed information will be included. The plan set will include the completed title sheet, typical sections and notes. Plan sheets will be prepared on City of Culver City title block and include the required information outlined RFP.

Our approach for pavement rehabilitation will begin with a thorough assessment of options for a long-term rehabilitation, ideally 20 years. Sampling and testing of the pavement and subsurface materials and deflection testing will be applied performed to gather quantifiable data for analysis. Due to past overlays of existing concrete pavements, additional coring will be performed to verify existence of underlying PCC pavements in suspect areas. These areas will be plotted on project base plans.

Next, options will be developed for rehabilitation design. A set of options will be developed for overlay of existing AC pavement. Reconstruction repairs will be provided to minimize the overlay thicknesses to the most cost effective balance in AC areas based on deflection analysis. Another set of options will be developed for overlay of existing PCC pavement, where joint reflection is the governing factor rather than deflections. A value engineering analysis spreadsheet of feasible options will be developed for consultation with the City on preferences, including lifespan estimates.

The mix of PCC and AC pavements provide a unique challenge on this project. Some of the PCC is covered with AC also; a special area of investigation. Rehab design for PCC slabs, and AC overlay of both AC and PCC will be needed, all working together.



Providing a long life structural section for the AC pavement within the restrictions of grade imposed by existing curb and gutter and median will be another pavement engineering challenge. Willdan deals with this problem routinely and has developed highly innovative strategies and analysis methods to resolve these problems.

One key challenge will be geometric constraints of existing median curbs and curb and gutters. Providing a viable overlay thickness under the latest more stringent Caltrans guidelines for use of asphalt rubber is the key issue, but one which Willdan has faced many times in the past with good success.

A second evaluation will be performed for a concrete pavement in lieu of rehabilitation. PCC pavements can easily be designed for 60-year lives or more, and so there is a built in advantage if the cost factors can be overcome. The analysis will provide for the most cost effective PCC structural section, and a full cost and lifespan comparison with rehabilitation options for consultation, review and decision making by City staff.

A pavement design report will incorporate the findings, analysis, conclusions and recommendations based on consultation with City staff on the various options.

One major advantage that Willdan provides is that the pavement design report evolves as the project develops in design. Final structural sections are not written in final form until the final street cross section is developed. Cold milling especially impacts overlay thickness, along with a host of other late decisions that may be made during design development. Our pavement engineer is in continuous communication with our civil design engineers, and together they develop the structural section and the design plans concurrently as governing parameters are determined.

Another advantage provided by our in-house pavement engineering staff is that our pavement engineer assists in development of the typical cross sections for the pavement structure, and also the constructability issues related to pavement joints, etc. Our pavement engineer will provide a complete joint layout for PCC pavement as he has on many other projects to avoid unstable slabs and difficulties during construction. The joint pattern must coincide with the nature of the PC concrete material delivered to the project, and again our pavement engineer will develop appropriate specifications for short cure and corresponding joint pattern.

Our pavement engineer also personally prepares the special provisions for the contract documents and provides a final proof of the project plans, including traffic control related to construction of paving. In fact, he maintains close communication with our traffic engineering staff to ensure that such things as construction joints for PCC pavement correspond appropriately with traffic control delineation. These factors can make the difference between straightforward construction with a beautiful pavement outcome, and problematic construction with joints in the wheel path and some unstable slabs.

In addition to development of pavement rehabilitation strategies, wheelchair ramps will be assessed for ADA compliance and locations where removal and repair of damaged curb, gutter, sidewalk, and driveway approaches will be determined and presented to the City for review and concurrence.

Plans and contract specifications will be prepared in accordance with the City's current standards and the Standard Specifications for Public Works Construction (Green Book). Willdan is prepared to provide project specific special provisions that amend or modify the standard provisions.

Willdan will prepare quantity calculations and an engineer's estimate. Separate quantity calculations for each sheet will be independently checked and separate calculations submitted. Calculation sheets will be neat and orderly and include the name of the engineer that prepared the calculations. Back-up calculations for lump sum bid items and estimates to be separated for a particular jurisdiction can also be provided.

For the various submittal milestones, Willdan and its project team will prepare for and facilitate a review conference with the appropriate review personnel from the City to thoroughly understand each comment and clarify any design issues. Each comment provided in writing and the comments shown on the plans will be addressed in a "Response to Comment Memorandum".

Willdan will furnish preliminary and final construction cost estimates with quantities for the roadway improvements as part of the submittal packages in a format acceptable to the City.

Landscape Concept Development

The development of the landscape design for median modification areas will incorporate all aspects of local and state water conservation standards. The tree, shrub and groundcover palette will be comprised of California friendly, drought tolerant species suitable for this particular site and complement the adjacent landscape theme. Currently, the planting palette consists of trees and shrubs such as, Eucalyptus Lemon Scented Gum, Canary Island Pine Trees, Indian Hawthorn, Fern Pines, Cast Iron Plant, Lily of the Nile and Bronze loquat.

The irrigation design will be state-of-the-art automatic irrigation system, which would deliver the highest efficiency. All plants will be selected based on low maintenance requirements such as trimming/pruning cycles, fertilization needs, hardiness, and reclaimed water adaptability, if required.

Since this is a street improvement project involving landscape elements, visibility and unobstructed views for both the pedestrian and driver are major factors in properly locating trees and shrubs within the parkways and medians. Our landscape design work will include coordination between the civil and traffic engineers.

Modification to the medians may adversely affect median trees as can be seen at left. During the preliminary design phase, Willdan will employ an ISA certified arborist to examine and assess the amount of potential root damage

a specific tree will encounter because of the curb re-alignment. In turn, this important field assessment will help in determining the tree's viability once the tree's anchoring system is compromised. Furthermore, this tree root assessment report will assist in the preparation of the construction plans phase when determining tree preservation or tree removal call-outs.

Quality Assurance/Quality Control

Willdan operates daily under a company-wide Quality Assurance/Quality Control (QA/QC) Program. The key component of this plan is Willdan's QA/QC Manual. This program has proven itself very effective and successful and is a continuous process that occurs day-to-day.

All submittals will meet the objectives of the project in terms of schedule and accuracy. They will be developed in compliance with all applicable standards and specifications in the formats specified by the City and respective reviewing agencies. Prior to submittal, each deliverable will undergo a quality control review by the Project Engineer, Deputy Project Manager, and the Project Manager. Each discipline leader is responsible for adhering to the QA/QC program and is held accountable for the quality of his/her product.

In addition to the reviews performed by the direct project team as stated above, the project will undergo a review by independent qualified staff not involved in day to day development of the project plans and specifications.

SCOPE OF WORK

The City of Culver City, through its Department of Public Works, desires consulting engineering services for the Sepulveda Boulevard Widening Project. The following is a brief description of our proposed Scope of Work.

Project Design Management Services

1. Willdan's project management staff will report directly to the City's project manager.

2. Provide project liaison between the City and utility companies and other applicable governmental agencies in order accomplish project objectives.

3. Oversee scope of services, emphasizing a high quality project, completed in a timely and professional manner, by maintaining a project schedule identifying the critical path for expeditious project completion.

4. Conduct and attend the pre-design meeting with all stakeholders; and schedule and conduct project design team meetings and other meetings as necessary; prepare agendas and minutes, and distribute.

5. Conduct one community outreach meeting to present the conceptual design and obtain feedback from the public.

6. Attend two City Council meetings to present the conceptual design and final project plans.

7. Monitor project compliance with applicable Federal, State, and local requirements.

8. Provide value engineering analysis.

9. Ensure that appropriate communication, correspondence, and reports are completed on an ongoing basis in timely manner to the satisfaction of the City.

10. Arrange and participate in a detailed review of the 90% PS&E package, with in-depth field review and constructability review, and claim avoidance emphasis. Each comment provided in writing and the comments shown on the plans will be addressed in a "Response to Comment Memorandum".

11. Coordinate stakeholder plan review and plan updates as necessary.

Preliminary Engineering

1. Attend a kick-off meeting to meet with City representatives to review the project in detail and determine requirements and procedures for design, ongoing review, coordination, and meetings. Items covered will include but not be limited to, pavement rehabilitation strategies, ADA compliance, traffic design, and landscape issues.

2. Assemble and review available information pertaining to the project, including existing survey data, as-built improvement plans, traffic signal, signing and striping plans, utility information, existing pavement section information, tax assessor maps, and other available record data. This task includes performing research at the City of Culver City, Caltrans, City of Los Angeles and Los Angeles County Department of Public Works.

3. Perform preliminary field reconnaissance, including photography, for an overall perspective on field conditions.

4. Research all existing underground and overhead utilities which may be affected by the improvement project. Fully coordinate with utility agencies regarding accuracy of locations of utility lines, relocation, and protection.

Design Survey and Right-of-Way Mapping

Willdan will perform the following:

1. Research of Record Information
   a. Obtain benchmarks, centerline ties, and other available survey data from the City of Culver City.
   b. Obtain information and mapping for record monuments, centerline, and right-of-way information from the County Surveyor's office.

2. Field Surveying
   a. Project Datum to be used
      i. Horizontal: California State Plane Coordinates
      ii. Vertical: City of Culver City GPS benchmark system
   b. Aerial Topographic Survey (performed by Aero Tech Surveys, Inc.)
      i. Limits: Topography of project limits extending 100' beyond right-of-way.
      ii. Collect standard topographic detail (hardscape, driveways, building frontages, doorways, surface utilities, striping, traffic signal appurtenances, etc.) of all features within project limits, including traffic striping between Playa Vista Street/Jefferson Boulevard to Sawtelle Boulevard.
   c. Cross-Section Survey
      i. Collect cross-sections at 50' intervals from right-of-way to right-of-way (ultimate) plus 15 feet.
   d. Other Field Surveying
      i. Establish a minimum of two temporary benchmarks within project limits.
      ii. Collect top of cone and rim elevations of existing sewer and storm drain manholes, and invert elevations of storm drain and sewer structures, including catch basins, within project limits.
   e. Right-of-way Mapping
   f. Research and ascertain right-of-way location.

3. Monument Perpetuation
   a. Review plans and found record centerline monumentation to determine said monumentation to be affected by proposed construction.
   b. Tie out all centerline monumentation determined to be affected, damaged, removed, or destroyed by proposed improvements.

Pavement Engineering

1. Perform a field investigation to gain strong familiarity with the site and specific pavement conditions. The following items will be determined:

   a. Potential reconstruction areas
   b. Miscellaneous special problems that may require a form of pretreatment prior to overlay
   c. Identification and recordation of core locations.
   d. Deflection test point alignments and preliminary sample segments definition.

2. Provide deflection testing at 50-foot intervals in 2 lanes northbound and southbound and 100-foot intervals on the number one lane northbound.

3. Perform coring and testing: 18 full section cores and moisture content tests, and 3 R-values at selected core locations, plus 8 additional exploratory partial depth cores to check for existence of PCC pavement. Soil corrosivity will be tested for soils on the site and soils will be classified.

4. Review test data and core samples to ascertain potential problems with specific strategies, such as geometric constraints, widespread extreme deflection readings indicating potential reconstruction, wet subgrade, thin pavement sections, fabric interlayers affecting cold milling or delaminating, special base materials, PCC section situation, etc.

5. Calculate overlay thickness deflection test results for AC pavement sections using Caltrans Test Method 376, and Caltrans Highway Design Manual. City will provide the design TI.

6. Prepare materials report, including summary of existing conditions and complete recommendations for rehabilitation, including special treatments needed, overlay thickness calculations, and constructability considerations, with test documentation attached. Random testing of PCC areas will be used to verify slab stabilities and facilitate in determination of rehabilitation strategy for overlay of PCC, though actual design of the rehab will be driven by joint reflection considerations.

7. Evaluate strategies and special conditions for resurfacing that will alleviate difficult circumstances on specific segments, and estimate the quantity of removals for each strategy.

8. Determine in consultation with City staff the strategy to be applied to retard reflection of joints and cracks in PCC pavement areas.

9. Calculate reconstruction structural sections for repairs and areas of reconstruction and also calculate structural sections for PCC repairs pavement repairs.

10. Develop a PCC pavement design in lieu of rehabilitation of existing pavement, and develop cost comparisons for the various possible strategies for review by the City, including lifespan calculations, and include this information in the pavement design report.

11. Based on the City agreed strategies, incorporate project special conditions, unique engineering and constructability considerations and concerns for overlay, and City agreed preferences into a pavement geotechnical report, including a brief summary of findings and recommendations and all test data, outlining the specific elements to be implemented for pavement upgrade.

12. Based on the City agreed final strategy of PCC pavement or rehabilitation, incorporate project special conditions, unique engineering and constructability considerations, and City agreed preferences into the pavement design, and prepare preliminary typical sections and special provisions, and coordinate design of pavement rehabilitation.

13. Provide five copies of the draft pavement geotechnical report for review by City staff, revise as appropriate and provide five copies of the final report.

14. Take design plans to the site and mark reconstruction and other repair areas in the field conforming to overlay design limitations, and generally proof overlay design aspects such as special conditions for cold milling, and other treatments and coordinate for recording and plotting on plans.

15. For PCC pavement, mark areas of repair for destabilized slabs, including marking and plotting outlines of areas of reconstruction that create new stable slabs without destabilizing adjacent slabs.

16. Prepare PCC joint pattern layout definition and joint designs for PCC pavement.

17. Prepare special provisions for pavement related items and monitor inclusion of the final details on the project plans, and proof estimates, details, cross sections and construction notes, to ensure proper implementation at time of construction.

18. Coordinate final revisions and perform final constructability review of bid documents.

19. Answer questions during bid period.

20. Provide review of pavement materials documentation at time of construction at no cost to City.

Preliminary/Conceptual Design - Civil

1. Review compiled record data.

2. Develop base drawings at minimum scale of 1" = 20'

   a. Plot survey data.
   b. Identify and plot apparent substructures.
   c. Conduct field verification of record data.

3. Develop proposed geometric layout for parkway and median curb. Design alternatives will be identified and evaluated.

4. Develop typical cross sections for reconstruction areas.

5. Integrate design standards for Caltrans and the City of Los Angeles into the design as required.

6. Coordinate and integrate design standards for transit agencies (Culver City Bus and Metro Bus).

7. Develop preliminary cost estimates.

8. Attend coordination meetings with City personnel at various times during the design stage to obtain additional input and review progress of the work.

9. Submit preliminary plans and estimates to the City of Culver City for review and comment.

10. Respond to plan review comments.

Preliminary/Conceptual Design - Traffic

1. Upon completion of survey and preparation of base plans, perform a detailed field review to verify and document existing traffic related topographic conditions. The field review will include, but not limited to, existing signs, existing striping, traffic signal equipment and any additional topographic information pertinent to the project.

2. Coordinate with affected agencies and determine requirements for various permits necessary for the project. Coordinate and integrate design standards for Caltrans and the City of Los Angeles each of which has jurisdiction within a portion of right-of-way for the project.

3. Prepare Traffic Management Plan (TMP) and traffic control concept plans.

4. Prepare and evaluate design concept plans.

5. Prepare preliminary cost estimates for each design alternative.

Preliminary/Conceptual Design – Landscape

1. Investigate landscape and irrigation requirements for the City of Culver City. Obtain available record drawings. Verify known underground utilities to avoid conflicts with proposed parkway trees and median trees plantings, and irrigation mainline routing. Research available water source(s) and electrical sources for the irrigation system and automatic irrigation controllers.

2. Field verify existing landscape and irrigation systems. Work with City staff to assess trees, shrubs and groundcover conditions and determine suitability. Conduct a thorough irrigation audit to determine the performance of the existing system and propose upgrades, if necessary.

3. Prepare one concept plan. Submit plan to the City and other pertinent agencies/departments for review and comments. The plan will address:

   - Planting palette suggestions (i.e., trees, shrubs, groundcover and vines)
   - Irrigation systems (i.e., sprinkler equipment)
   - Median hardscape treatment (i.e., stamped concrete, pavers)
   - Renovation of existing landscaped areas

4. Upon the review and comments from the City, present a final concept plan for final review and approval that addresses the comments from all parties. The construction documents for landscape improvements will not commence until the City and all other pertinent agencies have reviewed and approved the concept plan.

Utility and Agency Coordination

1. Provide utility coordination throughout the design phase.

2. Willdan will prepare and send utility notifications via certified mail to the utility companies and other agencies with facilities within the limits of the project on

City letterhead. Copies of available maps, plans and records and prior rights information will be requested for any existing facilities within the project limits that may be affected by the proposed improvements. These notices will be sent to the contacts provided by the City. Each notice will contain a letter requesting available atlases, as-builts, and proposed utilities within the project limits. The requests will also include a copy of the Thomas Bros. Map pages with the project area highlighted and a response sheet.

3. Willdan will maintain detailed records of correspondence with utility companies, which will be made available to the City of Culver City upon request at the completion of the work. Upon receipt of utility maps from the utility companies, Willdan will prepare a digital master file in AutoCAD digital format depicting the location of known underground and above-ground utilities within the project limits. Municipal services such as water, storm drain, and sewer lines will also be included in the master file plan. This master file will be referenced into the drawings to identify potential utility conflicts with the proposed improvements. High-risk facilities as defined by the Caltrans Manual of High Risk Utilities will be identified.

4. If required, Willdan will coordinate potholing performed by the utility companies in order to determine depths of their facilities.

5. Preliminary costs estimates and schedules will be requested from each utility company for which any utility relocation is required, including Southern California Edison Company.

6. Coordinate with affected agencies and determine requirements for various permits necessary for the project. Letters requesting information and transmitting submittals will be on City letterhead.

7. Submit a set of the preliminary plans to each affected utility company for comments.

8. Submit a set of final plans to each affected utility company and affected agency with final notification for completion of utility work.

9. Provide the City a brief written summary of utility coordination status upon delivery of final construction contract documents to the City.

Final Design (60%, 90%, & 100% PS&E)

1. Following the approval of preliminary plans, prepare final (60%, 90%, & 100% stages) street rehabilitation, storm drain modification, median and parkway

landscape and irrigation, traffic signal, traffic control, street lighting and signing and striping plans.

2. Prepare civil design plans at scale of 1" = 20' horizontal and 1"=4' vertical. Details will be prepared at large scale for clarity.

3. Define limits of curb and gutter, driveway and sidewalk removal and reconstruction.

4. Define limits of pavement, grinding, and overlay if rehabilitation option is elected.

5. Define limits of pavement reconstruction and joint pattern, if PCC pavement option is elected.

6. Define limits of pavement and concrete removal where required.

7. Prepare signing and striping plans at a scale of 1" = 20' along Sepulveda Boulevard from Sawtelle Boulevard to Green Valley Circle. The signing and striping plans will include loop replacements at signalized intersections, where traffic signal modifications are not required. The design will conform to the latest edition of the Caltrans Standard Plans and Specifications, MUTCD, and City Standards.

8. Prepare traffic control plans at a scale of 1" = 20'. The traffic control plans will be prepared for the street widening and the median reconstruction areas of the project. It is not anticipated that traffic control plans will be required for roadway concrete reconstruction or street resurfacing. The design will conform to the latest edition of the Caltrans Standard Plans and Specifications, MUTCD, and City Standards.

9. Prepare street lighting plan at a scale of 1" = 20' from Playa Street/Jefferson to Green Valley Circle. The street lighting system is City-owned, therefore the design will conform to Los Angeles County and IES standards.

10. Prepare traffic signal modification plans at a scale of 1" = 20'. The intersections include: Sepulveda at Jefferson/Playa, Sepulveda at Slauson, Sepulveda at the Sizzler driveway, and Sepulveda at Green Valley. It is our understanding that the red light camera system for the intersection of Sepulveda at Slauson will be relocated by others and will not be a part of the traffic signal modification plan. The designs will conform to the latest edition of the Caltrans Standard Plans and Specifications, MUTCD, and City Standards.

11. Prepare traffic signal interconnect plan at a scale of 1" = 20' from Playa Street/Jefferson to Green Valley Circle. The traffic signal interconnect design will

be the relocation of the City's CCTV fiber optic system. The designs will conform to the latest edition of the Caltrans Standard Plans and Specifications and City Standards.

12. Prepare traffic special provisions and final engineer's estimate to be incorporated into bid documents.

13. Submit preliminary PS&E at 60%, 90% and 100% completion for City review. Upon receipt of final City comments, revise PS&E and submit final PS&E with plans on mylar, to the City for use in advertisement and bid.

14. Integrate design standards for Caltrans and the City of Los Angeles into the design as required.

15. Coordinate and integrate design standards for transit agencies (Culver City Bus and Metro Bus).

16. Upon the approval of the conceptual plan for the median modifications, conduct a field review of potential trees affected by the new curb alignments. This tree assessment report will evaluate root shaving and/or root pruning impacts for each tree affected by the modifications.

17. Prepare landscaping plans, specifications and estimates (PS&E) for the modified medians and parkways. The PS&E will be prepared in conformance with the approved concept plan. The plans will address proposed and existing landscape and irrigation systems areas. The irrigation system design will be in accordance with reclaimed water requirements and standards, if required. In addition, the landscape construction plans package shall include landscape details; construction costs estimates and special provisions specifications.

18. Plans will be prepared and delivered in the latest version of AutoCad format.

19. Prepare specifications and contract documents to conform to applicable requirements of the City of Culver City.

20. Perform final constructability/quality control review.

21. Prepare final project cost estimates.

22. Coordinate with other agencies and utility companies as required in the preparation of the plans, issuance of permits as required, and construction clearance.

23. Submit final 100% PS&E documents in accordance with the RFP, including mylar and digital submittals.

24. Willdan will prepare a conceptual Storm Water Pollution Prevention Plan (SWPPP) in accordance with either the General Construction Activity Permit. Willdan will prepare the Notice of Intent (NOI) and process the approval through the City of Culver City and Regional Water Quality Control Board (RWQCB).

Construction Technical Support

1. Attend pre-bid meeting.

2. During advertisement period, prepare responses in writing for City staff to answer written requests for clarification form prospective bidders.

3. Prepare and issue addenda as necessary.

4. Prepare record drawings based on redline drawings provided by the contractor and prepare for submittal to the City wet stamped and signed mylars.

EXPERIENCE

The following is a list of representative projects accomplished by members of our project team.

Project: **223rd Street Improvements (2008)**
Client: **City of Carson**
Contact: **Mr. Farrokh Abolfathi, Principal Engineer, (310) 830-7600**

Willdan was retained to provide professional design services to prepare plans, specifications, and cost estimate (PS&E) for the 223rd Street Improvements, Lucerne Street to Alameda Street Project No. 1003. Services included developing a landscape master plan to create an identity for Auto Row, and preparation of plans and specifications, street widening and rehabilitation, landscape medians, signing and striping and traffic control.

Project: **Whites & Soledad Canyon Improvement (2008)**
Client: **City of Santa Clarita**
Contact: **Mr. Terry Brice, Assistant Engineer, (661) 259-2489**

Willdan was retained to provide professional design services to prepare plans, specifications, and cost estimate (PS&E) for the construction of a right-turn pocket at Whites Canyon road and Soledad Canyon Road, Project No. C3010. Services included developing and preparation of plans and specifications, street widening and rehabilitation, relocate overhead utilities, signing and striping, street lighting and traffic control.

Project: **HWY 111 Street Improvements (2007)**
Client: **City of Indian Wells**
Contact: **Mr. Tim Wassil, Director of Public Works, (760) 346-2489**

Prepare plans, specification, and estimate (PS&E) for Highway 111 from west City limit to east City limit (3 miles). Project consists in widening Highway 111 to add one thru lane for the eastbound and westbound traffic, as well as landscape medians. Project includes preparation of environmental impact report, street, storm drain, traffic signal (8), interconnect, signing and striping plans, preparation of topographic survey, geotechnical report, legal description and platts, right-of-way appraisal and acquisition, coordination with adjacent developments and agencies for project transitions and utility companies for substructure research and relocation. Project was completed in a timely manner to meet the City's schedule

Project: **Town Center Street Improvement Design (2007)**
Client: **City of La Canada Flintridge**
Contact: **Mr. Ying Kwan, City Engineer, (818) 790-8882**

Willdan prepared the plans, specifications, and estimate for the installation/modification of three traffic signals, streetscape design, street resurfacing, raised center medians, and center median landscaping associated with the La Canada Flintridge Town Center development. Willdan also assisted with Caltrans Encroachment Permit processing to obtain permit and performed utility coordination, right-of-way survey, pavement analysis, and streetscape design.

Project: **Norwalk Boulevard and Bloomfield Avenue Boulevard Resurfacing (2007)**
Client: **City of Lakewood**
Contact: **Ms. Lisa Rapp, Director of Public Works, (562) 866-9771**

Provided engineering design, pavement deflection testing and study, pavement rehabilitation design, utility coordination, and preparation of bid documents for the resurfacing Norwalk Boulevard and Bloomfield Avenue from City limit to City limit.

Project: **California Avenue Street Rehabilitation Design FHWA Funded (2007)**
Client: **City of South Gate**
Contact: **Mr. Robert Dickey, Director of Public Works, (323) 563-9500**

Willdan provided deflection testing, pavement report, pavement rehabilitation design, utility coordination, and preparation of bid documents for this major arterial from City limit to City Limit. Included installation of interconnect and new street light system.

Project: **Alder/Randall and Alder/Merrill Improvements (2004)**
Client: **City of Fontana**
Contact: **Mr. Ricardo Sandoval, City Engineer, (909) 350-7613**

Prepared street and traffic signal improvement plans, and engineering construction estimate for the location of Alder Avenue/Merrill Avenue and Alder Avenue/Randall Avenue. Services rendered consisted of preparation of plans for traffic signal, storm drain, street, and signing and striping plans. Other services included utility coordination, topographic survey, legal description with plat, potholing, and assistance during advertisement and bidding. Project consisted of widening the intersection to ultimate improvement for the traffic signal installation.

Project: **Garfield Avenue Street Rehabilitation Design FHWA funded (2004)**
Client: **City of South Gate**
Contact: **Mr. Robert Dickey, Director of Public Works, (323) 563-9500**

Willdan provided deflection testing, pavement report, pavement rehabilitation design, utility coordination, and preparation of bid documents for this major arterial from Firestone to Imperial Highway. Included installation of interconnect and concrete intersection pavement.

Project: **Paramount Boulevard Rehabilitation Project FHWA Funded (2007)**
Client: **City of Pico Rivera**
Contact: **Mr. Michael Moore, Director of Public Works, (562) 942-2000**

Willdan was retained by the City of Pico Rivera to provide professional engineering services including preliminary engineering, survey, and design preparation of plans and specifications for the Paramount Boulevard Rehabilitation Project. The roadway width of Paramount Boulevard within the project limits of Washington Boulevard to Gallatin Road varies from 58 feet to 72 feet wide. The services for this project included civil design, traffic engineering, survey, utility coordination, and preparation of technical specifications for the project.

Project: **Rosecrans Boulevard Rehabilitation Project FHWA Funded (2007)**
Client: **City of Paramount**
Contact: **Mr. Chris Cash, Utilities & Infrastructure Assistant Director, (562) 220-2020**

Willdan was retained by the City of Paramount to provide professional engineering services including preliminary engineering, survey, and design preparation of plans and specifications for the Rosecrans Boulevard Rehabilitation Project. The services for this project included civil design, pavement engineering, deflection testing and materials report, traffic engineering, survey, utility coordination, and preparation of technical specifications for the project.

Project: **Larch Avenue Improvement FY 2006-07 (2007)**
Client: **City of Lawndale**
Contact: **Ms. Marlene Miyoshi, Director of Public Works, (310) 973-3265**

Willdan has been retained to provide professional services for engineering design, pavement engineering design, utility coordination, and preparation of bid documents for the Larch Avenue from Manhattan Beach Boulevard to Marine Avenue Improvement Project, FY 2006-07.

Project: **Hawthorne/Palos Verdes Drive West Overlay (2006)**
Client: **City of Rancho Palos Verdes**
Contact: **Ms. Bindu Vaish, Project Manager, (310) 544-5254**

Provided design and pavement engineering services for the resurfacing of Hawthorne Boulevard (Silver Spur/North City limit) and southbound Palos Verdes Drive West (North City limit/Hawthorne) and slurry seal of northbound Palos Verdes Drive West (400' south of Golden Cove/Hawthorne).

Project: **Rosecrans Avenue Street Resurfacing (2005)**
Client: **City of Paramount**
Contact: **Mr. Chris Cash, Utilities & Infrastructure Assistant Director, (562) 220-2020**

Prepared plans and specifications and provided construction engineering and labor compliance for the street resurfacing of Rosecrans Avenue from Garfield Avenue to Century Boulevard including crosswalk replacement at Downey Avenue.

Project: **Del Amo Boulevard Resurfacing (2005)**
Client: **City of Lakewood**
Contact: **Ms. Lisa Rapp, Director of Public Works, (562) 866-9771**

Provided engineering design, pavement rehabilitation design, utility coordination, and preparation of bid documents for the resurfacing Del Amo Boulevard between Studebaker Road and the east City limit.

Project: **2004-2005 Asphalt Concrete Overlay (2004)**
Client: **City of Rolling Hills Estates**
Contact: **Mr. Sam Wise, Assistant City Manager, (310) 377-1577**

Provided design, design survey, utility coordination, monument restoration, contract administration, and construction observation services for the City's 2004-05 Asphalt Concrete Overlay program.

Project: **San Gabriel Boulevard Improvements (2003)**
Client: **Rosemead Community Development Commission**
Contact: **Mr. Oliver Chi, City Manager, (626) 569-2100**

Provided civil and traffic engineering design, utility coordination, construction management, construction observation, monument restoration, and federal labor compliance services for street improvements on San Gabriel Boulevard from Hellman Avenue to Rush Street. The project included street resurfacing with Asphalt-Rubber Hot Mix (ARHM); removal and construction of all concrete sidewalk, driveways, and curb ramps in compliance with ADA requirements; signing and striping; traffic loop replacement; new parkway trees with grates; and street light with underground conduits.

WORKLOAD

The current and anticipated workload of the team members include the following:

CURRENT AND ANTICIPATED WORKLOAD	
Key Personnel	**Major Projects**
Adel Freij, P.E.	No anticipated major projects.
Abner Catig	No anticipated major projects.
Calvin Catig	No anticipated major projects.
Tom Kirk, P.E.	No anticipated major projects.
Lew Gluesing, P.E., T.E., P.T.O.E.	No anticipated major projects.
Vanessa Muñoz, P.E., T.E., P.T.O.E.	No anticipated major projects.
Bob Burch	No anticipated major projects.
Jeffrey Lau, E.I.T.	No anticipated major projects.
Juan Avila	No anticipated major projects.
Jason Brown, R.C.I.	No anticipated major projects.
Ed Cox	No anticipated major projects.
David Knell, P.L.S.	No anticipated major projects.
Susy Barrientos	No anticipated major projects.
William Coffman	No anticipated major projects.
John Hidalgo, R.L.A.	No anticipated major projects.
Bryan Nguyen, R.L.A.	No anticipated major projects.
David Hayes, R.L.A.	No anticipated major projects.
Steven Leathers, P.E.	No anticipated major projects.
Vincent P. Ip, P.E., G.E.	No anticipated major projects.

All key personnel listed will be available for the duration of the project. Should a change be required due to unforeseen circumstances, a person of equal stature and ability will be offered for the position.

PROJECT TIMELINE

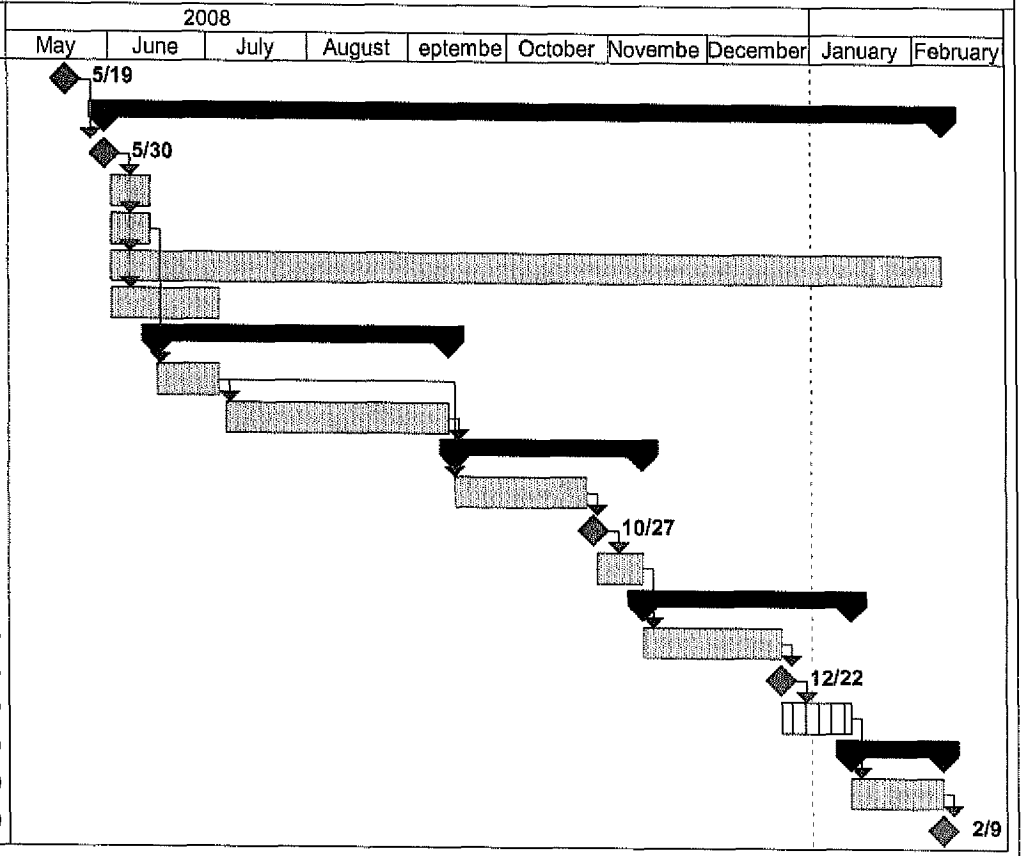
The attached schedule shows our plan as outlined in more detail in the Scope of Work section how testing and other design work can be performed concurrently to minimize the timeframe. Willdan has the necessary personnel to devote to the project tasks during this crucial period.

CITY OF CULVER CITY

Sepulveda Boulevard Widening Project

PROJECT DESIGN SCHEDULE

ID	Task Name	Start	Finish
1	Notice-to-Proceed (Assumed)	Mon 5/19/08	Mon 5/19/08
2	**General**	**Fri 5/30/08**	**Mon 2/9/09**
3	Kick-Off Meeting	Fri 5/30/08	Fri 5/30/08
4	Research Records/Field Review	Mon 6/2/08	Fri 6/13/08
5	Survey	Mon 6/2/08	Fri 6/13/08
6	Utility Coordination	Mon 6/2/08	Mon 2/9/09
7	Pavement Engineering	Mon 6/2/08	Fri 7/4/08
8	**Conceptual Design**	**Mon 6/16/08**	**Fri 9/12/08**
9	Develop Base Plans	Mon 6/16/08	Fri 7/4/08
10	Conceptual Design Design Phase	Mon 7/7/08	Fri 9/12/08
11	**60% PS&E**	**Mon 9/15/08**	**Mon 11/10/08**
12	Design	Mon 9/15/08	Fri 10/24/08
13	60% Submittal	Mon 10/27/08	Mon 10/27/08
14	City Review	Tue 10/28/08	Mon 11/10/08
15	**90% PS&E**	**Tue 11/11/08**	**Mon 1/12/09**
16	Design	Tue 11/11/08	Mon 12/22/08
17	90% Submittal	Mon 12/22/08	Mon 12/22/08
18	City Review	Tue 12/23/08	Mon 1/12/09
19	**100% Final PS&E**	**Tue 1/13/09**	**Mon 2/9/09**
20	Final Design	Tue 1/13/09	Mon 2/9/09
21	100% Final Submittal	Mon 2/9/09	Mon 2/9/09



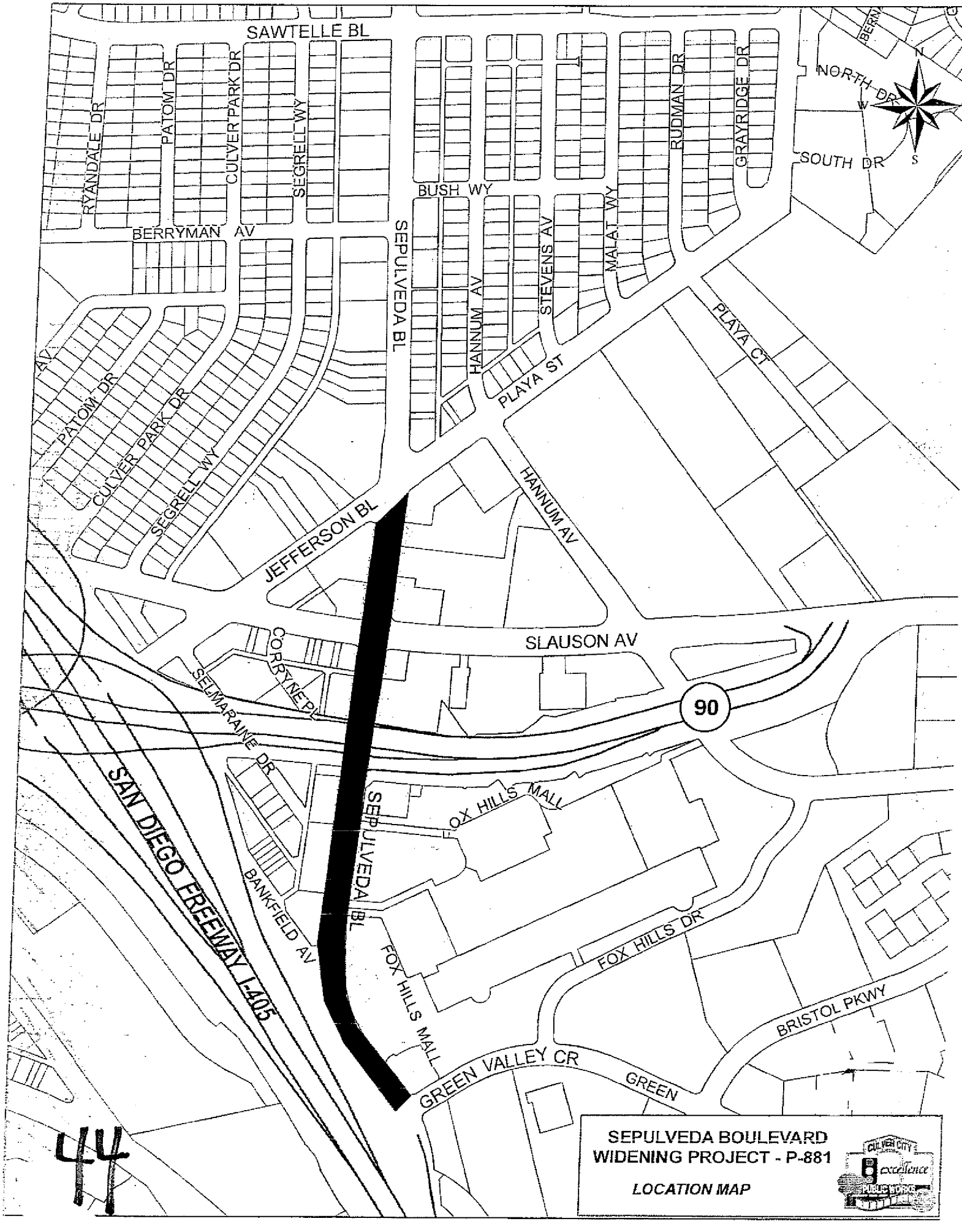
Date: Thu 3/20/08 | Summary | Task | Milestone | City Task

FEE SCHEDULE

As requested in the City's RFP, the fee schedule is being submitted in a separate sealed envelope.

REFERENCES

Client:	**City of Lakewood**
	5050 Clark Avenue, Lakewood, CA 90712
Contact:	**Ms. Lisa Rapp, Director of Public Works, (562) 866-9771, Fax: (562) 866-0505**
Client:	**City of Rolling Hills Estates**
	4045 Palos Verdes Drive North, Rolling Hills Estates, CA 90274
Contact:	**Mr. Sam Wise, Assistant City Manager/Director of Public Works, (310) 377-1577, Fax: (310) 377-4468**
Client:	**City of South Pasadena**
	1414 Mission Street, South Pasadena, CA 91030
Contact:	**Mr. Shin D. Furukawa, Deputy Public Works Director, (626) 403-7246, Fax: (626) 403-7211**
Client:	**City of Fontana**
	8353 Sierra Avenue, Fontana, CA 92335
Contact:	**Mr. Ricardo Sandoval, City Engineer, (909) 350-7613, Fax: (909) 350-6613**
Client:	**City of Paramount**
	16400 Colorado Avenue, Paramount, CA 90723-5012
Contact:	**Mr. Chris Cash, Public Works Director, (562) 220-2020 Fax: (562) 630-6731**
Client:	**City of La Canada Flintridge**
	1327 Foothill Boulevard, La Cañada-Flintridge, CA 91011
Contact:	**Mr. Ying Kwan, City Engineer, (818) 790-8882 Fax: (818) 790-7536**



SEPULVEDA BOULEVARD
WIDENING PROJECT - P-881

LOCATION MAP

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