

Proposal for

North Santa Monica Boulevard Reconstruction

Beverly Hills Job No. 2184

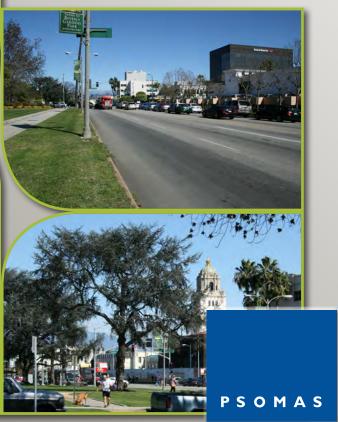


March 28, 2013

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March 28, 2013

Aaron Kunz, Deputy Director of Transportation CITY OF BEVERLY HILLS
Department of Public Works and Transportation 345 Foothill Road
Beverly Hills, CA 90210

Subject: North Santa Monica Boulevard Reconstruction Project — Job No. 2184

Dear Aaron:

Psomas is pleased to submit this proposal to support the City of Beverly Hills for this incredibly exciting project. Psomas and our exclusive teaming partners have strong historic relationships with the City, having helped to deliver many roadway and Capital Improvement Projects for Public Works and Transportation over the years.

We offer a team of design professionals who are each intimately familiar with the project's history, technical details, and diverse stakeholder agendas. We stand ready to support the City to conceive, develop, and deliver a project that pays respect to the cultural importance of the corridor while improving its urban design and function.

Please consider why the Psomas Team is the City of Beverly Hills' best choice for this project:

Mr. Ross Barker, PE, and I will personally oversee and manage our team's efforts. Mr. Barker and I have successfully delivered many projects together for the City of Beverly Hills over the last decade, including the Urban Design Program. We, along with our core team of member firms, Gruen and Iteris, recently delivered a project, similar in scope and scale, for the Wilshire Boulevard corridor in 2012. Our background, training, recent experience, and commitment to sustainability are unique.

Psomas Team's Design Experience on North Santa Monica Boulevard (NSMB). Our management and proposed key subconsultant staff have, *as a team*, become intimately familiar with considerations, opportunities, and constraints that exist within the corridor that can only come through the engineering design process. We have designed and delivered improvements, for years, that consider the pending NSMB project. Our functional institutional knowledge and project familiarity is unparalleled.

Strength and Responsiveness. Psomas is the largest and strongest employee-owned consulting engineering firm in California. Our headquarters and core team members' offices are located within 10 miles of the Public Works Building and NSMB. We have hundreds of qualified staff within our local offices.

555 South Flower Street Suite 4300 Los Angeles, CA 90071 Mr. Aaron Kunz March 28, 2013 Page 2

Our History of Successful Project Delivery. Reconstruction of NSMB will not be simple or straightforward; however, we have a demonstrated history of delivering complex, urban redevelopment projects in high ADT transportation corridors—with predictable, minimal construction impact.

Sustainability in Practice. Psomas is responsible for many award-winning, green, constructed local public works projects that feature progressive and innovative approaches and are easily maintained by City forces.

Our Principal-in-Charge and authorized official to negotiate and contractually bind Psomas for this project is Mr. Sean P. Vargas, PE, ENV SP, LEED AP BD+C, Vice President/Principal of Psomas. He is located in our Los Angeles office at 555 South Flower Street, Suite 4300, Los Angeles, CA 90071, and he may be reached at (213) 223-1400 or via e-mail at svargas@Psomas.com.

We look forward to continuing our partnership with the City of Beverly Hills. Should you have any questions, please do not hesitate to contact us.

Sincerely,

Psomas

Sean P. Vargas, PE, ENV SP, LEED AP BD+C

Vice President/Principal



Table of Contents

Section 1 | Firm Overview

Psomas

Project Manager

Contract/Required Insurance

Section 2 | Team Qualifications

Team Qualifications Organization Chart

Key Staff

Section 3 | Project Understanding and Approach

Section 4 | Scope of Work

Phase I

Phase II

Section 5 | Project Schedule

Section 6 | References and Relevant Experience

Section 7 | Exhibits

Résumés

Certificate of Insurance







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Primary Point of Contact

Sean Vargas, PE, LEED AP BD+C, ENV SP (213) 223-1400

Psomas

Dedicated to balancing the natural and built environment, Psomas is ranked one of the top consulting engineering firms in the nation by *Engineering News Record* (ENR) magazine. We serve public and private sector clients in the transportation, water, site development, federal and energy markets.

Services offered:

- Planning
- Land surveying including 3D laser scanning
- Civil engineering design including BIM delivery
- Construction management
- Environmental consulting
- GIS consulting
- Special district financing

We are recognized global leaders in our industry for delivering highly visible, sustainably designed, award-winning urban roadway and stormwater projects. We have been a trusted consultant partner of the City of Beverly Hills for many years.

We were founded over 65 years ago in West Los Angeles and were headquartered in West Los Angeles for more than 50 years. Our local offices are now in Downtown Los Angeles and Culver City. We provide services from our offices throughout California, Arizona, and Utah.

Project Manager

Our Project Manager for this important project will be Ross W. Barker, PE. He has 40 years of engineering and management experience, the last 34 of which he has spent in Los Angeles designing and delivering over 100 miles of urban roadway projects. Mr. Barker has successfully delivered many projects for the City of Beverly Hills Department of Public Works and Transportation, from concept to closeout. Whether it is his role as Principal-in-Charge of the extensive Beverly Hills Urban Design Program to the recent delivery of the smaller scale "T" Alley Project, he delivers the same level of personal involvement and service to Beverly Hills. Mr. Barker delivers projects (including the two above) on time and within budget!

Contract/Required Insurance

A complete copy of the contract was not provided as part of the RFP for our Team's review. Psomas confirms that we can accept the terms and conditions/insurance of the contract in the same manner we did for our current on-call contract. A copy of our insurance certificate with the required contract limits is provided in the Exhibit section of this proposal.





2 Team Qualifications

Team Qualifications

We have reconvened a team of professionals for North Santa Monica Boulevard (NSMB) that is expert in delivery of complex urban roadway projects. Our core team of Psomas, Iteris and Gruen have recently delivered (from 2010 to 2012), among other projects, the Wilshire BRT immediately adjacent to the City of Beverly Hills. The Wilshire BRT project is a complete reconstruction project

The Psomas Team has vast roadway design experience in Beverly Hills and in the NSMB corridor. in an 80,000 vehicle per day ADT corridor. We are bringing the same core firms and staff directly from the Wilshire BRT project to the NSMB project. We are battle tested and we work together seamlessly. The Psomas Team has vast roadway design experience in Beverly Hills and in the NSMB corridor. Our proposed principal-level staff are technically expert and inspire confidence in stakeholders and Council.

Organization Chart

The Organization Chart, provided on the following page, presents the Project Team's key members, their proposed roles on this project and lines of communication.

Project Discipline

Key Staff

Project Management, Roadway and Stormwater, and Sustainability Ross Barker, PE – Psomas | Project Manager and Civil Technical Lead

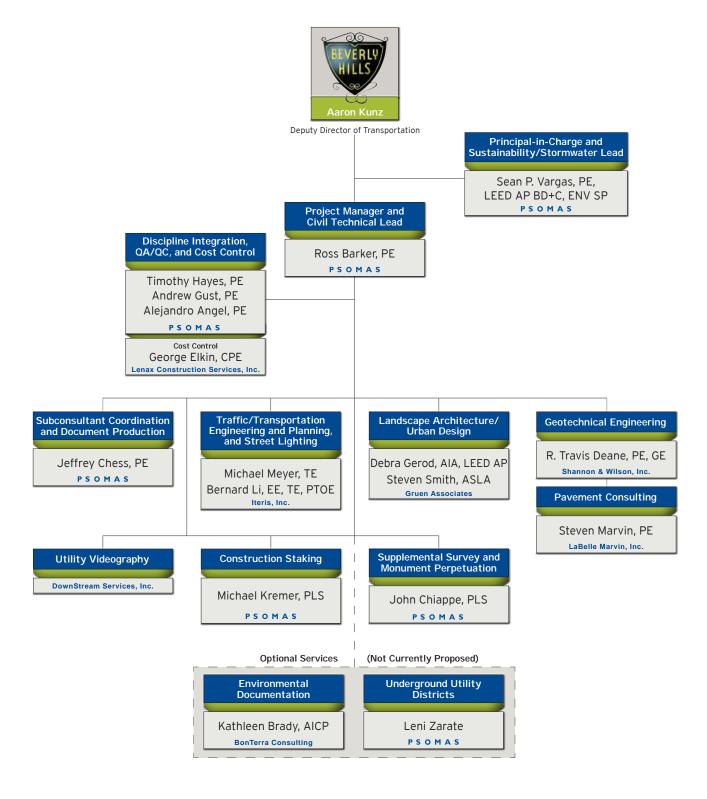
P S O M A S

Mr. Barker will serve as our team's Project Manager and Lead Civil Engineer. Ross is a hands-on manager. At Psomas for 34 out of 40 years, Ross' career has been defined by designing and managing complex urban infrastructure projects in the Beverly Hills and West Los Angeles area. His duties and level of involvement for NSMB will be consistent with his roles in delivery of the Beverly Hills Urban Design Program and, more recently for the T-Alley Project in Beverly Hills. Mr. Barker's ability to communicate clearly with non-technical stakeholders, coupled with his technical expertise, will ensure a smooth project arc between Phase I and Phase II.

Sean P. Vargas, PE, LEED AP BD+C, ENV SP — Psomas | Principal-in-Charge and Sustainability/Stormwater Lead

Mr. Vargas will serve as Principal-in-Charge and will ultimately be responsible for ensuring our team delivers our services as proposed, and provides the best project value to the City. He will leverage his experience delivering local complex public works and transportation projects, such as the Wilshire BRT, to ensure the goals for NSMB are met. His knowledge of the City of Beverly Hills' processes and his relationships with City staff, as well as adjacent municipalities, will result in seamless interaction and coordination. Mr. Vargas will also play a key technical role guiding our sustainable approach, and our hydrology, hydraulics, and stormwater management efforts.







Traffic/Transportation Engineering and Planning, and Street Lighting



Iteris, Inc., is the market leader in providing Traffic Information Management Solutions to the Intelligent Traffic Management Industry. The firm's decades of expertise in traffic management, along with superior services and patented products help detect, measure, and manage traffic and vehicular performance; minimize traffic congestion; and empower their clients with solutions to better manage their transportation networks.

Michael Meyer, TE — Iteris, Inc. | Transportation Planning

Mr. Meyer will manage the transportation planning efforts for our team. His extensive experience includes various projects in and adjacent to Beverly Hills. His familiarity with the City, NSMB's project history, and the traffic issues in the corridor, will facilitate a Phase I outcome that fully addresses stakeholders and technical requirements. Mr. Meyer's clear and effective communication will be heavily relied upon by the team.

Bernard Li, **EE**, **TE**, **PTOE** — **Iteris**, **Inc.** | Traffic Engineering and Street Lighting

Mr. Li will provide a unique combination of expertise in the disciplines of both electrical and traffic engineering. Mr. Li will work hand-in-hand with Mr. Meyer and the rest of our team in Phase I as we develop our concepts, and then lead the production of PS&E for signalization, signage, striping and street lighting in Phase II.

Landscape Architecture/ Urban Design

GRUENASSOCIATES
ARCHITECTURE PLANNING INTERIORS

Gruen Associates, established in 1946, provides architectural, interior design, planning, urban design, environmental assessment, landscape architecture, community participation, and transportation services worldwide. The firm's strength in planning and urban design derives from their experience and expertise in preparing numerous outstanding regional, specific and downtown plans; replanning of large cities and neighborhoods; and transportation corridor planning.

Debra Gerod, **AIA**, **LEED AP** — **Gruen Associates** | Landscape Architecture/Urban Design

Ms. Gerod will provide principal-level oversight for Gruen's urban design and landscape architecture efforts. Her rich, local knowledge of issues and her transportation-centric work history will be of great benefit in Phase I. Ms. Gerod's experiences in leading major outreach efforts, such as the Union Station Master Plan, have helped shape her measured approach. Her solid working relationships with Metro will ensure that coordination with NSMB goes smoothly.

Steven Smith, ASLA — **Gruen Associates** | Landscape Architecture/ Urban Design

Mr. Smith will design and manage the urban design and landscape architecture effort in Phases I and II. He has worked on a variety of local transportation and master planning projects, parks, and greenbelts. The institutional knowledge Mr. Smith brings from recently managing two Beverly Hills Gateway projects, one of which is located at the eastern NSMB terminus, is invaluable.





Timothy Hayes, PE — Psomas | Discipline Integration and QA/QC

Mr. Hayes has over 19 years of experience in planning and design of transportation improvements with a focus on the widening of major arterial roadways. In 2012, he was our team's technical lead and was responsible for our construction cost control efforts for the Wilshire BRT. Mr. Hayes' recent comprehensive experience with technical and non-technical project components and discipline coordination in the Wilshire Boulevard corridor will afford him a unique perspective in Phase II NSMB delivery.

Andrew Gust, PE — Psomas | Discipline Integration and Constructability

Mr. Gust will assist our effort in two key areas. First, his 30 years of transportation construction management experience will inform our Phase I construction phasing and sequencing strategy, which he will help us assess, as well as address traffic impacts considering real-world realities of roadway construction. Second, in Phase II, Mr. Gust will play a prominent role in our QA/QC effort to audit our quantity surveys and cost estimates, as well as review the plans for constructability concerns.

Alejandro Angel, PhD, PE — Psomas | Discipline Integration and QA/QC

Dr. Angel will act as Psomas' in-house discipline integrator for signage, striping, and signalization plans. He will ensure Iteris' discipline plans are integrated and do not conflict with other disciplines during our QA/QC processes.

Established in 1993, **Lenax Construction Services, Inc.**, is a 100% woman owned consulting firm. Lenax provides services including cost estimating, project controls/scheduling, change order control, claims negotiations, cost control and feasibility studies, value engineering support, dispute resolution and claim avoidance, and constructability review assistance.

George Elkin, CPE — Lenax | Cost Control

Mr. Elkin is a Certified Professional Estimator with over 30 years of experience in all phases of construction and project management. He is highly skilled in estimating, scheduling, and budget control, and has served as a claims/expert witness. His work specialties include design-to-construction cost estimating, value engineering support, and claims support, as well as detailed change order review and negotiation.

Jeffrey Chess, PE — **Psomas** | Subconsultant Coordination and Documentation Production

Mr. Chess will handle our internal Phase II production efforts. His focus will be coordination and assembly of PS&E in Phase II, coordination with his subconsultant counterparts, and interfacing with our QA/QC team. He will also oversee our permitting efforts.

Discipline Integration, QA/QC, and Cost Control

PSOMAS



Subconsultant Coordination and Document Production

PSOMAS





Geotechnical Engineering

■WISHANNON & WILSON, INC.

Shannon & Wilson is a full service, nationally recognized leader in geotechnical and environmental engineering. Since its founding in 1954, the firm has been providing integrated services to private and public clients resolving geotechnical and environmental project issues and challenges. An employee-owned corporation with a staff of over 300, Shannon & Wilson is capable of supporting geotechnical and environmental projects in a variety of markets nationwide. The firm has 11 offices nationwide, with its Southern California operations located in Glendale, California.

R. Travis Deane, PE, GE — Shannon & Wilson, Inc. | Geotechnical Engineering

Mr. Dean will oversee our field exploration and geotechnical report. He will also manage the efforts of LaBelle Marvin.

LaBelle Marvin

Steven Marvin, PE — LaBelle Marvin, Inc. | Pavement Consulting

Mr. Marvin will be the team's engineer for pavement evaluation. Using his more than 40 years of local experience, he recently provided our Wilshire BRT team similar invaluable support to inform our pavement removal and reconstruction design, sequencing, and construction approach.

Utility Videography



DownStream Services, Inc. (DSI), was founded in 1998 and incorporated in 2002. DSI is one of the leading Condition Assessment and Pipeline Rehabilitation companies in the Southwest. DSI is a certified small business enterprise that retains over 40 employees and is recognized for its dynamic approach and professionalism within the environmental industry. Utilizing start-of-the-art equipment, DSI is continually expanding its technology and innovation to maintain the highest level of excellence in the business.

Construction Staking

Michael Kremer, PLS — Psomas | Construction Staking

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Mr. Kremer runs our construction staking department out of our Los Angeles office. He has over 37 years of field and office experience, 21 of which have been with Psomas. He will be responsible for coordination with the NSMB contractor and will manage our field staking efforts.

Supplemental Survey and Monument Perpetuation

Perpetuation Mr. Chicago will be appropriate for a social and delivering and

PSOMAS

Mr. Chiappe will be responsible for scoping and delivering supplemental design survey for the project, as required. He will also manage the efforts to perpetuate the survey monuments that will be affected by NSMB demolition and reconstruction.

John Chiappe, PLS — Psomas | Supplemental Survey and Monument



Founded in 1996, **BonTerra Consulting** is an environmental planning and natural resources management consulting company that serves public- and private sector clients throughout Southern and Central California. Located in Pasadena and Irvine, BonTerra Consulting is a certified woman-owned disadvantaged small business enterprise (WBE/DBE/SBE). The outstanding reputations of BonTerra Consulting staff members have made them a recognized leader in the environmental planning industry. Each of the firm's eight principals has more than 20 years of hands-on experience in environmental planning, impact assessment, natural resources management, biological surveys, and city and regional planning studies.

Kathleen Brady, AICP — **BonTerra Consulting** | Environmental Documentation

Ms. Brady has focused her 35 years of experience on environmental impact assessment, transportation projects, and advanced planning programs. She will be available to assist the team with environmental documentation from a Notice of Exemption or Notice of Determination through to Negative Declaration, Mitigated Negative Declaration, or EIR.

Environmental Documentation



Leni Zarate — Psomas | Underground Utility Districts

Ms. Zarate has over 22 years of experience in public financing. She has extensive experience in Special District financing formation, annual administration, district maturity, initial bond issuance, refundings, delinquency management, foreclosure, district workout/ restructuring, annual disclosure reporting and information dissemination to the public.

Undergound Utility
Districts

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Project Understanding and Approach

> This is a once in a lifetime opportunity to re-imagine the corridor.

The City of Beverly Hills plans to reconstruct North Santa Monica Boulevard (NSMB) from the eastern city limit with West Hollywood to the western city limit with Los Angeles. As one of the major east-west arterials in the City, fronted by many City landmarks, including the Beverly Gardens Park, this will be a significant undertaking and one that will be closely monitored by the public. While the roadway and stormwater management improvements are required due to the deteriorated conditions, the City is provided a once in a lifetime

opportunity to improve the design of the corridor, implement sustainable practices, and to potentially provide the opportunity for bicycle lanes, urban design enhancements and pedestrian improvements.



Within the City, NSMB serves not only as a major transportation and utility corridor, but also as a valuable amenity that reflects the distinct "districts" that abut the right-of-way. Our team has an unparalleled knowledge of the unique challenges and associated opportunities as a result of many years of consulting for the City of Beverly Hills and many entities within the corridor. We will leverage this historic, recent, and current design and consulting experience to ensure each of the key issues is carefully considered and reflected in our study and design of the proposed improvements.

Keys to Success

Knowledge and Experience

Psomas has worked as an on-call engineering consultant to the City of Beverly Hills for many years, including our current agreement through December 2015. Via design and development of projects managed either by Sean Vargas or Ross Barker, we have developed solid working relationships with Public Works and Transportation, the City Manager's Office, and City residents. Similarly, our staff is expert with the City's project delivery procedures, production of contract





documents (Plans, Specifications, and Estimates – PS&E), and unique Standard Details, having developed and drafted them on behalf of the City.

We have successfully delivered many projects for the City of Beverly Hills over the past decade, including the award-winning Urban Design Program, a similar high profile urban roadway redevelopment that included full reconstruction of Beverly Drive, Canon Drive, Rodeo Drive, Brighton Way and Dayton Way within the "Golden Triangle." The value of our experience anticipating and planning for construction impacts, partnering with City staff (from all departments), and communicating with the public cannot be overerstated.

The Psomas Team possesses a wealth of specialized knowledge and successful design experience with roadway and infrastructure within the NSMB Corridor itself. Our team has recently consulted, or is currently consulting, on numerous relevant, local, and adjacent projects, as shown in the legend on the following page, and illustrated graphically on Page 4.

sustainable Approach Knowledge and Experience Outreach **Project Success** Cooperation and Completed on time or earlier, and Stakeholder within budget or under, satisfying **Teamwork Engagement** ALL project stakeholders Stakeholders Utilities | Public | City Businesses | Permitting Agencies **Technical** Responsiveness **Expertise**

Finally, we bring relationships and local experience with adjacent municipalities, project designers, and franchise utility owners:

- Psomas provides on-call engineering support to the City of Los Angeles Streets and Stormwater department via our current contract. Sean Vargas is our contract executive. We will be able to coordinate the NSMB project productively and efficiently with their program manager.
- We have solid relationships and work regularly with Mia Lehrer and Associates (designers of the Beverly Gardens Park improvements). Most recently, Mia was a subconsultant to Psomas for our award-winning sustainable stormwater management projects within public parks under the Proposition O Clean Stormwater Bond, for which Sean Vargas was Psomas' Program Director.
- We maintain relationships with franchise utility owners such as Southern California Edison and AT&T on Beverly Hills projects, having recently worked jointly with the Beverly Hills City Engineer, AT&T, the Beverly Hills Assistant City Manager, and Chief Information Officer on the Beverly Hills AT&T DAS Nodes projects.

Cooperation and Teamwork

Successful delivery of NSMB through pre-design, design and construction is highly dependent on the right combination of teaming partners. We consider our project team to include Psomas, our subconsultants, the City, and public stakeholders. We have assembled our consultant team to include trusted partners with whom we regularly team for similar high profile projects. The working Principals whom we propose as part of our team are the same Principals who have delivered our previous projects on behalf

The Psomas Team

We are a group of professionals who enjoy working together—and it shows.

of the City. Each of our Psomas and subconsultant discipline leads has not only



Beverly Hills North Santa Monica Boulevard Psomas Team Experience — Legend									
1.	Psomas	Γ	Urban Design Program in the Golden Triangle						
2.	Psomas	l	NSMB Signalization Upgrades						
3.	Psomas	ı	Crescent Garage Construction Impacts Consulting						
4.	Gruen/Psomas	l	Doheny Drive, Santa Monica Gateway						
5.	Psomas/Iteris/Gruen	ı	Rexford Drive Intersection Improvements						
6.	Psomas/Iteris	ı	NSMB/Crescent Drive Right-of-Way Bollards and Street Closure Plan						
7.	Psomas	l	Crescent Garage/Annenberg Offsite Improvements						
8.	Iteris	ı	Westbound to Eastbound U-turn Intersection Redesign						
9.	Psomas/Iteris	ı	9900 Wilshire						
10.	Iteris	ı	Gateway Project EIR Report						
11.	Iteris/Gruen	ı	Santa Monica Drive Transit Parkway						
12.	Iteris	l	Beverly Hills Triangle Parking Database						
13.	Iteris	ı	Lot D Traffic Analysis						
14.	Iteris		Entertainment Business District Planning/EIR						
15.	Iteris		Salick Office Building T1A						
16.	Gruen/Psomas		Wilshire Boulevard, Whittier Drive Gateway Project						
17.	Gruen		Santa Monica, Five Parking Structures						

participated as a Psomas team member on City projects, but has also delivered projects as a Prime consultant to the City. Our spirit of teamwork extends into the City family, whether it be collaborating with Bijan Vaziri on traffic flow issues, accommodating operational and maintenance considerations from Renato Talavera, or collaborating on functional aesthetics with David Lightner. We are a group of professionals who enjoy working together—and it shows.

Outreach and Stakeholder Engagement

By virtue of our team's long-standing history working in and for Beverly Hills, and our staff who live in and around Beverly Hills, we understand the physical, economic, and social landscape of not only the City, but the NSMB corridor itself. We recall that, when NSMB was relinquished by Caltrans, the residents north of NSMB publicly opposed widening the roadway as presented at that time. We realize that this project will be subject to intense scrutiny by all stakeholders. Psomas is unique in our breadth of experience and strategic participation in the largest and highest profile public, private, and quasi-public projects in Los Angeles County, the Westside and, most importantly, Beverly Hills. From public roadway/streetscape urban projects such as the Beverly Hills Urban Design Program and the Wilshire BRT; to private mega-projects (in terms of transportation and economic impact) like the NBCU Evolution Plan (www.nbcuniversalevolution.com) and Playa Vista (www.playavista.com); to sustainable initiatives that impact the public consciousness like the Proposition O Clean Stormwater Bond Program (www.lapropo.org), we are at the forefront of socially, environmentally, and economically important local projects.

Our team and our proposed key staff are each experienced and respected locally. We are adept at communicating concepts and ideas in a compelling fashion through our words and images that we create. Our collaborative approach will assist the City to realize the full potential of the NSMB corridor.



City of Beverly Hills

NSMB Psomas Project Team Experience





Individual Firm Experience

Teaming Experience



Technical Expertise

We understand the technical challenges within the corridor and have the expertise to meet them.

Paving and Surface Drainage Improvements | Repeated resurfacing of NSMB has resulted in an increase in the roadway surface elevation and a related decrease in curb drainage capacity. Developing potholes, delamination of previous overlays, cracking, utility trench failures, and various skin patches and repairs have impacted ride quality. Pavement distress is currently sufficiently severe enough to cause a deteriorated riding condition, particularly within the curb lanes. The rough and irregular ride, combined with the pavement failures and repairs, exacerbates maintenance requirements for vehicles and buses regularly traveling the corridor.



Existing Impacted Alley Drainage North of Beverly Gardens Park



Subsurface Retention Construction in Imperial Highway Right-of-Way

Our design will restore finished surface elevations that promote a safe riding line and positive roadway drainage. The re-profiled roadway and intersections will provide acceptably smooth grade transitions, improve the operation of the buses, and improve motorist and pedestrian safety. We will consider pavement mixes and structural sections that provide for an extended useful life and that may be constructed with minimized impact to traffic.

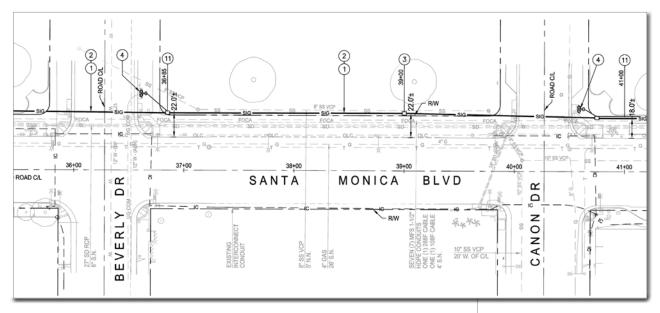
Stormwater Management | We will propose a design that sustainably manages stormwater runoff, capture, and treatment in an integrated fashion. We have studied the drainage issue from the North-South alleys and have discussed our progressive approach with the former City Engineer and Environmental Utilities Manager—we are pleased to see the desire for a forward thinking approach in the RFP. We believe a solution that captures and treats alley runoff, as well as a portion of the improved roadway runoff underground, within the right-of-way, along the north side of NSMB, and that does not permanently impact the surface and character of Beverly Gardens Park, is possible. Psomas is the only firm to have designed and had a system of this nature constructed within a high-traffic secondary highway in Los Angeles County.

Existing Utilities | NSMB, in addition to its role as a major transportation corridor, is a major utility corridor for the City of Beverly Hills and franchise utility owners. Impacts and relocations as a result of the proposed roadway improvements are possible. Our team's proactive approach in engaging and

coordinating with utility owners beginning in Phase I will help to identify and address potential issues early in the project. We successfully employed this approach in the recently Psomas-designed Wilshire BRT project.

Psomas mapped all of the utilities in the NSMB corridor from Wilshire Boulevard to Beverly Boulevard and designed signalization and ADA improvements in NSMB, which were constructed in 2012, based on our survey and mapping. We have unique and current insight into the functional complexity of the utility networks—particularly along the north side of NSMB. We will use our information and research to supplement the City-provided roadway and utility survey data.





Psomas' NSMB Utility Mapping from Signalization Project

During design of the NSMB-Doheny Gateway Improvement Project, we discovered that the City-provided NSMB utility mapping did not include utility depths. We will review the mapped location and depth of each utility during Phase I. If there appears to be a potential conflict, we will followup with the appropriate utility representative including conducting a field meeting to verify the conflict, as we did very successfully with the Wilshire BRT. If additional information is still deemed required to inform our design, we will prescribe potholing to occur in Phase I or early in Phase II dependent on the type of conflict anticipated.

Americans with Disabilities Act (ADA) Compliant Access | Psomas, led by Sean Vargas and Jeff Chess, has prepared multiple broad-based ADA Transition and Implementation plans within the last five years. We are expert in identifying defects and correcting non-compliant paths of travel (POT). Psomas has already field-evaluated and redesigned the curb ramp improvements for 10 of the intersections on NSMB between Roxbury Drive and Beverly Boulevard as part of the NSMB Signalization Project. We know what the issues are and understand the challenges. We will share this knowledge with the Beverly Gardens Park design team to ensure that both projects reflect a Universally Accessible built condition.

Access, Constructability, Staging, and Sequencing | The 1.8 miles in the NSMB corridor include unique districts that will each involve different construction challenges. It is imperative that local access and regional traffic be maintained throughout construction. Drawing upon our local experience in the complete street reconstruction within the heavily scrutinized Beverly Hills "Golden Business Triangle," as well as with the Wilshire BRT, we will develop feasible stage construction and traffic handling plans that control the location and extent of where work will be performed in the most efficient manner possible, while also minimizing impacts to adjoining businesses, churches, and residents.



Coordination with Other Projects | Effective assimilation of information from recently constructed projects and coordination with other planned or current relevant projects within and adjacent to NSMB will be required to ensure not only that improvements for NSMB are implemented in a cost effective and timely manner, but also that disruption is minimized. The Psomas Team either

> worked on, or is familiar with, the detail of each of the ongoing or recently completed projects in the corridor. We will consider and evaluate the potential impact of each adjacent project to NSMB in Phase I.

Glendale Northeas Huntington

Psomas Team Office Locations





Gruen Associates Shannon & Wilson

Responsiveness

Psomas and our key subconsultants will deliver our scope of services from our local Los Angeles offices. Our firms' office locations are between two and nine miles from the City. Our team understands, from experience, the City's level of expectations for support during design and construction. If public meeting support is required, we have been there to support with just 30 minutes' notice—and will continue to be. When field issues are encountered during construction,

we respond to support the City—in person. When the contractor calls at the last minute for construction staking support we accommodate—we deploy more local survey crews daily than any company in the Western United States.

Sustainable Approach

Psomas proposes to approach and deliver this project sustainably. Beginning with Phase I, pre-design, we will employ a collaborative process by which we help the City establish whether we are doing the right project (i.e., widening vs. no widening options) and whether we are doing the project right (i.e., engaging stakeholders, reducing minimizing environmental impacts, etc.).



We propose to look at the project through the lens of the EnvisionTM planning and assessment tool. Envision is a system developed by the Institute for Sustainable Infrastructure (ISI), an organization

founded by the American Public Works Association (APWA), the American Society for Civil Engineers (ASCE), and the American Council of Engineering Companies (ACEC).

Psomas' involvement with ISI and Envision dates back to Tim Psomas' national presidency of ACEC, his role as the first Chair of the Board of Directors of ISI, and to Psomas' current and continuing commitment as a founding and charter member. Sean Vargas is one of the very first Envision credentialed professionals in the United States and one of an even smaller group to have a major infrastructure project registered with ISI for recognition and award.

On the following page is a table showing sample criteria from the objective framework of the Envision tool, along with how they might be applicable to NSMB.





Sample Criteria

Quality of Life

- Minimize noise, vibration, light pollution
- Preserve local character and enhance public space

Leadership

- Stakeholder involvement
- Plan for long-term maintenance

Resource Allocation

- Consider use of recycled materials
- Minimize potable water consumption

Natural World

- Manage stormwater quality
- Promote Low Impact Development

Climate and Risk

- Reduce air pollutant emissions
- Prepare for project hazards

Applicability Use to NSMB

- Develop measures to manage traffic in adjacent neighborhoods
- Coordinate improvements with the City's wayfinding program and adjacent park improvements
- Specify new street lights consistent with the existing character
- Consider low energy/low maintenance lighting (LED or Induction Lighting)
- Assist the City in meaningful effective stakeholder engagement
- Specify durable, easily maintained (and sourced) materials
- Recycled (RAP) or rubberized asphalt product
- Low water demand landscaping
- Innovative, integrated, proven stormwater management solutions
- Specify construction equipment emission requirements
- Consider signal/light pole "knock-down" events-specify spare custom poles

Approach to Management

To meet the demands of the NSMB project, Psomas has put forth a well-planned, organized and disciplined management team that understands project objectives and considerations. We are supported by internal technical staff and *exclusive subconsultant resources* with the expertise and experience to effectively deliver from Phase I to closeout. Our Team has the depth and breadth of resources to meet the project challenges and pledges to commit them to the project until it is complete.

Our plan for success relies on our management and oversight team, continued close communication with all stakeholders, effective coordination and project documentation, a well-planned quality assurance and quality control program, and appropriate schedule and cost control measures.

Management and Oversight

Our management team is comprised of experienced, senior, licensed engineers, the majority of whom are Psomas Principals. We are committed to this project and will actively participate through successful project delivery.

Communication, Coordination, and Documentation

Project Team and stakeholder communication will be effectively led by our Project Manager, Ross Barker, PE. He will be available at all times via office and mobile phone. We will develop a master schedule of stakeholder meetings, submittals, and review sessions so there will be ample opportunity to present and discuss issues, review project status, receive input, and convey information.

All key sessions will be documented, agendas provided, and minutes developed and distributed. Documentation will include technical information, recommendations or input from stakeholders, decision rationale, updated project schedules, and revisions to design and construction budgets. All discussions, whether the result of telephone calls, emails, meetings or presentations, will be reduced to writing and distributed to all pertinent stakeholders.





Quality Assurance/Quality Control

We will ensure the accuracy and completeness of the PDRs, plans, reports, specifications and construction cost estimates through the implementation of our quality assurance plan. Our QA/QC Plan will be implemented and maintained throughout the contract duration. Our Plan establishes the necessary processes to ensure:

- The pre-design report and PS&E package are developed in accordance with good engineering practices consistent with the applicable Standards and Design Guidelines
- The plans and calculations submitted to the City are independently checked and back checked
- Each of our submittals will go through independent interdisciplinary review (squad check) prior to submittal to the City
- Our Document Control System is implemented and maintained
- Plan coordination is closely monitored
- All applications, reports and presentations are reviewed

Quality Control Program

The Psomas Quality Control Program (QCP) is one of the key elements in our project delivery process and, according to our clients, is one of the major reasons why public agencies return to Psomas for their design needs. At Psomas, QCP is in effect over the length of the project, and is not merely a series of individual events/plan checks at a few points on the schedule.

There are three major stages in our Quality Control Program:

Quality Assurance | In the Quality Assurance stage, we include the kickoff to establish expectations and develop a work plan based upon the City's input, the schedule, and the budget. The work plan identifies specific work products and establishes a set of relevant measures and standards of quality for each of those products. Based upon that information, an internal QA plan is agreed upon at the appropriate level of detail to ensure the deliverables are responsive to the pre-determined quality requirements and objectives.

Quality Control | Once work on the project begins, we move on to the Quality Control stage, when we track the execution of the work plan, review our designs and work products, and communicate with the City and our subconsultants. We provide project information through our Project Web, allowing all team members to monitor the progress of our work plan. In this stage, the quality control manager (and/or discipline integrator) also performs detailed technical reviews of our design and those of our subconsultants to ensure that they meet the quality standards defined in the quality planning stage. This review is continuous throughout the life of the project and ensures a smooth and "constructible" approach.

Post-Completion Quality Evaluation | Finally, during the post-completion quality evaluation stage we solicit feedback to assess our overall performance and identify improvement opportunities.

All of these elements contribute to the success of our design review process.





Schedule and Cost Control

We will prepare a preliminary schedule and update the schedule for each major task on a monthly basis. We will immediately communicate issues to the City that have the potential to affect the project schedule.

Our schedule control methods include, at a minimum:

- Review of the baseline schedule v. actual progress on a weekly basis
- Consult and coordinate with our subconsultants on an as-needed basis (weekly, at a minimum)
- Discuss schedule status at each project team meeting and within invoice submittals
- Meet as needed to resolve potential schedule issues if path tasks are forecast to be behind schedule

We are committed to controlling project costs with the goal of maximizing project value for the City. Effective management of our internal resources as well as our consultant team ensures that we understand and control our professional fees.

We exercise the same discipline in aligning project goals with the specific scope we develop to effectively manage construction cost. Our senior design and construction experts then perform our internal reviews independently. Our independent, reviews will be performed within Pre-Design as part of the reports' development and within Final Design for PS&E to ensure conformance with the PDR and overall project objectives.

Our team's experience with recently constructed projects within the City of Beverly Hills, the City of Los Angeles, and Los Angeles County; our associated current database of cost data; and familiarity with the current ultra competitive bid environment ensures that we design appropriately such that we begin with a realistic cost estimate and, ultimately, receive responsible and responsive bids within the cost estimate value.

Approach to Delivery

The RFP requires completion of Phase I by January 2014, followed by a bid-ready City-approved PS&E package by November 2014. Our team was carefully assembled to achieve this goal, considering our specific experience with the corridor, as well as our institutional and historic experience and relationships within the City of Beverly Hills.

Our team sees the tackling of the project challenges as an opportunity to truly improve this corridor. Based on our extensive research, meetings with the key stakeholders, and our many field observations, we have developed an effective approach to project delivery.

Prepare a Comprehensive Pre-Design Report

Our approach to this project relies on the production of a complete and comprehensive PDR. The construction budget, limited environmental impact/construction constraints, and initial/long-term performance expectations will drive the Analysis of Alternatives. The project alternative that is ultimately





selected will be the optimal combination of the subset of alternatives considered in our technical evaluations. Bearing in mind the project considerations described above, we consider the following elements key to our successful PDR:

- Identification, documentation, and management of all stakeholder requirements | Each of the major project stakeholders has individual goals that must be documented, synthesized and ultimately realized. Our team members have participated in similar local project study efforts and for the City of Beverly Hills, have solid working relationships with the stakeholders, and have recent relevant experience to inform our work. We will document all functional, performance, and constructed requirements that must be implemented in the selected alternative.
- Development of technically sound, constructible, and maintainable paving alternative | The bulk of the project construction cost is related to paving removal, repair, and/or reconstruction. Our team will use our field exploration data to recommend a suite of options for removal and replacement (R&R). Our technical analysis will include life-cycle cost analysis and a discussion of maintenance considerations for each alternative.
- Identification of a suite of allowable construction phasing options | Construction within the corridor adjacent to diverse land uses will require development of a set of "base" phasing options for construction. Our options will consider adjacent land use, community/stakeholder team input, anticipated construction output by paving method, limited environmental impact, and pedestrian/vehicular safety and traffic impact. We will identify project limits and construction sequencing.
- Impact to existing improvements | We will evaluate the impact of the roadway improvements on the existing traffic signal system including signal interconnect and communications infrastructure, landscaping, bus stops, and underground utilities. We will identify the requirement for temporary construction provisions where appropriate. Potential utility impacts may affect Analysis of Alternatives, the Fatal Flaw Analysis, as well as the cost estimate.

Deliver Well-Coordinated, Complete PS&E Package

We will prepare a PS&E package that receive a thorough quality control review to make sure we are meeting the project objectives, following the City's standards, and addressing any comments from previous submittals. We will prepare and maintain a matrix to track all of the comments and responses received for the 35%, 65%, 90%, and final submittals. Before our design plans are submitted to the City, they will undergo internal inter-disciplinary Squad Check by our staff, and will be checked against the field conditions by the design team.

In addition, our internal Construction Management experts will perform a constructability review not only to verify the project is buildable as proposed, but also to evaluate and provide input on the construction sequencing and how the proposed construction activities could be performed to minimize disruption to peak-hour traffic and the cross streets located along the corridor.

Play an Active Role during Construction and Project Closeout

On a regular and as-needed basis, we will provide proactive reviews of construction submittals and shop drawings for compliance with the contract





documents and respond to all RFIs. All submittals and RFIs will be logged and tracked to ensure timely responses in accordance with the contract requirements.

We will also review and approve the Contractor's construction schedule and updates if desired. We recommend that the Contractor be required to produce "three-week look-ahead" schedules to be presented at the project progress meetings to ensure any issues can be brought out in advance.

We will prepare as-built plans based upon the Contractor's and Construction Manager's red-lined construction plans, which will reflect what was actually constructed including any field-authorized modifications.

Project Close-Out assistance will be provided in the form of resolving any outstanding issues. We will provide supporting information, a complete archive of all project records, and a final project closeout file to the City.





Phase 1

Conceptual Design Phase

The Scope of Work presented herein builds upon the Request for Proposal (RFP) issued by the City of Beverly Hills. It presents a Phase 1 planning process that will review the reasonable range of alternatives and select a preferred alternative for design in the Phase 2 design effort.

Task 1. Project Management and Outreach Plan

1.a. Refine Scope and Schedule

We will develop a Project Management Plan that refines the scope of services and presents a detailed schedule for the work plan. It is anticipated that monthly progress meetings will be held between Psomas Team members and City staff to report on the project status and discuss scope, schedule and budget issues. The Project Management plan will include details of the QA/QC Plan to be employed by the Team and will identify deliverables, review schedules for draft work products, and final product deliverable dates.

1.b Outreach Plan

The Project Management Plan will include a section devoted to public outreach. It is our understanding that City of Beverly Hills staff will assist in the logistics of public outreach in terms of arranging meeting facilities and notifying the public of the meetings, but the Psomas Team will be responsible for preparation of the content of the meetings. We will prepare the draft meeting notices, the agendas, presentation materials and handouts, and take meeting minutes. Key team members will make the public presentations or support City staff in making the presentations, as appropriate for each meeting.

It is anticipated that we will participate in an initial presentation to the City Council that reviews the work plan and describes the public outreach program and project schedule. It will be important that the City Council understands and concurs in the outreach plan in terms of the number of meetings and types of meetings, the City Commissions and Committees that will hold such meetings, and the plan for City Council participation in approval of the proposed project at the end of Phase 1.

1.c. Public Meetings

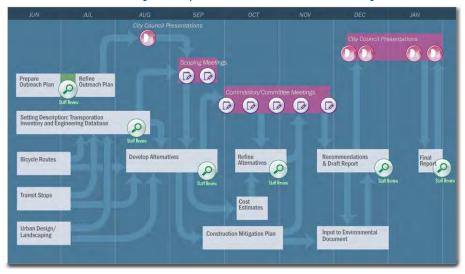
The approximate timing of the public meetings anticipated in Phase 1 is shown on the Work Flow Diagram on the following page. The public meetings include:

- City Council meeting to review scope and approve Outreach Plan
- Two (2) scoping meetings to obtain public input on the study
- Four (4) walking tours to educate interested stakeholders
- Five (5) Commission/Committee meetings to review the alternatives and obtain feedback on their refinement
- Four (4) City Council meetings to review and approve the recommended plan





Public Meetings Anticipated in Phase 1 - Work Flow Diagram



As noted above, key Psomas Team members will attend all of these public meetings to make the presentations and respond to public questions. The schedule of meetings will be developed at the outset of the project to avoid Holiday periods and to allow Commissioners/Committee Members and the Council to know well in advance when this project will be coming to them for review and action.

Task 2. Pre-Design Report

The pre-design analysis and report that we will prepare as a part of Phase I is critical to the success of the project. Its content and the logical presentation of information will become the basis for the preliminary and detailed design and, ultimately, for the construction and operation of the project. The pre-design report will describe the proposed project in a manner that allows both the City and stakeholders to gain a thorough understanding of the necessity and scope of the project.

Report Format

Executive Summary | The executive summary will be limited to a page or two and will concisely present the major points and conclusions developed in the report. It will briefly discuss the project background, existing conditions, alternative evaluation summary, recommended alternative, project cost estimate and design, and construction schedules.

Body of Report | The body contains a more detailed discussion of the project including the scope, potential alternatives, estimated cost and schedule.

Scope of Work | The Scope will describe the background of the project, including existing conditions. This will document the requirements and goals of the project, which will be discussed in detail. Sufficient detail will be provided to show that the City's goals are met by the scope of the project.

2 a. Existing Conditions

We will prepare a Setting Section that describes existing conditions along the corridor and identifies key issues to be addressed in the reconstruction project.







This section may also be used as the Setting Section of an environmental document, depending upon what type of document (e.g., Mitigated Negative Declaration) is determined to be required)

Transportation Setting | North Santa Monica Boulevard extends 1.8 miles within the City of Beverly Hills and generally includes two lanes in each direction with center turn lanes. Additional turn lanes are provided at Wilshire Boulevard (right turn lanes in each direction), Beverly Boulevard (eastbound right turn lane) and Doheny/Melrose (eastbound through/right to Melrose and Doheny). There are 12 traffic signals located along North Santa Monica Boulevard in the City, including the transition intersection/Moreno Drive intersections at the western end of the corridor. In addition, there is one planned signal to be added at Merv Griffin Way as mitigation for the 9900 Wilshire and Hilton projects. Most of the signals operate with two phases, with the exception of those at the western end: Wilshire Boulevard, Beverly Boulevard/Palm Drive and Doheny/Melrose. Traffic volumes on North Santa Monica Boulevard are heavy in both directions, approaching 51,000 vehicles per day (27,800 westbound and 23,000 eastbound), the highest volume in the City, with frequent congestion particularly through the Business Triangle portion of the corridor. Traffic lightens east of Beverly Drive.

The right of way width is 85 feet, which is typically devoted to a 63-foot roadway, a narrow 2-foot strip behind the curb on the south side of the street, and 20 feet of parkway on the north side of the street. There are plans to widen the street between Wilshire and the Los Angeles City limits to the west, again as part of the mitigation program for the two approved developments along that stretch of the corridor. To the east of Wilshire, there are no current plans for widening and past plans that would have converted some of the right of way currently landscaped along the Park have been generally opposed by Beverly Hills residents.

Traffic patterns along the corridor are also influenced by the adjacent land uses and side street patterns. In the eastern segment, between West Hollywood and Beverly Boulevard, there are no intersections along the south side of the street, just the abandoned railroad right of way. The unsignalized intersections provide access to/from residential areas north of the Boulevard. Similarly, between Beverly Boulevard and Alpine Drive, there are no intersections to the south and residential streets to the north.

Along the Civic Center area, each of the intersections is signalized. Access to civic center parking occurs via Alpine, Rexford and Crescent, including the new parking garage to serve the Annenberg Performing Arts Center. Access to the Police and Fire Departments is also an important consideration. To the west, in the Business Triangle, all but the western most intersections at Walden and Linden are signalized. The traffic patterns are also influenced by the one-way circulation patterns in the Triangle, with Roxbury and Camden intersecting North Santa Monica Boulevard, and with northbound approaches and Bedford intersecting it with a southbound departure leg. It is not uncommon to have to stop multiple times at intersections along this stretch of Santa Monica Boulevard during peak periods.

Between Wilshire and the western City limits, there are no cross streets and only the Merv Griffin Way "T" intersection, resulting in significant turning movements to/from the boulevard. The intersection at Wilshire experiences





considerable delay due to its multi-phase operation and one must typically wait through more than one signal cycle to progress through that intersection in peak hours. An improvement plan at the Wilshire intersection is planned as mitigation for the Hilton project.

We will collect new average daily traffic counts in each of the segments of the corridor. New peak period turning movement counts will also be collected at each signalized intersection and current levels of service calculated at each location. The peak period turning movement counts will also include bicyclists and pedestrians. If so desired, Saturday afternoon counts can also be collected to capture the shopping peak traffic conditions.

Bicycle Routes | Existing and planned bicycle facilities in the vicinity of Santa Monica Boulevard will be mapped and described. These will include those under consideration in Beverly Hills, as well as the existing bike lanes on Santa Monica Boulevard in West Hollywood to the east and on Santa Monica Boulevard in Los Angeles, west of Avenue of the Stars. The location of the bicycle lanes in Los Angeles could result in some challenges and alternative treatments at the cross-over intersection at the Beverly Hills City limits, which could influence the design of the bike lane alternatives considered in Beverly Hills. An initial investigation of issues related to two bicycle lanes on North Santa Monica Boulevard in Beverly Hills would include analysis of the eastbound merge of bicyclists from the south side of the boulevard at Avenue of the Stars to the North Santa Monica portion of the crossover intersection. One option could include placing bicycle lanes on South Santa Monica Boulevard between the cross-over intersection and Roxbury Drive, at which point they could transition back to North Santa Monica Boulevard, which would keep them away from the congested Wilshire/Santa Monica intersection. Another alternative could put the eastbound lane on South Santa Monica Boulevard west of Roxbury Drive and keep the westbound lane on North Santa Monica Boulevard.

Transit Stops | The corridor currently has three Metro bus routes on it, 4, 704 and 16. Route 4 extends from Downtown Los Angeles to Santa Monica via Sunset and Santa Monica Boulevards. It operates at approximately 20-minute headways in peak periods. Route 704 follows a similar route but is Rapid Bus service with 8-10 minute headways in peak periods and limited stops between Santa Monica and Downtown Los Angeles. Both routes stop at the Canon and Wilshire stops in Beverly Hills, as does Route 16, which operates between Century City and Downtown. It travels along Santa



Monica Boulevard and turns onto Crescent Drive and then Burton Way. We will describe transit service in the corridor. The amenities provided at the two bus stops in Beverly Hills will be described.

Pedestrian Facilities | There is no sidewalk along the south side of North Santa Monica Boulevard. On the north side of the street, there is sidewalk in the western portions, but east of Crescent Drive the pedestrian pathway is a decomposed granite (DG) path set back from the street by about 100 feet along the north side of Beverly Gardens Park. Pedestrian movements will be described.



Intersections | The longitudinal riding surface is uneven at several intersections. The uneven riding surface is caused by repeated overlay and crowns with the intersecting streets. There are several constraints to re-profiling the intersections that will be considered during the alternatives analysis. We will document and describe the existing issues.

Existing Improvements | We will conduct a field investigation to verify all existing features on the City-provided survey and to identify all the relevant features that are missing. The field review will include work necessary to inspect the project area with respect to needs for preparing engineering plans. The field information collected will include:

- Curb-to-curb widths
- Sidewalk widths
- Lane dimensions
- Striping type and condition
- Crosswalk location and widths
- Location and widths of all driveways
- Location and length of all painted curbs
- Location and type of street signs
- Existing surface indications of utilities (storm drains, fire hydrants, catch basins, etc.)
- Location and type of all pertinent signal related equipment including poles, conduits and pull boxes
- Controller cabinet and controller condition
- Location of street lighting poles
- Location and size of trees
- Specific land use related considerations

Data Synthesis | We will assemble City-provided existing pertinent information (that we did not prepare or already possess) and data, including traffic signal, street lighting, signing and striping, and utility plans available for the project area. We will develop our base plans based on the field investigation and data synthesis.

Storm Drain Videography | We will provide CCTV inspection of approximately 8,250 LF of existing storm drain lines as described in the RFP. We will visit the site to locate manholes and develop plan for CCTV inspection based on locations and traffic impacts. We will obtain no-cost permits to perform the work. We will provide traffic control during the video inspection. We will provide a DVD with inspection reports and associated videos. We have assumed that this work will be performed between 10 p.m. and 6 a.m., Monday through Thursday.

Hydrology, **Hydraulics**, **and Stormwater Quality Setting** | The drainage within NSMB has been impacted by multiple pavement overlays that have affected gutter drainage, as well as discharge from the north-south alley drainage. We will prepare a comprehensive drainage section, including a roadway drainage report, alley hydrology and hydraulics, and a current confirmation of the findings from the Psomas 2001 Storm Drain Master Plan. We will discuss and describe the current stormwater quality setting, including guidelines, requirements, and best practices including Low Impact Development consideration.





Pavement, Geotechnical, and Environmental Setting | Existing surface and near-surface soils in the area generally consist of fine grained materials including silt to silty sand. Soils and groundwater conditions in Beverly Hills, and specifically the Beverly Gardens Park, vary. There are a number of sites along the corridor that may have had the historic potential for subsurface contamination.

Geotechnical File Review

We have reviewed the geological conditions at the site using our in-house files and online resources. We will perform further review of previous geotechnical reports for projects adjacent to the site. Information obtained will be used in support of our subsequent field explorations and geotechnical design.

Field Preparation

- Site Reconnaissance | We will complete a site reconnaissance to review field conditions for access and lay out the exploration program. We will obtain the necessary no-cost permits for our field work.
- Health and Safety Plan | We will prepare a project specific health and safety plan and perform job site safety assessments at each work location along with tailgate safety meetings. The health and safety plan will outline the potential job site hazards with respect to the proposed scope of services, and will cover items including emergency evacuation to the nearest hospital, overhead electrical hazards, subsurface utilities, vehicle traffic, and pedestrian encroachment. This process will be documented during the course of the safety reviews.
- Utility Location and Permits | We will contact Underground Service Alert (USA). Our field representatives will mark the proposed coring locations and notify USA. Our field representatives will then review the USA marks prior to commencing with coring and other subsurface exploration.

Field Explorations

We will employ a two-stage field exploration program to adequately characterize the existing pavement system and subgrade soils. For the first stage of exploration, we will utilize non-destructive Falling Weight Deflectometer (FWD) testing of the pavement for evaluation of the physical properties of the pavement and subgrade system. Data will be gathered at 200-foot intervals along NSMB. During deflection testing, visual observation of the pavement condition and/or distress will be performed and recorded.

The second stage of our exploration program will consist of drilling subsurface pavement cores to observe the existing pavement, base materials (if present), and the upper 1 to 1½ feet of the subgrade materials at regular intervals. Cores will be collected for laboratory testing. Each core will extend to a depth of about 3½ feet depending on the subgrade materials. Cores will be spaced approximately 500 feet apart. We plan to use mechanical drilling equipment to accomplish the coring. After coring, each hole will be backfilled and capped. Excess material remaining at the completion of our work will be disposed of, if necessary. The cores will be delivered to a location of the City's choosing within the vicinity of the site for storage.

For both the FWD testing and coring we have assumed:

We will obtain no cost permits from the City





- Either off-peak working hours of 9:00 a.m. to 3:00 p.m. or night working hours will be required
- FWD testing will take approximately one (1) day to complete
- The coring rig will take approximately two (2) days to complete the 18 explorations

Laboratory Testing

• Geotechnical Testing | Laboratory tests to estimate geotechnical properties will be conducted on selected soil samples from the cores to determine pertinent physical and engineering characteristics of the subgrade soils. We anticipate performing moisture content determinations, Atterberg limit determinations, and grain size analyses, as appropriate. R-value testing will also be performed for pavement design.

Analyses and Report

- Subsurface Profile | Based on the file review and field explorations, we will prepare a characterization of the pavement section and subgrade soils. We will also indicate the presence of perched groundwater or saturated subgrade, if encountered.
- Pavement Design | We will make asphalt-concrete design recommendations for the street reconstruction. Our recommendations will be based on the traffic index provided in the RFP, using Caltrans methodologies. We will also provide recommendations for using aggregate base material and alternative pavement sections where appropriate.
- Earthwork and Drainage | We will provide recommendations for site
 and subgrade preparation including stripping depth, sub-excavation
 to remove unsuitable material, suitability of on-site soil for structural
 fill, compaction of structural fill requirements, and drainage. We will
 provide recommendations for import structural fill using Greenbook
 specifications, as appropriate.
- Reporting | The pavement investigation data will be provided within our geotechnical report. It will include our geotechnical recommendations, appropriate figures, FWD data, coring logs, and the results of laboratory testing.

Infiltration Testing

Soils and groundwater conditions in Beverly Hills, and specifically the Beverly Gardens Park area, likely vary sufficiently such that the variation will dictate the type of Low Impact Development approach to stormwater management employed. We have conducted numerous basin-wide and site specific infiltration evaluations for Underground Injection Control (UIC) and LID systems leading to development of efficient, low-cost approaches to stormwater management using infiltration. For Beverly Gardens Park, we propose a Preliminary Infiltration Evaluation (PIE) based on limited existing and new information. We will use the PIE to determine if site soils are suitable for shallow infiltration technologies (i.e., rapid infiltration via trenches or ponds, rain gardens, bioswales etc.) and if deep stormwater infiltration via Underground Injection Control (UIC) drywells might prove feasible. We would use soils data (i.e., grain-size distribution) and groundwater data from the initial sonic boring/monitoring well to estimate





both shallow and deep soil infiltration rates, as well as the thickness of unsaturated soils beneath the site. If the site hydrogeology will support UIC drywells, their small footprint and high volume capability will render the site an ideal candidate for regional sub-surface treatment and efficient low maintenance stormwater disposal. If the PIE indicates the site does not possess suitable characteristics for LID technologies, then the City will have saved money on costly and fruitless infiltration testing. If the PIE indicates the site has potential for shallow or deep infiltration, then we will recommend appropriate Detailed Infiltration Analyses (DIA) to support system design, including Pilot Infiltration Testing (PIT) for shallow facilities, deep infiltration testing to determine the capacity of UIC dry wells and, if appropriate, numerical groundwater mounding analyses. Below, we outline a scope of work that addresses the above approach:

Preliminary Infiltration Evaluation

- Research and Data Collection
 - Review of reports listed on GeoTracker
 - Review of geotechnical reports for nearby projects on file at City of Beverly Hills
 - Drill three (3) Sonic boreholes 30 feet deep, (one (1) borehole in each block of the park) if groundwater is encountered, we will install a Vibrating Wire Piezometer for monitoring seasonal variation in the groundwater table. If initial soil logging indicates UIC potential, we will extend one of the Sonic holes to 50 feet deep and complete a 2-inch observation well for conducting a short-term, small scale infiltration test.

Laboratory Testing

We will use Sieve/Grain size analyses to estimate preliminary infiltration rates and test select samples for Organic content and Cation-exchange capacity (CEC) to evaluate soil treatment capability. Our testing will include 20 sieve analyses, 9 organic content analyses and 9 CEC analyses.

Analyses and Preliminary Infiltration Memorandum

Based on the information obtained from our PIE, we will prepare and submit our findings, conclusions and recommendations for infiltration alternatives at Beverly Park Gardens. We will prepare a design memorandum that includes:

- Feasibility and risks of infiltration options
- Preliminary range of infiltration rates for shallow facilities
- Preliminary range of injection rates for UIC drywells
- Scopes of work and budgets for Detailed Infiltration Analyses

Detailed Infiltration Analysis (Optional - to be performed if warranted and authorized)

The type and number of detailed infiltration analyses will depend on site conditions revealed during the Preliminary Infiltration Evaluation. Principal tasks typically include:





Pilot Infiltration Testing (PIT). For shallow infiltration sites to narrow the range of infiltration rates for each block (3 to 6 PITs) including:

- Obtaining necessary permits from City and/or Underground Injection Control well requirements
- *DigAlert marking proposed location and notify*
- Excavating backhoe pits (typically 50 to 100 ft2)
- Conducting 8- to 16-hour infiltration tests
- Data analyses

UIC Drywell Testing. For deep infiltration site to confirm feasibility of dry well system approach:

- Drilling a 24- to 36-inch diameter hole
- Sampling bulk/material types
- Drumming and disposal of cuttings
- Designing, drilling and constructing dry well
- Conducting a 24-hour injection test
- Data analyses
- If appropriate, converting the observation well to a permanent dry well

Groundwater Mounding Analyses. If groundwater is near the base of infiltration facilities (shallow or deep):

- Constructing a numerical model using infiltration rates based on PITs or UIC testing
- Running mounding scenarios based on estimated runoff and design storms selected by the project team
- Evaluating infiltration site geometries to determine most practical design configurations (size and depths)

Reporting. The Infiltration Testing will be described in our Geotechnical Report for the site. It will document the investigation, analyses, findings, conclusions and recommendations.

Environmental Testing

A program of environmental testing will be conducted in conjunction with the Pavement Investigation and Infiltration Testing described above.

File Review

Prior to start of the Geotechnical Investigation, we will conduct a limited historical review of sites located along the alignment to determine the potential to encounter contaminated material during construction. We will also review available historical aerial photographs, maps and environmental documents.

A preliminary review of the GeoTracker sites located along the alignment indicated the presence of six closed Leaking Underground Storage Tank (LUST) Sites, two closed Cleanup Program Sites, and one active LUST site which is presently eligible for closure. The active LUST site is an existing service station located east of the alignment; potential contaminants of concern at this site include petroleum hydrocarbons.



e3



In addition, one active Department of Toxic Substance Control (DTSC) Voluntary Cleanup site is located adjacent, south of the alignment on Parcels 12 and 13. Contaminants of concern at this DTSC site include arsenic (associated with former historic railroad use and use of pesticides) and may likely also include petroleum, and other metals.

Sampling During Field Exploration

Environmental soil samples will be collected during the geotechnical exploration program of the work to provide assistance for the management of potentially contaminated materials likely to be encountered during construction, and to support site health and safety. In addition to the soil sampling, we recommend collecting samples of concrete and/or asphalt material that is likely to be removed during construction to analyze for proper off-site disposal or for potential reuse on the project.

Laboratory Testing

One soil sample will be collected from each core and analyzed for Title 22 Metals, including Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Vanadium, and Zinc, by Environmental Protection Agency (EPA) Method 6010B/7471A, Total Petroleum Hydrocarbons (TPH) as Diesel extended by M8015D, Organochlorine Pesticides by EPA Method 8081A, Polycyclic Aromatic Hydrocarbons (PAHs) by EPA Method 8310, and Volatile Organic Compounds (VOCs) by EPA Method 8260B.

Based on the initial analytical results, follow-up analysis for metals may be required using either the Soluble Threshold Limit Concentration (STLC) and/or the Resource Conservation Recovery Act (RCRA) Toxicity Characteristic Leaching Procedure (TCLP). For cost estimating purposes we assume that up to three (3) samples may require either STLC and/or TCLP testing.

Up to eight (8) concrete and/or asphalt samples will be collected and analyzed for pH, Title 22 Metals and Asbestos.

The samples will be submitted for analytical testing by American Environmental Testing Laboratory (AETL) of Burbank, California, and will be analyzed on standard 5- to 7-day turn-around time.

Reporting

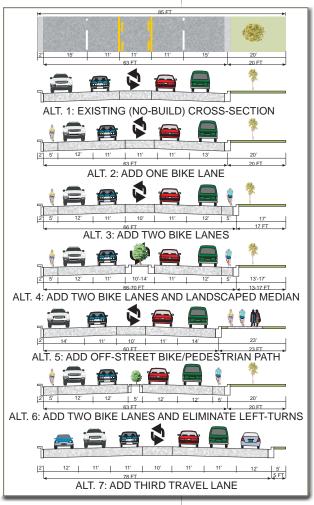
We will prepare a short write-up to discuss the analytical results of the samples collected as a part of the testing. The write-up will be incorporated into the Geotechnical Report prepared for the project.

At the completion of our work, we will prepare a geotechnical report for the project. The report will include the results of our Pavement Investigation, Infiltration Testing, Environmental Testing, geotechnical recommendations, appropriate figures, FWD data, core logs, and results of laboratory testing.





2 b. Alternative Development and Analysis



After the scope has been properly defined, potential alternatives to address project goals will be identified. Each of these alternatives will be described in detail. The pros and cons of each of the potential alternative solutions will be discussed, including the no-project alternative. The merits of each alternative will be documented. The result of the alternative analysis will be a recommended alternative.

We will develop a range of alternatives that can ultimately be presented to the public for consideration. These will range from the No Build Alternative, which would include only repaying and no changes to the lane configurations along the corridor, to alternatives that would add bicycle lanes, and potentially an alternative that would add a travel lane. It is understood that the latter alternative has been proposed in the past and rejected by the community, but it seems reasonable to include it in the initial list of alternatives, even if it is quickly screened out as not meeting the goals of the project and having too many significant negative impacts. The figure on the left illustrates the range of cross sections that could be considered in the Phase 1 alternatives analysis. It should be noted that the cross sections could vary by segment as well. For example, the segment of Santa Monica Boulevard west of Wilshire Boulevard could be planned for additional travel lanes when the 9900 Wilshire and Hilton projects are developed, but not carry those additional lanes east of Wilshire Boulevard.

NSMB Potential Range of Alternatives

The table below illustrates some of the issues associated with the initial list of alternatives and identifies the likely type of environmental clearance that could be required for each.

Comparison of North Santa Monica Boulevard Reconstruction Alternatives

Comparison of North Santa Monica Boulevald Reconstituction Afternatives									
Alternative/Description	Widening Required	Bike Lanes	Construction Impacts	Environmental	Other				
1 No Build	No	No	No	N/A	Pavement Rehabilitation Only				
2 Add One Bike Lane	No	Eastbound Only	Minor	Categorical Exemptions	None				
3 Add Two Bike Lanes	3 Feet	5 Feet On Street	Minor	Categorical Exemptions	None				
4 Add Two Bike Lanes and Landscape Median	3 to 7 Feet	5 Feet On Street	Significant	Mitigation Negative Declaration	None				
5 Add Off-Street Bike/Pedestrian Pathway	No/-3 Feet	12-Foot Path	Minor	Mitigation Negative Declaration	Joint Use Bike/Pedestrian Path in Beverly Gardens Park				
6 Add Two Bike Lanes, Eliminate Left Turns	No	5 Feet On Street	Significant	Categorical Exemptions	Traffic Patterns Affected, Access to Business Triangle via Right Turns				
7 Add Third Travel Lane	15 Feet	No	Significant	Environmental Impact Report	Accommodates Higher Volumes of Traffic, But Major Impacts on Park				
		1							



It is anticipated that the initial list of alternatives would be presented at the public scoping meetings to gauge public reaction. The list of alternatives will likely then be narrowed to a smaller number of alternatives for more detailed study.

2 c. Refine Alternatives

Feedback from Public Meetings | We will summarize the feedback received at the scoping meetings and make a recommendation for the narrowing of the range of alternatives to the appropriate City Commissions and/or Committees. Following receipt of consensus on the list of alternatives, the Team will add additional detail to the project descriptions. For budgeting purposes, it has been assumed that no more than four alternatives, in addition to the No Build Alternative, will be carried forward.

Conceptual Plans | We will lay out the corridor alternatives on aerial photos of the corridor so that the public can easily understand where the improvements are located; where widening, if any, starts and stops; and where bicycle lanes are to be located. We will provide illustrative and colored plans, sections, elevations, sketches and 3-D visual tools to communicate and assist participants at the open house meetings. Our public presentation exhibits will communicate the intent and differences between the civil engineering and traffic alternative options. In assisting the City in these public presentations, the illustrative documents and PowerPoint presentations will allow participants at all levels to visualize the changes and effects of the varying designs as they relate to the Boulevard reconstruction.

Construction Mitigation Plan | Construction impacts will be one of the more highly scrutinized aspects of the reconstruction project analysis. We will develop construction mitigation plans for the alternatives. It can be expected that many of the elements of the construction mitigation plans will be similar for each alternative, but where they differ, the differences will be highlighted to assist in selecting a preferred alternative.

The construction mitigation plan will address such issues as:

- Time period of construction activity; days of the week and work hours. The approximate length of construction will be estimated based on alternative work windows and the impact of less daily hours of construction activity versus overall duration of construction.
- Haul routes for construction materials.
- Phasing of construction, whether from east to west or north half versus south half of the street.
- Potential street closures, such as residential streets north of the Boulevard to prevent diversion through residential streets.
- Noise mitigation techniques, including equipment noise restrictions and decorative noise walls along Beverly Gardens Park.
- Detour routes, if necessary.

Potential Traffic Impacts | We will assess the likelihood that traffic could be diverted away from the Santa Monica Boulevard corridor during the construction period and will identify the parallel roadways to which it might shift. Potential mitigation measures to reduce the impacts on parallel corridors will be investigated, as well as measures to reduce the likelihood of such diversion. This







will also address where Traffic Control Plans (TCPs) may be required in the Phase 2 scope of work.

2 d. Recommendations and Draft Report

Identify Preferred Alternative and Construction Scenario | Working with the City Commissions and Committees in the refinement of the alternatives, and responding to questions and comments that arise at their meetings, the Psomas Team will develop consensus on which alternative best meets the goals of the project and minimizes impacts on the community. The recommendations will be incorporated into the Recommended Project. The recommended project will be presented in detail. We will prepare "10 %" plans to represent the proposed improvements so that pre-design level quantity surveys and cost estimates may be prepared. A narrative supporting the selection of this alternative will be included.

- Fatal Flaw Analysis | The recommended project will be evaluated for obstacles based on the following considerations:
 - Construction Budget Compliance and Limitations Based on Type of Funds
 - Geotechnical Evaluation
 - Environmental Evaluation
 - Right-of-Way Requirements
 - · Required Permits
 - Utility Interference
 - Stakeholder Opposition
- Project Schedule | The schedule will show the five phases of the project: pre-design, design, bid and award, construction, and closeout. The schedule will be realistic and achievable.
- Construction Cost Estimate | We will coordinate the desired format for the pre-design cost estimate in advance of estimate preparation to ensure that it easily supports reconciliation with project funding and associated requirements/milestones. Cost estimates for each of the corridor alternatives will be prepared.
- QA/QC Update | The pre-design report will provide a more detailed schedule for Phase II. We will clearly document design reviews, interdisciplinary (squad) checks, and constructability review.
- Envision Sustainable Planning Assessment | We will report the result of Phase I of our pre-design efforts to reflect consideration of the five objective criteria categories described in our Project Understanding and Approach section.

2 e. Final Report

We will prepare a Final Report following the initial presentation of the Draft Report to the City Council. We will respond to comments on the Draft Final Report and re-submit it to the City Council for final review and approval. In accordance with the RFP, we have assumed that four (4) City Council meetings will be necessary to finetune and achieve final approval of the recommended construction plan and to receive approval to move to Phase 2 of the work.





2 f. Input to Environmental Document

We will summarize the appropriate materials from the study that will be incorporated into the environmental document for the project. This will include the Setting, Description of Alternatives Considered, and Mitigation Plan for the Selected Alternative. We will work with Community Development Department staff and their consultant to provide the input required for the environmental document, including appropriate graphics. For budgeting purposes, we have assumed that this effort will include input to the preparation of an Initial Study/Environmental Checklist, and technical support for a Categorical Exemption or Mitigated Negative Declaration. If a full Environmental Impact Report (EIR) is determined to be required, we will re-scope the level of effort for this task at that time.

As a part of the process above, the following list of specific activities will be performed and documented during Phase I:

- Confirm related, available constructed/"in design" project information and assimilate into our base plans.
- Document all project-defining Project Scope information, including: curb return radii, street structural sections, stormwater management requirements, design flow rates "Q", diameter and length of storm drains, utility requirements including street lighting and traffic signal requirements, soil permeability, and geotechnical considerations, as well as the materials to be used in the construction of the project
- Determine the need for supplemental field survey (if required).
- Establish stormwater management requirements (hydrology, hydraulics, and stormwater quality).
- Refine storm drain mainline and catch basin hydrology. Complete catch basin design and hydraulic calculations.
- Identify potential major utility conflicts.
- Determine right-of-way requirements (temporary and/or permanent).
- Coordinate utility company involvement, including projected impact on the project design and construction schedule.
- Determine permits required by other agencies.
- Determine the method and sequence for repair or replacement for storm drains.
- Evaluate construction methodology, sequencing, and impacts (including traffic and contractor parking).
- Evaluate the design alternatives that satisfy the project requirements.
- Analyze and understand the budgetary implications of the alternative engineering solutions.
- Support the environmental document preparation or, optionally, prepare it.
- Identify applicable standards and specifications restrictions (ADA requirements, special construction restrictions, and right-of-way requirements).
- Consider design controls (adjoining property line controls, alley and roadway drainage considerations, adjacent construction).
- Solicit stakeholder input (including other City departments (e.g., police, fire, information technology).







OPTIONAL TASK

Environmental Document Preparation

The expectation is that the project improvements may include a Class I bicycle path, pedestrian facilities, roadway restoration, landscaping, transit enhancements, utility relocation, and other amenities. The precise footprint of these improvements has not been defined. Without defined limits of the improvements footprint and feedback from stakeholders, we may not definitively state the type of environmental documentation that would be appropriate for the project. It is recommended that the determination of the type of environmental documentation be evaluated after preliminary concept plans are complete and the initial outreach to the community has been conducted.

The California Environmental Quality Act (CEQA) does provide for Categorical Exemptions (CE) for classes of projects which have been determined not to have a significant effect on the environment and are exempt from the provisions of CEOA. There is the potential that the project may qualify as a Class I exempt project (CEOA Guidelines Section 15301). This CE class is for the "operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use." However, a key consideration is if the project has the potential for environmental impact; in that case, the CE would not apply.

In making the determination as to the type of documentation required, the City will need to assess the potential for impact, a key consideration will be the potential effects on adjacent land uses, particularly Beverly Gardens Park and adjacent residential development. Though the roadway right-of-way extends 20 feet north of the existing curb face, right-of-way has been assimilated for parkland use; therefore, the potential for impact to the park would need to be closely evaluated. Though providing circulation improvements within the rightof-way is generally not considered an impact, the community may view this as reducing the size of the park. If there is question as to the suitability of a CE, it is recommended that a higher level environmental document be prepared, such as a Mitigated Negative Declaration (MND).

Scope of Optional Environmental Documentation

As previously indicated, a project footprint is needed before a definitive approach to the CEQA documentation can be determined. While there may be an opportunity to prepare a CE, this scope of work assumes that a MND is the appropriate type of CEQA document. Based on project design and community input, the appropriate documentation will be determined to reduce potential exposure to the City of Beverly Hills related to the adequacy of the environmental document.

Based on the current project definition, the traffic volumes, mix, and speeds on NSMB would not change as a result of the project. Therefore, there would be no operational air quality, greenhouse gas (GHG) emissions, or noise impacts.

Project Initiation | When preliminary concept plans are available, we will attend a meeting with the City and the Project Team. The meeting will provide an opportunity for Project Team members to discuss the proposed approach





for completing the CEQA documentation; to establish lines of communications and expectations; to set the schedule; to discuss information needs and any outstanding issues; to develop strategies for addressing these issues; and to identify sensitivities and potential issues of concern to citizens, organizations, or other agencies that have been identified during the project development process.

Preparation of an Initial Study Leading to a Mitigated Negative Declaration | The Initial Study will be prepared in compliance with Section 15063 of the State CEQA Guidelines and applicable case law. It is assumed that a preferred alternative will be identified as the focus of the environmental document. This Scope of Work assumes that the Initial Study will be prepared for only the preferred alternative. Using the CEQA Initial Study Checklist, we will respond to each checklist question based on project plans, a site visit, and available information.

The following is a description of the work effort for assessing potential environmental effects relative to each topical issue:

- Agricultural and Forestry Resources | The project site does not contain nor has the potential to sustain agricultural or forestry resources. The topic will be addressed qualitatively in the Initial Study.
- Aesthetics | We will assess potential visual changes resulting from implementation of the project. This analysis will focus on the project's compatibility with surrounding land uses and change to the character of the site. Photographs will be taken of the site and from selected offsite viewpoints to depict the character of the project area. No significant impacts are anticipated due to the nature of the proposed project.
- Air Quality/GHG Emissions | We will document construction methods and timing, quantities of demolition spoils, soil export and import, anticipated equipment use, and other data relative to air quality and greenhouse gas (GHG) emissions. We will calculate the construction phase emissions of criteria pollutants and GHG using California Emission Estimator Model (CalEEMod) or OFFROAD 2011 and EMFAC 2011. We will analyze the proposed project's air quality impacts, addressing the issues described in the State of California Environmental Quality Act (CEQA) Guidelines Appendix G, and in accordance with significance criteria established by the South Coast Air Quality Management District (SCAOMD). Potential criteria pollutant impacts to local receptors during the construction phase of the project will be assessed using the SCAQMD Localized Significance Thresholds methodology. The air quality analysis will include qualitative discussions of toxic air pollutant impacts from construction equipment diesel particulate emissions and consistency of the project with the applicable air quality management plans. Since the project would not alter the travel characteristics of the roadway, no dispersion modeling will be required for the air quality analysis.

There are currently no established quantitative significance criteria for GHG emissions for infrastructure improvement projects; we will assess significance using methods considering thresholds recommended by SCAQMD and in consultation with the City of Beverly Hills. Significance will also be assessed by considering whether implementation of the project would conflict with an applicable plan, policy or regulation adopted for





the purpose of reducing the emissions of GHGs. If potential significant impacts are identified, mitigation will be recommended to reduce pollutant emissions.

We will provide the results of the air quality and GHG analyses in the respective sections of an Initial Study. This will include brief descriptions of existing air quality and applicable regulations and policies; and the results of the analyses described above, including a determination of the level of significance of impacts in accordance with CEQA guidelines. We will revise the draft Initial Study once based on comments received from Psomas and once based on comments received from the City of Beverly Hills.

- Biological Resources | The project site contains no known locations of State-listed or federally listed Threatened or Endangered species, or species otherwise designated as special status by State and local resources agencies and organizations. To validate this expected finding, our Biologist will visit the project site. The findings will be documented in the *Initial Study.*
- Cultural Resources | We will conduct a Phase I cultural resources study for the proposed project that will include a cultural resources literature review; a paleontological resources records search and literature review; a preliminary assessment of the built environment adjacent to the project site; and Native American consultation. A field survey would not be required. The records searches will be completed at the South Central Coastal Information Center (SCCIC), California State University, Fullerton, and the Los Angeles County Museum (LACM) respectively; Contact with the California Native American Heritage Commission (NAHC) for a review of its Sacred Lands File will be initiated to obtain a list of local Native American contacts to whom we will prepare and send informational letters. We will present the research and survey results of the study in a cultural resources letter report which will be appended to the Initial Study being prepared for the project.

Recognizing the importance of historic resources in the City, an assessment of potential impacts on historic resources will be done. This would include conducting a site inspection/field visit of the proposed areaof-potential-effect (APE) for the project, and compiling and analyzing archival research material, such as maps, aerial photographs, and original engineering documents. The findings will be incorporated into the MND.

- Geology and Soils | We will review and summarize existing geotechnical data to address the potential for impacts and project constraints. Sources such as the geotechnical data developed for the project, US Geologic Survey data, the General Plan, and other projects in the vicinity will be used. This Scope of Work assumes that these sources will be adequate to address the issues identified in the CEQA Initial Study checklist, and no additional technical study is required.
- Hazards and Hazardous Materials | We will summarize the information developed as part of the geotechnical evaluation. This includes a review of the GeoTracker sites and data bases which will provide information on the potential for encountering contaminated materials.





- Hydrology and Water Quality | The Initial Study will provide an overview of any existing drainage systems and water quality treatment features that are in place to address water quality issues. It is also assumed that the information provided with regard to proposed hydraulics/hydrology, project design, and appropriate best management practices for water quality treatment (including erosion control) will be sufficient to address the issues identified in the CEQA checklist and that mitigation measures will be identified. We will also evaluate the project's compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements.
- Land Use and Planning | We will describe the existing on-site and surrounding land uses based on a site visit and review of aerial photographs. This section will address the project's consistency with relevant planning programs and plans and will discuss physical changes to the site.
- Mineral Resources | The project site does not contain mineral resources. The topic will be addressed qualitatively in the Initial Study based on the mapping from the California Geological Survey.
- Noise | We will document data relative to construction methods and timing, quantities of demolition spoils, soil export and import, anticipated equipment use, and other project data related to noise impact. We will estimate existing ambient noise levels at sensitive receptors adjacent to North Santa Monica Boulevard Phase I traffic data. We will analyze the proposed project's noise impacts, addressing the issues described in the State of CEQA Guidelines Appendix G and in accordance with standards established in the City of Beverly Hills General Plan and Noise Ordinance (Title 5, Chapter 1 of the Municipal Code). We will analyze impacts from construction noise and, if necessary, provide mitigation measures or conditions to assure compliance with the Noise Ordinance.

We will provide the results of the noise analysis in the noise section of an Initial Study. The section will include descriptions of existing noise and applicable regulations and policies; the results of the analyses described above, including a determination of the level of significance in accordance with CEQA and City guidelines and criteria; and a discussion of appropriate mitigation measures. We will revise the report once based on comments from the Project Team and once based on comments from the City of Beverly Hills.

- Population and Housing | The proposed project does not involve the removal of existing housing units or the generation of new residents; therefore, no significant impacts related to population and housing are anticipated as a result of the proposed project. We will provide a summary statement in the Initial Study to support this conclusion.
- Public Services and Facilities | The project would allow for improvements along NSMB. Because of the nature of the project, no significant long-term impacts on police or fire protection, schools or parks would be expected. We will coordinate with the respective service providers as necessary to substantiate this finding.







- Recreation | The proposed project does not include an increase in residential uses and would not increase the demand for recreational facilities, nor would it require the construction of new facilities. However, there is the potential of reducing the acreage currently being used by Beverly Gardens Park. We will assess the impacts related to recreation.
- Transportation, Circulation, and Parking | We will summarize the Traffic Study as part of the Initial Study. Mitigation will be identified, as necessary.
- Utilities and Service Systems | Using information on the utility infrastructure system available from the Project Team and through coordination with utility purveyors, we will document and assess potential impacts to utilities.

A Draft Initial Study will be submitted to the City and the Project Team for review. After receipt of comments, the Draft Initial Study will be revised to incorporate all comments that are within the Scope of Work (Revised Initial Study). The Revised Initial Study will be submitted for review by the same parties. Concurrent with preparation of the revised document, we will prepare the necessary documentation for the MND, including a proposed finding that the project will not have a significant effect on the environment with implementation of mitigation measures. This will be submitted to the City and Project Team for review with the Revised Initial Study.

Public Distribution of the Initial Study/Mitigated Negative Declaration | Following the review of the Revised Initial Study and MND, we will submit a proof check copy of the IS/MND for final review prior to public distribution. Following the City's acceptance of the proof check Initial Study/MND, we will finalize the document and prepare it for reproduction.

We will coordinate with the City on a mailing list for the distribution of the IS/MND. This Scope of Work assumes that we will provide 30 copies of the IS/MND for the City's use; appendices will be provided only on CD. Additional copies of the IS/MND can be provided in PDF format on CD and to upload onto the City's website. We will coordinate reproduction and distribution of the IS/MND to the State Clearinghouse (SCH) and interested parties. In accordance with current SCH procedures, we will submit 15 hardcopies of the Summary Form for Electronic Document Submittal and 15 CDs of the entire document to SCH.

Notices | A Notice of Intent (NOI) that the City proposes to adopt an MND needs to be provided to the public. This notice should be published in the local newspaper(s) or, at a minimum, posted at the project site. It is assumed that we would prepare the NOI, but that the City will submit the notice to the newspaper and/or post at the project site. The project requires a 20-day public review period for the IS/MND, unless a State agency is identified as a responsible agency. If this occurs, a 30-day public review will be required.

Response to Comments | Once the public review period has ended, we will coordinate with the City and Project Team to review the comments received on the IS/MND and to develop an approach to responding to the comments. Topical responses, with a brief summary of the response and reference back to the larger response, will be used if multiple comments are received on the same issue. This approach will allow a more complete response without undue repetition. One





screencheck copy of the Response to Comments document will be submitted to the City and Project Team for review. The responses will then be revised based on comments on this document. In compliance with Section 15074 of the State CEQA Guidelines, the City must consider the proposed IS/MND together with any comments received during the public review process. This Scope of Work assumes up to 40 hours of technical staff time and 6 hours of support staff time for Responses to Comments. Should the comments received require additional effort beyond this assumption, a budget augmentation may be requested.

Mitigation Monitoring and Reporting Program | In compliance with California Public Resources Code Section 21081.6, we will prepare a mitigation monitoring and reporting program (MMRP) for adoption with the IS/MND. The MMRP will be prepared at the same time as the Response to Comments. The MMRP will be designed to ensure compliance with adopted mitigation requirements during project implementation. The program will be prepared in matrix format and will provide the timing and responsibility for each mitigation measure. A draft copy will be submitted for review by the Project Team. Revisions will be made accordingly.

Notice of Determination | Immediately following the adoption of the MND, we will prepare the Notice of Determination (NOD) to be filed with the County Clerk and SCH. Within five days of approval of the IS/MND, we will file an original signed NOD with the County Clerk; it is assumed that the City will be responsible for all filing fees. Once the NOD has been filed with the County Clerk, we will submit the NOD along with evidence of County Clerk filing and payment of fees to SCH.

Project Management and Meetings | We will meet with the Project Team and the City through the team meetings. Up to four (4) team meetings are assumed in addition to the project kick-off meeting. The Principal or Project Manager will be available to attend Planning Commission and the City Council hearings, if requested by the City of Beverly Hills. This Scope of Work assumes up to 16 hours of meeting time, not including the project kick-off meeting, and up to 40 hours of general project management time.



Phase II

Our team will develop and prepare PS&E for improvements to the corridor. Improvements will include new pavement, curb, gutter, sidewalk, street lighting, landscape and irrigation based on the approved concepts from Phase I. Plans will be prepared on City provided title blocks using the most recent City and Public Works Construction Standards and details.

1. 20-Scale Plan and Profile Street Improvement Drawings

Preparation of these plans will include the following components:

- Establish street centerline control and stationing for future construction layout
- Verify street cross-section dimensional elements including lane width, curb to curb dimensions, and cross slope criteria
- Review curb radius criteria with City for intersection returns
- Calculate geometric layout for curb lines including transitions to join conditions
- Review geometric layout with City for consistency with design elements and standards
- Develop design cross sections to be used to establish street cross slope and longitudinal profiles of centerline and curb lines
- Establish final centerline and curb line profiles and cross sectional elements

These 20-scale plan and profile drawings will provide the overall horizontal and vertical control that will be used to develop the detailed 10-scale detailed plans for intersection improvements.

2. 10-Scale Detailed Plans for Intersections

These drawings will provide detailed finished surface elevations and details for construction of intersections. Specific elements and activities associated with these drawings include:

- Provide detailed elevations for the vertical control of intersection improvements
- Verify "riding line" profiles for transitional areas at the approach and departure zones for intersections
- Establish detailed finished surface elevations for sidewalk areas including ADA transitions to intersections
- Identify catch basin locations and details for new catch basins and relocated basins at intersections
- Sections and construction details will be included as required with each of these drawing elements

3. 20-Scale Plan and Profile Storm Drain Improvement Drawings

These 20-scale precise paving drawings will be based on the findings of Phase I and will include:

 Plan and profile drawings to describe new alley discharge from the 11 north-south alleys between Crescent Drive and Carmelita Avenue (approximately 100 LF each)





- Plan and Profile drawings for the five main-line drains within/crossing NSMB as identified in Psomas' 2001 Storm Drain Master Plan
 - 200 LF of 39-Inch Storm Drain perpendicular to NSMB at North Linden Drive
 - 400 LF of 27-inch Storm Drain parallel to NSMB between North Canon Drive and North Rexford Drive
 - 75 LF of 39-inch Storm Drain perpendicular to NSMB at North Elm Drive
 - 400 LF of double 5"x4" box perpendicular to NSMB at North Arden Drive
 - 400 LF of 42-Inch Storm Drain perpendicular to NSMB at Alta/North Palm Drive
- Plans, sections, and details to describe post-construction sustainable stormwater management measures to be constructed as a part of the project

4. Traffic Signal Modifications Plans

We will prepare raffic signal modification plans at locations where the existing traffic signal facilities are impacted by the project (e.g., due to roadway widening). Traffic signal modification plans may be required at any or all of the following intersections on North Santa Monica Boulevard:

- Moreno Drive (City of Los Angeles' signal)
- Merv Griffin Way (planned future signal)
- Wilshire Boulevard
- Roxbury Drive
- Bedford Drive
- Camden Drive

- Rodeo Drive
- Beverly Drive
- Canon Drive
- Crescent Drive
- Rexford Drive
- Beverly Boulevard / Palm Drive
- Doheny Drive (City of West Hollywood signal)

All the traffic signal modification plans prepared for this project will conform to the standards, formats, and requirements of the City. In addition, the plans will be designed per Caltrans Standard Plans, Caltrans Specifications, and the 2012 California Manual on Uniform Traffic Control Devices (MUTCD). The plans will include all existing, removal and proposed traffic signal facilities, accompanied by detail general and construction notes, pole and conductor schedules, existing and proposed phase diagrams, and necessary details for the construction of a modified traffic signal system. Proposed facilities might include, but are not limited to, new/modified poles, mast arms, luminaires, controller, detection, pull boxes, conduits, pedestrian push buttons, vehicular and pedestrian signals. One sheet will be prepared for each intersection showing the complete design of the signal at a scale of 1"=20'.

5. Traffic Signal Interconnect Plans

With the potential widening of the north side of North Santa Monica Boulevard, the existing 24-strand single mode fiber optic (SMFO) communications conduits and cables installed as part of the Santa Monica Boulevard Signal Synchronization Project from Wilshire Boulevard to Beverly Boulevard may also





be impacted. If it is determined that the interconnect pull boxes and conduits are affected by the roadway widening, we will prepare plans for the relocation/ reinstallation of the traffic signal interconnect system within the project limits.

During our field investigation in Task 1, we will open every pull box and identify if there is existing slack and, if so, the approximate length of the slack cable. If it is determined that there is enough slack cable, our design will call for the re-use and re-pull of the existing 24-strand SMFO cables in new conduits. Otherwise, new 24-strand SMFO will be required. Our design will also include connection and splicing details at each signalized intersection. These plans will be prepared at a scale of 1"=40' and will conform to the requirements of the City and Caltrans.

6. Signing and Striping Plans

Signing and striping plans along North Santa Monica Boulevard within the project limits will be prepared. The plans will include all existing, removal and proposed striping and signing in the project area, and will conform to the requirements of the City. New striping will be designed per City and Caltrans Standards and Specifications, while all the new signs will be in conformance with the 2012 California MUTCD standards. The plans will include all notes and details for the removal of old / conflicting striping or pavement markings; removal of dilapidated / non-standard signs; and installation of new striping, pavement markings and signs within the project area. The plans will also provide detail dimensions of lane widths, pocket lengths, and striping transitions for changes in striping alignments or where the existing stripes are joined. These plans will be prepared at a scale of 1"=40'.

7. Street Lighting Plans

We will prepare street lighting plans for the new street lighting system. The plans will conform to the requirements of the City. The new lighting will be reflective in character of the existing poles (as determined in Phase I). The plans will include all notes and details for the construction of a complete street lighting system with new poles, mast arms, luminaires, conduits, conductors, and pull boxes. Any changes to the lighting circuit loading and pole locations will be checked for allowable voltage drop and circuit load capacities. Illumination calculations will be performed to ensure the roadway meets the minimum lighting requirements. If additional electrical service feeds are required, we will coordinate closely with Southern California Edison to obtain new service points.

8. Landscape, Irrigation, Landscape Lighting, Bus Shelter, and Street Furniture Plans

We will prepare landscape and urban design related plans to accompany and integrate with the roadway, traffic, and storm drain improvements.

Traffic Control Plans

We will incorporate construction phasing schedule, construction staging diagrams and associated traffic control/detour requirements (approved under Phase 1) into Final Plans.





We will prepare detailed traffic control plans and detour plans, to be implemented by the Contractor during construction to provide safe and efficient work zones for both the Contractor and the public.

The plans will clearly show the work area, and will include pertinent information such as existing signing and striping, placement of delineators, barricades, construction signs, warning signs and proper lengths of lane merge or shift, that will enable the Contractor to accurately and safely set up a traffic control zone at the worksite. The designs will also include all of the details and notes necessary and will follow the local and national guidelines for traffic control, including the California MUTCD, and Work Area Traffic Control Handbook (WATCH).

10. Storm Water Pollution Prevention Plan (SWPPP)

The Construction General Permit (CGP) requires that all construction-related stormwater discharges associated with NSMB be permitted under the CGP and have a fully developed site SWPPP on-site prior to beginning any soil disturbing activities. The SWPPP will include the information needed to demonstrate compliance with all the requirements of the CGP. The SWPPP document will be written by a Psomas Qualified SWPPP Developer (QSD) and will include a worksite erosion control plan. We will prepare and submit a Notice of Intent (NOI) and Vicinity Map to the SWRCB. We will prepare the SWPPP in conformance with the State Water Resources Control Board, Order No. 2009-0009-DWQ, and General Permit No. CAS000002.

11. Specifications

We will prepare the Project Manual to include:

- Notice to Bidders
- Proposal Form
- Specifications
 - Special Provisions section of the Specifications will reflect the plans.
 The Special provisions will supplement the 2012 Edition of the Standard Specifications for Public Works Construction (Greenbook), with all revisions
- Standard Contractual Requirements (SCR)

12. Construction Cost Estimate

We will prepare an engineer's estimate of probable construction cost to be included and updated with the 35%, 65%, 90% and Final submittals. The estimate details willll be presented in CSI Divisions (unless the City prefers otherwise) inclusive of general conditions, material quantities, unit costs of labor, Contractor's overhead and profit, bond and insurance, construction contingency, and escalation to the mid-point of construction.

13. Submittals

We will submit plans for review and approval at the following milestones. We will submit the quantity specified by the City. The cost for printing and delivery of submittals will be invoiced as a reimbursable expense.





- 35% plans and Engineer's estimate of probable construction cost
- 65% plans, draft specifications, and Engineer's estimate of probable construction cost
- 90% Plans, specifications, and Engineer's estimate of probable construction cost
- Final Plans, specifications, and Engineer's estimate of probable construction cost

We will distribute 35%, 65% and 90% Plans to potentially affected agencies and utility owners for review and comment, clearly delineating existing and proposed utilities in current and final locations and clearly identifying all utility conflicts. We will incorporate comments and information provided by the affected agencies and utility owners into the Plans and Specifications. We will coordinate with impacted franchise utility owners for all necessary utility relocation work (preor post-construction) and include the cost of said relocations in our Engineer's estimate of probable construction cost. We will request, review, and assimilate comments from City, Police, Fire and other impacted City departments.

We will submit our documents in accordance with the City's specific standards for electronic deliverables.

14. Permitting and Agency Coordination

We will coordinate with the County of Los Angeles and/or the State of California (as required) for processing of storm drain connection permits, standard urban stormwater mitigation plans, stormwater pollution prevention plans, and NOI to discharge under the General Construction Permit. Identified permit requirements will be discussed with the City, and implementation established and incorporated during appropriate phases of the project. Application fees will be paid by the City directly or by Psomas and then reimbursed by the City.

15. Bid and Award Support

- Draft Responses to Requests for Information (RFI) and/or Clarification (RFC)
- Prepare Bid Addenda Documents where necessary
- Attend Pre-Bid meeting

16. Construction Administration and Project Closeout Support

- Attend Pre-Construction meeting and prepare minutes
- Provide review and approval of all submittals, Shop Drawings, RFI's and Change Order Requests required by the construction contract and provide supplemental documents for clarification or resolution of conflicts encountered during construction. Ensure that all specified submittals are responsive to the intent.
- Provide periodic on-site observation during construction to maintain awareness of the project development and project schedule and to observe conformance with the contract documents and the approved construction mitigation plans
- Develop punch lists and recommendations to the City for substantial completion date and acceptance of all corrective and completion work by the contractor





- Prepare "As Built" drawings and submit both in electronic format and hard copy. Mylar costs will be invoiced as a reimbursable cost.
- Attend regularly scheduled meetings to discuss the Project with the City and Contractor

17. Small Potholes (Budget)

After a concept has been agreed upon in Phase I we will determine the locations at which the existing utilities appear to be in conflict based on the record drawing based utility mapping. We will perform vacuum extraction potholing at these locations to locate the horizontal and vertical alignments of the utilities in conflict with the proposed improvements. The potholes will be backfilled with the material that is exhumed from the pothole, compacted and perm-a-patched. At the completion of the work, a potholing report will be prepared with photographs, documenting the location, utility, depth to top of facility, size, material, and soil conditions.

18. Construction Staking

- Provide one (1) set of stakes for saw-cutting. Stakes will be set along the saw-cut line at angle points and approximately 50-foot intervals in tangent sections and 25-foot intervals in curves. Since it is anticipated that the project will be phased in thirds (longitudinally), one (1) set of lines will be provided on the north side of the roadway and another set on the southern side of the roadway.
- Provide one (1) set of stakes for approximately 37 catch basins. Stakes will be set on a convenient offset to curb face at the inside and outside face of box with grades to top of curb. Local depressions will be staked at the time of final curb staking.
- Provide one (1) set of stakes for storm drain construction as called out in the RFP. Stakes will be set on a convenient offset to centerline of pipe at approximately 25-foot intervals with cuts to invert grade.
- Provide one (1) set of stakes for curb construction. Stakes will be set on a convenient offset to face of curb at approximately 25-foot intervals with cuts and fills to top of curb.
- Provide one (1) set of stakes for curb returns. Four (4) stakes and one (1) radius point per return will be provided on a convenient offset to curb face with cuts and fills to top of curb grade.
- Provide one (1) set of grade stakes on a convenient offset for grading the interim join conditions and along centerline due to the construction being done in longitudinal sections. Stakes will be set at approximately 50-foot intervals with grades to finish surface.
- Optional Provide one (1) set of stakes for miscellaneous relocated utility construction such as fire hydrants, street lights, vaults, etc. A budget of 40 hours has been allocated due to the unknown magnitude of relocated utilities.







19. Monument Perpetuation

Pursuant to state law (Section 8771 of the Professional Land Surveyor's Act), the location of the various street centerline monuments and their respective tie points that will be destroyed or disturbed during construction must be perpetuated. This will include 25 street intersections and four (4) alleys.

- After Phase II, and prior to construction, we will have a clear understanding of which monuments of record will be either destroyed or disturbed during construction. When this is determined, we will dispatch our survey crews to the impacted intersections to locate, record, and document the location of the existing and missing monuments.
- After construction is complete, we will return to the affected locations and re-establish the monuments or tie points that are missing. The previously recorded Record of Survey is used as the basis for this replacement process and will include, at a minimum, four (4) tie points for each centerline monument. This information will then be documented in the form of Tie Note Books that will be prepared for each intersection and submitted to the City of Beverly Hills for filing.

Our efforts will require two (2) field crew hours per intersection for the pre-construction work and two (2) hours per intersection for the post-construction work.

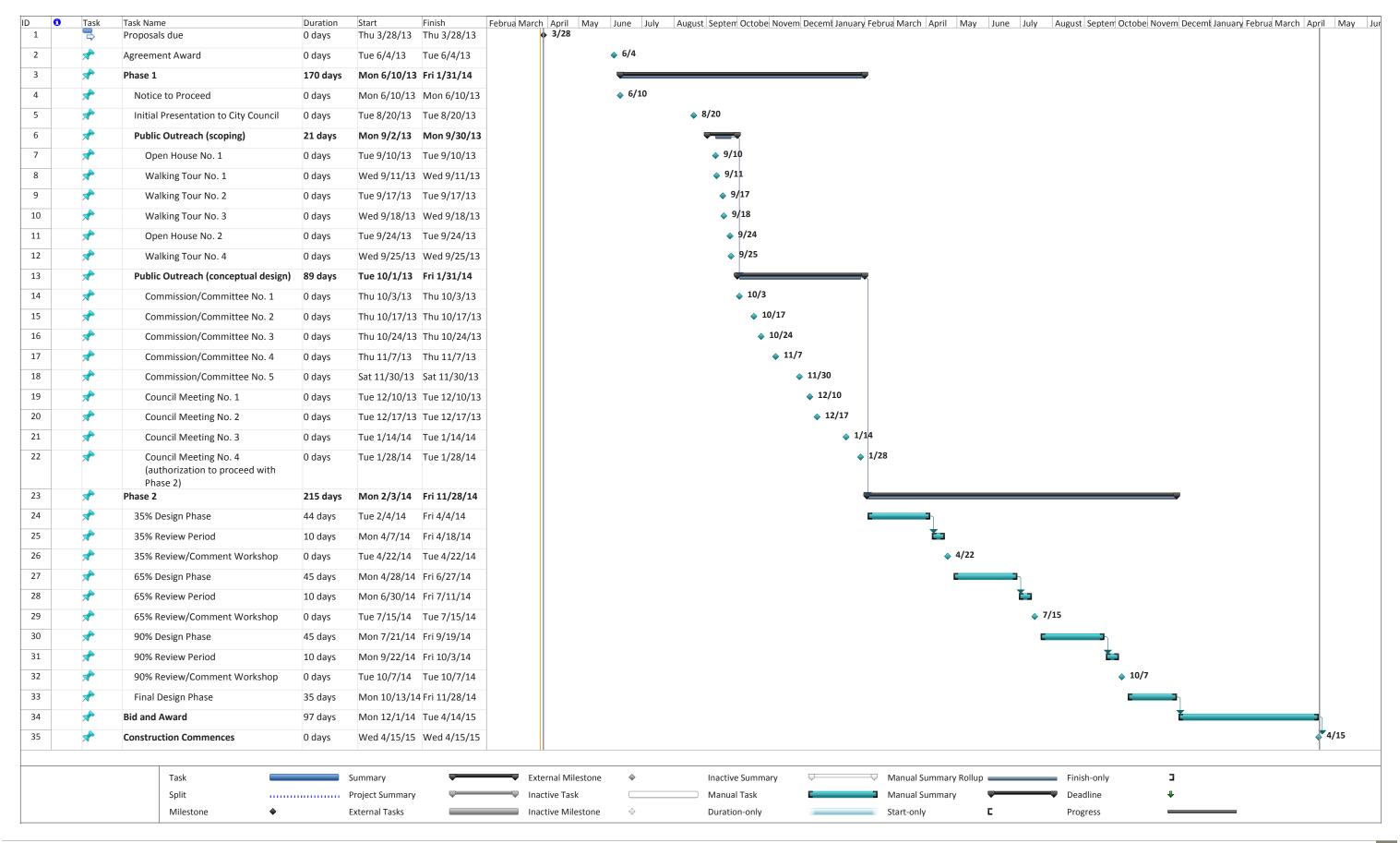
Optional Supplemental Survey (Budget)

If during the course of our pre-design efforts we establish a limit of work that goes beyond the existing coverage, or if we determine that features or detail are missing, we will provide supplemental topographic/design survey to integrate with the City-provided information. Because the need and/or scope are undetermined at this time, we have provided an optional budgetary fee only.

Optional Geotechnical Support During Construction

During construction, our services would include geotechnical construction observation and testing. The purpose of our geotechnical construction observation and testing services would be to confirm the subsurface conditions encountered during construction are as assumed for design. Further, we would observe the Contractor's work to verify the site grading, earthwork, and pavement construction are in accordance with the project plans and specifications and our geotechnical recommendations. We would anticipate this would include an on-site preconstruction meeting, observing site preparation, compaction of subgrade fills, and placement of base and asphalt pavement section.







References and Project Experience

Presented on the following pages are descriptions of public agency projects for which Psomas has provided services similar to those described in the RFP. A client reference is included with each featured project description. We encourage you to contact the individuals shown to verify our work quality, quality control, and our ability to complete each project on time and within budget.

The services that we propose to provide for NSMB are comprehensive. We have chosen a list of representative projects to illustrate:

- The recent record of performance by our team
- Projects of similar magnitude and profile that presented similar challenges
- Projects successfully delivered for and in Beverly Hills
- Projects that showcase our specialized planning and design experience within the Santa Monica Boulevard Corridor
- Projects that showcase progressive sustainable features and stormwater management strategies

Our featured projects include:

Wilshire Bus Rapid Transit (BRT) Project

A recent, local, high ADT, major urban corridor reconstruction project that included similar phases and professional services designed and delivered by our Principal in Charge and proposed team - Psomas, Iteris, and Gruen

Beverly Hills Urban Design Program

An award winning, highly-visible, urban reconstruction project delivered to the City of Beverly Hills by the same Psomas Principal in Charge and Project Manager

King Abdullah Road Redesign Project

A recent, non-local, major urban corridor reconstruction project designed and managed by our proposed Project Manager and Technical Lead

Recent, Related, Adjacent Beverly Hills Public Improvement Projects

Traffic and roadway public improvement projects recently delivered to various departments in Beverly Hills within or immediately adjacent to NSMB

Proposition O Clean Stormwater Bond Program

Progressive, sustainable, maintainable, stormwater management projects recently constructed within major transportation corridor rights-of-way and public parks

Santa Monica Boulevard Transit Parkway

Extensive Santa Monica Boulevard corridor through which we have built relationships and partnerships with NSMB stakeholders





Wilshire Bus Rapid Transit (BRT) Project

Los Angeles, CA

Wilshire Boulevard is the most heavily used transit corridor in the region. It has one of the highest average daily traffic (ADT) volumes for a roadway of its category in the County of Los Angeles, estimated at 80,000.

Phase I (P1) | Transportation analysis of the entire Corridor extending from downtown Los Angeles to Santa Monica; preparation of the purpose and need sections of the project documentation: evaluation of the traffic and parking impacts of the alternatives; assessment of construction impacts; interface with Metro modeling staff; and participation in community outreach efforts. Assistance to Metro and LADOT with the transportation analysis in the EIR/EA, refinement of the regional travel demand model for use in forecasting corridor volumes, and estimation of diversion of traffic to parallel routes.

Phase II (P2) | Preparation of pre-design documentation and PS&E for the two project segments within the City of Los Angeles for the Bureau of Engineering. Segment No. 1, the largest in the corridor and most significant in the overall project, is the 3.6 miles between Western Avenue and San Vicente Boulevard. Within this segment the existing asphalt concrete curb lanes are removed and reconstructed with Portland cement concrete and are converted to bus and right turn only operation during the peak periods on weekdays. The middle lanes are repaved with asphaltic concrete. Segment No. 2 is approximately 0.1 mile from Federal Avenue to Barrington Avenue where the roadway is widened to accommodate an additional eastbound travel lane.

Project required design and delivery of three separate sets of PS&E to accommodate the unique requirements of Federal and local funding sources.



City of Beverly Hills | North Santa Monica Boulevard Reconstruction

Local, Recent, Major Urban Roadway Redevelopment

Key Personnel

Sean P. Vargas, PE, LEED AP BD+C, ENV SP (P2)

- Principal-in-Charge

Ross Barker, PE (P2)

- QA/QC Manager

Michael Meyer, TE (P1&2)

- Transportation Planning

Steve Smith, ASLA (P2)

- Landscape Architecture and Urban Design

Steve Marvin, PE (P2)

- Pavement Consulting and Life Cycle Cost Analysis

Timothy Hayes, PE (P2)

 Civil Technical Lead and Cost Control

Andrew Gust, PE (P2)

- Constructability and Construction Impacts

Reference

City of Los Angeles Department of Public Works Bureau of Engineering 1149 S. Broadway, Suite 800 Los Angeles, CA 90015

Michael Brown (P2) Division Manager, Street Improvement and Stormwater Division (213) 485-4523

Martha Butler (P1) Los Angeles Metro One Gateway Plaza Los Angeles, CA 90012 (213) 922-7651

Project Costs

\$2,200,000 (Fee) P2 \$12,000,000 (Construction) P2

\$900,000 (Several Phases) P1 Construction Cost (N/A) P1

Project Duration

2011 to 2012 (P2) 2002 to 2012 (P1)





Wilshire Bus Rapid Transit (BRT) Project

Los Angeles, CA

-- Continued --

Key project considerations included:

- Analysis and mitigation of construction and traffic impacts seven unique traffic control plans considering peak and off-peak construction scenarios were prepared.
- Stakeholder outreach our team supported the outreach effort led by our co-consultant.
- Prescription of sustainable alternatives.
- Coordination with franchise utility owners 20 different utility owners were represented in this congested corridor.
- Coordination with concurrent projects Psomas considered, coordinated, and integrated the requirements of major concurrent projects including the Westside Subway Extension, the segment of the Wilshire BRT prepared by Los Angeles County, and the City of Los Angeles Stormdrain Buildout Study which was also prepared by Psomas.
- Adaptable schedule management Elected officials within the City of Los Angeles committed to a compressed schedule through partnership with stakeholders in the City family (Bureau of Engineering, LADOT, etc.). Psomas was able to meet this schedule via a proactive, responsive, and cooperative approach.







Beverly Hills Urban Design Program, Triangle Area

Beverly Hills, CA

The Beverly Hills Urban Design Program was an award-winning urban enhancement project within the Beverly Hills "Golden Triangle," one of the most prestigious retail shopping districts on the planet. The goal of the improvements was to transform the urban roadway and streetscape via complete building-to building right-of-way removal and reconstruction within this 5,000 to 11,000 vehicle ADT district. This comprehensive program encompassing 1.4 miles of Rodeo Drive, Canon Drive, Beverly Drive, Brighton Way and Dayton Way was designed and constructed over a six-year period. Construction was completed at night while maintaining access to retail, restaurant, and cultural addresses within the district.

The City of Beverly Hills selected Psomas to provide survey, design, construction staking, and construction administration services for this comprehensive street reconstruction project. The revitalized roadway and streetscape includes reconstructed roadway; new landscape and irrigation; stormwater improvements; utility relocations; custom hardscape; custom pedestrian lighting, traffic signal poles and street light poles; custom street furniture; and new pedestrian-friendly mid-block crosswalks. The result is a sustainable, pedestrian friendly, "parkonce" retail and dining experience beyond compare.

Psomas' successful delivery of the project resulted from a combination of our Project Manager's coordination and collaboration with the City's family of departments and our technical competence.

Coordination and Collaboration | Our management team maintained an atmosphere of proactive communication throughout the project, where we regularly met concurrently with PW&T and Economic Development staff to ensure project goals and project outcomes were consistent and became reality. We engaged the Fire and Police Department staff for their input and implemented design features to



Highly Visible Urban Roadway Redevelopment for Beverly Hills

Key Personnel

Sean P. Vargas, PE, LEED AP BD+C, ENV SP

- Project Manager

Ross Barker, PE

- Principal-in-Charge

Steven Marvin, PE

- Pavement Consulting and LIfe Cycle Cost Analysis

References

City of Beverly Hills

Public Works and Transportation Bureau of Engineering Street Improvement and Stormwater Division 345 Foothill Road Beverly Hills, CA 90210

Ara Maloyan

Project Manager, PW&T(former) (562) 570-6771 (current contact information)

Daniel Cartagena

Project Manager, Economic Development (former) Senior Management Analyst (current) (310) 285-1189

David Lightner

Director of Economic Development (former) Deputy City Manager (current) (310) 285-1080

Project Cost

\$2.2 million (Psomas Fee) \$12 million (Construction)

Project Duration

2002 to 2008





Urban Design Program, Triangle Area

Beverly Hills, CA

-- Continued --

accommodate their operational needs. The Psomas Team supported City staff in communications to stakeholders. We worked closely with the staff and Contractor to accommodate unforeseen and unique interruptions to the construction resultant from the inaugural Walk of Style, Baccarat chandelier holiday displays, and installation of the iconic Robert Graham "Torso" public art display.

Technical Competence | There were several technical challenges on the project. Design challenges included developing design cross sections and re-designing the streets and sidewalks in a manner that positive drainage and stormwater management was maintained and Americans with Disabilities Act (ADA) compliant access to all public areas was achieved. Our design featured unique custom lighting and street furniture requiring a heightened focus on subconsultant and coconsultant oversight.







NSMB Signal Synchronization | Beverly Hills, CA

Key Personnel: Sean Vargas, PE, LEED AP BD+C, Env SP - Project Manager

As a part of our on-call agreement, Psomas prepared plans, specifications and cost estimates (PS&E) for traffic signal modification and Americans with Disabilities Act (ADA) upgrades at nine intersections along a 1.1-mile, 40,000-ADT stretch of NSMB between Wilshire Boulevard and Beverly Boulevard. The project included full inventory and mapping of all subsurface utilities within the corridor, design and replacement of controllers and cabinets, transit priority system support, design of the video detection system, and detector loops for the transit priority system.

City of Beverly Hills NSMB Related Projects

Reference

Tristan Malabanan Project Manager, (310) 285-2512

Project Cost

Design Cost: \$165,000 Construction Cost: \$2 million

Project Duration

2012

NSMB/Doheny Gateway Project | Beverly Hills, CA

Key Personnel: Steve Smith, ASLA - Project Manager | Jeffrey Chess, PE - Civil Engineering | Michael Meyer, TE - Transportation Planning

Gruen, along with Psomas and Iteris, teamed to prepare a study and PS&E for this high profile City gateway including grading, accessible path of travel, and coordination of new water service to the project. The design team considered the NSMB reconstruction and developed project scope and work limits, accordingly. The project required design approval from both City of Beverly Hills and City of West Hollywood.

Reference

Community Services
Department
455 N. Rexford Drive, Suite 200
Beverly Hills, CA 90210
Steven Zoet
Director, (310) 285-2533

Project Duration

2013

Rexford Drive Intersection Improvements | Beverly Hills, CA

Key Personnel: Sean Vargas, PE, LEED AP BD+C, Env SP - Principal-in-Charge | Jeffrey Chess, PE - Project Manager | Michael Meyer, TE - Transportation Planning | Steve Smith, ASLA - Landscape Architecture and Urban Design

Psomas was selected to prepare the Pre-Design Study for reconfiguring the stop controlled intersection of Rexford Drive and the City Hall parking garage entrance. The Pre-Design Study documents the impacts of eliminating the existing turnaround entrance and creating a "T" configuration intersection, and demonstrates feasibility, constraints, and magnitude of construction cost of the improvements required. Iteris prepared a warrant analysis and incorporated findings into the project recommendations. Psomas, Iteris and Gruen are currently preparing PS&E for the project consistent with the pre-design recommendations.

Reference

Project Administration Division 345 Foothill Road Beverly Hills, CA 90210 Alan Schneider Director, (310) 288-2823

Project Duration

2013

NSMB/Crescent Drive, Right-of-Way Bollards and Street Closure | Beverly Hills, CA

Key Personnel: Sean Vargas, PE, LEED AP BD+C, Env SP - Principal-in-Charge | Jeffrey Chess, PE - Project Manager | Michael Meyer, TE - Transportation Planning

Psomas prepared the Pre-Design Study for construction of a manually operated counterweighted bollard system in Crescent Drive to provide for temporary event street closure between NSMB and Little Santa Monica Boulevard. The Pre-Design Study studied access, subsurface impacts, aesthetics, costs, and appropriateness of each system for the application. Psomas prepared PS&E identifying location of the bollard system, modifications to impacted utility systems, and surface restoration.

Reference

Project Administration Division 345 Foothill Road Beverly Hills, CA 90210 Alan Schneider Director, (310) 288-2823

Project Duration

2013





Recent, Non-Local, Major Urban Roadway Redevelopment

Key Personnel

Ross Barker, PE
- Project Manager

Client

Arriyadh Development Authority

Project Cost

Design Cost \$600,000 (Psomas)

Construction Cost \$160 million

Project Duration

2010 to 2011

King Abdullah Road Redesign

Riyadh, Kingdom of Saudi Arabia

King Abdullah Road was redesigned from a standard urban roadway to a six-lane urban freeway providing free flow of traffic to new interchanges serving King Saud University at Book Gate, and providing a new freeway interchange at King Khalid Freeway to improve access. The project was constrained by existing development, which limited available right-of-way, as well as a major expansion program being constructed by King Saud University adjacent to King Abdullah road.

Special Unique Design Issues

- Limited right-of-way conditions and LRT space requirements required innovative solutions to highway geometrics.
- Existing right-of-way and locations of existing entry and exit ramps required innovative solutions for the new freeway interchange. There was insufficient land available for traditional interchange designs.
- Traffic analysis was integrated with the City-wide traffic model.
- Infrastructure elements including storm drainage, water and sewer systems required significant upgrades and relocations to accommodate the new design.
- Multiple alternatives were developed for the freeway interchange to substantiate the optimal design developed for the project.

Benefit to Client

Psomas brought a new perspective to the road design approach and innovative interchange alternatives. We provided multiple alternative design studies for the interchange to develop the selected design, which provided optimal efficiency within the existing right-of-way constraints. The final design included a three-level interchange and was within the allocated construction budget.

Project Statistics

- 60,000 ADT
- 3.5-km-long (11,500 feet) urban freeway
- Interchange design at King Saud University
- Interchange design at King Khalid Freeway
- Integrated LRT system
- Integrated King Saud University expansion program









Proposition O Clean Stormwater Bond Program

Los Angeles, CA

On November 2, 2004, the voters of Los Angeles overwhelmingly passed Proposition O, which authorized the City of Los Angeles to issue a series of general obligation bonds for up to \$500 million for projects to protect public health by cleaning up pollution, including bacteria and trash, in the City's watercourses, beaches and ocean, in order to meet Federal Clean Water Act requirements.

Psomas was the first design consultant selected by the City under this program. We provided pre-design services, detailed design services, design services during construction, and program management support/staff augmentation. Our efforts involved extensive public outreach, evaluation, design and implementation of retrofit and purpose-built facilities within the public right-of-way and on City owned and acquired property. Projects ranged from installation of structural and "green" treatment measures within existing streetscapes, to new stormwater diversion, treatment, and re-use systems, to new purpose-built complementary-use sustainable stormwater treatment/public park facilities. Psomas led multi-discipline teams to deliver these projects including public outreach, instrumentation and controls, MEP engineering, structural engineering, geotechnical engineering, construction cost control, architecture and landscape architecture, traffic engineering, and wetland biology.

Specific relevant projects included:

Imperial Highway BMP Project | Roadway and urban runoff capture and subsurface treatment from 7.5 acres (1 mile) of Imperial Highway via subsurface retention within the right-of-way. This project mitigated and minimized discharge of pollutants, including oil and grease, suspended solids, and metals to receiving waters.



Local, Sustainable Public Works Stormwater Management

Key Personnel

Sean P. Vargas, PE, LEED AP BD+C, ENV SP

- Principal-in-Charge, Program Manager, Project Manager

Jeffrey Chess, PE

- Project Manager

Client

City of Los Angeles Bureau of Engineering Los Angeles, CA 90015-2213

Contact

Kenneth Redd Deputy City Engineer (213) 485-4906

Project Cost

Design Cost \$8.5 million

Construction Cost \$30+ million

Project Duration

2004 to 2012





Proposition O Clean Stormwater Bond Program

Los Angeles, CA

-- Continued --

- Grand Boulevard BMP Project | Roadway runoff capture and treatment from 7 acres in the Venice area via behind the curb LID measures.
 This project improved surface water quality and beautified the existing streetscape.
- Westside Rainwater Park | Purpose-built Universally Accessible play park. Diversion and treatment of urban runoff from a 10'x11.5' RCB serving a 3,700-acre watershed for reuse as subsurface irrigation.
- Mar Vista Park BMP Project | Regional diversion and runoff capture from a 270-acre subwatershed from 78-inch drain in Sawtelle Boulevard. Subsurface detention, treatment (chlorination/dechlorination), and stormwater reuse for surface park irrigation.
- Westminster Dog Park | Dog park runoff capture and treatment with modular treatment wetland.
- South Los Angeles Wetland Park | Award winning brownfield urban redevelopment project. Regional diversion and runoff capture, new treatment wetland, and public park
- Coastal Low Flow Diversions Interceptor Relief Sewer (CIRS) | Eight coastal Low Flow Diversions to divert and treat winter-dry weather runoff from major ocean outfalls to Hyperion WWTP for treatment. Improvements included new and retrofit pump stations and approximately 5,000 LF of new Coastal Interceptor Relief Sewer within Pacific Coast Highway.

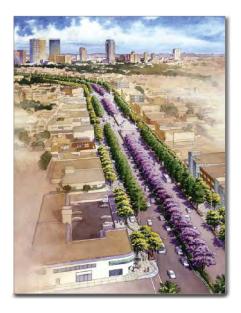






Santa Monica Boulevard Transit Parkway

Beverly Hills, CA



Iteris, with Gruen, led a multidisciplinary team in the design of transportation improvements along Santa Monica Boulevard between the San Diego Freeway and Beverly Hills. Iteris completed the Major Investment Study (MIS), which included the evaluation of arterial High Occupancy Vehicle (HOV) lanes, bicycle lanes, bus transit improvements, and the potential for future rail transit, as well as mixed flow traffic lane capacity improvements. A major community outreach effort was included in the study to involve nearby homeowners and businesses in the alternatives refinement component of the project. Parking issues and neighborhood

traffic intrusion were important to the community. The evaluation of traffic operations along this corridor was complicated by the fact that the existing facility consisted of two parallel two-way roadways separated by an abandoned railroad right-of-way. Standard intersection level of service analysis did not accurately reflect the congestion caused by the interlocking of the closely spaced intersections on either side of the railroad right-of-way. Iteris used the CORSIM model to evaluate existing conditions and future conditions with and without the proposed improvement project, which combined both roadways into one boulevard. The CORSIM simulation was also used to visually present the benefits of the proposed project to the public in public open houses. Urban design elements were also proposed to be implemented as part of this project,

including pedestrian amenities, billboard removal, landscaping, aesthetically pleasing retaining walls, and entry statements. Iteris led the team preparing the Environmental Assessment/Environmental Impact Report (EA/EIR) for the Classic Boulevard concept, which was recommended in the MIS. Iteris also managed the preparation of the Project Report, including preliminary engineering, for the proposed project. Traffic forecasts for the year 2020 were developed by Iteris through use of a customized emme/2 model derived from the City of Los Angeles' City-wide model.

The Average Daily Traffic count for the 2.5-milelong segment was 56,600.

Local Transportation Planning

Key Personnel

Michael Meyer
- Project Manager

Client

Metro One Gateway Plaza Los Angeles, CA 90012

Al Patashnik (213) 922-3080

Project Cost

Design Cost \$975,000 (Fee)

Construction Cost N/A

Project Duration

1995 to 2000





Additional Recent Relevant Projects

PCH Traffic Congestion Relief

Dana Point, CA



Project Dates 2006 to 2009

Psomas provided full engineering services for the widening of Pacific Coast Highway from the San Juan Creek Bridge to Crystal Lantern. The widening added an extra lane in both directions, turning a four-lane facility into a six-lane facility. The project included CEQA/NEPA environmental documentation; geotechnical investigation; widening the roadway to six lanes with curbs and gutters; coordinating with Caltrans for encroachment permit; design of off-site improvements to enhance the public right-of-way including a pedestrian bridge; all signage, striping

and construction period traffic control plan; sidewalks to ADA standards; street lights and traffic signal modifications; Class II bike lanes; drainage structures; and preparing a Storm Water Management Plan. This multiple award winning project met and exceeded its goal of reducing traffic congestion due to heavy pedestrian traffic and resulted in an iconic "gateway" to the City.



Project Dates 2006 to 2010

Van Buren Boulevard Widening

Riverside, CA

Psomas was the lead design and public outreach consultant for a two-mile improvement to Van Buren Boulevard, a major arterial from Jackson Street to 1,000 feet northerly of Jurupa Avenue. The project included an additional traffic lane in each direction and improved parkways for pedestrian access. The roadway was widened to provide up to six travel lanes, and

intersections were improved to reduce congestion and improve traffic flow. The project also incorporated new landscaped medians, complete redesign of the drainage system that previously drained to the open medians, new street lights, new curbs and gutters, ADA compliant sidewalks and curb ramps, new bus stops, parkway and median landscaping, and new traffic signals. Psomas coordinated all utility relocations and adjustments. Signage, striping, construction phase traffic control, and water quality management were also provided.

Right-of-way acquisition was required to construct project improvements. The Psomas Team provided the roadway engineering and right-of-way engineering to the City in support of their appraisal and acquisition services.



Project Date

Crenshaw Boulevard Rehabilitation

Torrance, CA

The City of Torrance awarded Psomas a contract to provide design services for the rehabilitation of approximately two miles of Crenshaw Boulevard from 182nd Street to 190th Street, including ramp improvements at the I-405, and from Sepulveda Boulevard to Maricopa. The project also involved pavement rehabilitation on this major arterial, ADA

improvements, traffic signalization, and capacity improvements at the I-405. These capacity improvements required coordination with Caltrans and the submittal of an encroachment permit to construct the improvements.



Ross Barker, PE

Project Manager/Civil Technical Lead

PSOMAS

Education

BS/1972/Civil Engineering/ Queensland Institute of Technology, Australia

Registration

Professional Engineer/1981/ CA #32799

Affiliations

American Council of Engineering Companies

American Society of Civil Engineers

American Public Works Association Mr. Barker has 40 years of civil engineering management and infrastructure design experience for public works and transportation projects from the earliest concept and planning stages through the final design and construction. Ross is a hands-on Project Principal. He has prepared designs for over a hundred miles of highway and street improvements that meet State, County and local agency criteria. For the past 15 years, Mr. Barker has been at the forefront of sustainable design as it applies to streets and stormwater design and construction.

Mr. Barker's demonstrated commitment to personal involvement in the management and technical aspects of complex roadway redevelopment projects for the City of Beverly Hills and for other local municipalities helps ensure successful project delivery.

Relevant Project Experience

Wilshire Bus Rapid Transit (BRT), City of Los Angeles, CA: QA/QC Manager for PS&E for two roadway segments totaling over four miles. Key project stakeholders included the City of Los Angeles Bureaus of Engineering, Street Lighting, and Street Services; Los Angeles Department of Transportation; Metro; County of Los Angeles; City of Beverly Hills; and each or the same franchise utility companies present in the NSMB corridor. Wilshire Boulevard is a similarly diverse, high ADT, economically important and strategic east-west multimodal transportation corridor; it is the most heavily used transit corridor in Los Angeles County.

Urban Design Program, City of Beverly Hills, CA: Principal-in-Charge for preparation of plans, specifications and cost estimates (PS&E) for complete building-to-building reconstruction of Rodeo Drive, Beverly Drive, Canon Drive, Brighton Way and Dayton Way in the Beverly Hills Golden Business Triangle. The project included complete reconstruction of the street, curb, gutter and sidewalk; new landscape and irrigation; utility relocations; custom street furniture; custom street lighting and pedestrian lighting; traffic signals; and construction staging drawings.

T-Alley Reconstruction Project, City of Beverly Hills, CA: Project Manager, responsible for all design considerations in the repair and improvements to several existing public alleys/streets in the City. The project includes repair and reconstruction of approximately 2,500 LF of existing roadway including extensive drainage improvements. This particular project was challenging as existing street improvements and right-of-way extended up to the face of many existing structures.

Port of Los Angeles, B Street, Los Angeles, CA: Ross provided project management oversight and QA/QC review and coordination between consultants for this Worldport Los Angles expansion of major terminals at the harbor in San Pedro. He reviewed overall project program for constructability and project staging during construction.







Avenue S Widening Phase II Improvements, Palmdale, CA: Principal-in-Charge for preparation of the Project Report Equivalent (PRE) and the Environmental Documentation (NEPA and CEQA) for the widening of Avenue S. Ross managed the multi-disciplinary team of planning, design and environmental professionals to prepare the PRE for Avenue S between 30th Street East and 45th Street East, including the environmental documents. The project objectives were to widen a heavily used arterial highway including raised medians, provide upgraded ADA compliant accessible pedestrian sidewalk and ramps, and construct a Class I bike path. The project requires relocation of overhead and surface utilities; drainage system enhancements; new and reconstructed signalized intersections, and associated signage, striping, lighting and landscaping/irrigation.

Copper Hill Drive Public Improvements, Valencia CA: Principal-in-Charge for the design of Copper Hill Drive to widen this secondary highway to comply with Los Angeles County highway design requirements. The road segment was approximately 5,800 feet long and involved roadway design, storm drain design, signage and striping design, street lighting and traffic signal improvements for three intersections and enhanced parkway areas, as well as grading design for modification of adjacent slope conditions.

King Abdullah Road, West Section, Riyadh, Saudi Arabia: As part of an overall transportation and circulation improvement program for the City of Riyadh, the Arriyadh Development Authority has programmed and implemented a reconstruction program for King Abdullah Road, a main east-west artery within the City. Before the improvement program, King Abdullah Road was a six-lane urban arterial roadway with parking and retail and commercial uses fronting the road. Ross managed the conceptual, preliminary and final engineering design for the three kilometer west section of the road improvement program.

Imperial Highway and Main Street, Los Angeles, CA: Principal-in-Charge for public street improvement plans for the construction of turn pockets and intersection reconfiguration. Work included street improvement plans with related storm drain modifications, traffic signal plans, street lighting plans, signage and striping plans. Coordinated with the client, subconsultants and City departments for plan approvals. Project crossed the City boundary between Los Angeles and El Segundo, which required plan approval from both jurisdictions.

Thousand Oaks Boulevard Widening, Calabasas, CA: Principal-in-Charge and Project Manager for design and construction management services for street widening from two lanes to four lanes, on 2,500 feet of Thousand Oaks Boulevard, in the City of Calabasas. Services included storm drain improvements, reclaimed waterline installation, 2,000 feet of retaining wall, new street lights, and landscaping for a center median and meandering sidewalks on both sides of the boulevard.

Ross Barker, PE

Project Manager/ Civil Technical Lead

PSOMAS

– Continued –



Sean Vargas, PE, LEED AP BD+C, ENV SP

Principal-in-Charge and Sustainability/Stormwater Lead

Psomas Principal and Vice President Sean Vargas has 19 years of civil design, program and project management experience in the municipal and public works sectors throughout California and Florida. He has designed and managed major public municipal programs including multiyear on-call assignments, urban roadway, stormwater, and utility infrastructure projects.

A recognized leader in sustainable street and stormwater design practices, Sean is both ISI Envision credentialed and USGBC LEED accredited. He is an expert in delivery of complex urban transportation and infrastructure projects. As our Sustainability and Stormwater Management Technical Lead he will ensure that the principles of complete, livable streets are balanced with the social and economic project drivers.

Relevant Project Experience

Wilshire Bus Rapid Transit (BRT), City of Los Angeles, CA: Principal-in-Charge and project executive, responsible for pre-design, design and construction administration for reconstruction of two street segments totaling over four miles. Key project stakeholders included the City of Los Angeles Bureaus of Engineering, Street Lighting, and Street Services; Los Angeles Department of Transportation; Metro; County of Los Angeles; City of Beverly Hills; and each or the same franchise utility companies present in the NSMB corridor. Wilshire Boulevard is a similarly diverse, high ADT, economically important and strategic east-west multimodal transportation corridor; it is the most heavily used transit corridor in Los Angeles County.

Urban Design Program, City of Beverly Hills, CA: Project Manager responsible for the preparation of plans, specifications and cost estimates (PS&E) for complete building-to-building reconstruction of Rodeo Drive, Beverly Drive, Canon Drive, Brighton Way and Dayton Way in the Beverly Hills Golden Business Triangle. The project included complete reconstruction of the street, curb, gutter and sidewalk; new landscape and irrigation; utility relocations; custom street furniture; custom street lighting and pedestrian lighting; traffic signals; and construction staging drawings.

NSMB Signal Synchronization, City of Beverly Hills, CA: Project Manager and Principal-in-Charge for preparation of plans, specifications and cost estimates (PS&E) for traffic signal modification and Americans with Disabilities Act (ADA) upgrades at nine intersections along NSMB between Wilshire Boulevard and Beverly Boulevard. The project included full inventory and mapping of all subsurface utilities within the corridor, design and replacement of controllers and cabinets, transit priority system support, design of the video detection system, as well as detector loops for the transit priority system.

On-Call Program, Department of Transportation, City of Beverly Hills, CA: Principal-in-Charge for all projects including traffic, utility infrastructure, and roadway CIP projects and assignments.

PSOMAS

Education

BS/1994/Environmental Engineering/University of Florida, Gainesville

Registrations

Professional Engineer/1998/ FL #54100

Professional Engineer/2002/ CA #63309

USGBC LEED AP/2006

USGBC LEED AP BD+C/2012

ISI ENV SP/2012

Affiliations

Society of American Military Engineers

City of Los Angeles Low Impact Development Ordinance (LID) Technical Committee

Southern California Water Committee (SCWC) Stormwater Task Force



Proposition O Bond Program, City of Los Angeles, CA: Civil Program Manager for all Psomas projects under the \$500 million clean stormwater bond program. Project types included multi-benefit stormwater capture projects in roadway and urban park environments. Facilities ranged in complexity from integrated roadway subsurface stormwater capture to purpose built public parks, to regional capture, transmission and treatment. Specific projects included:

- Imperial Highway BMP Project: Roadway runoff capture and subsurface treatment
- Grand Boulevard BMP Project: Roadway runoff capture and treatment
- Westside Rainwater Park: Regional diversion and runoff capture, new public park, stormwater reuse for subsurface irrigation
- Mar Vista Park BMP Project: Regional diversion and runoff capture, subsurface detention, stormwater reuse for surface irrigation
- Westminster Dog Park: Runoff capture and treatment with modular treatment wetland
- South Los Angeles Wetland Park: Regional diversion and runoff capture, new treatment and wetland public park
- Coastal Low Flow Diversions Interceptor Relief Sewer (CIRS): Regional diversions and new major conveyance

Milton "Green" Street and Public Park, Los Angeles, CA: Project Manager for reconstruction of Milton Street as a "Green" street and a new 1.2-acre urban park along the Ballona Creek Bike Trail, located near the 90 Freeway near Playa Vista. Amenities include a new bike path, naturally vegetated open space, LID measures, and a regional stormwater capture and treatment facility.

Veteran Avenue at Wilshire Boulevard Widening and Kinross Continuation Project, Los Angeles, CA: Project Manager and Principal-in-Charge of the development of PS&E for the road widening and new roadway project along the Wilshire Boulevard corridor in West Los Angeles. The scope included new and reconstructed roadway, signage, striping, signalization and coordination measures for major regional Los Angeles County storm drain facilities.

NBC/Universal Vision Plan, Los Angeles, CA: Principal-in-Charge for this transit oriented development. Supported an extensive public outreach effort related to the development, Environmental Impact Report (EIR), and Specific Plan.

San Fernando Road Widening at Glendale Freeway, Los Angeles, CA: Principal-in-Charge of the traffic study, and preparation of PS&E for this secondary highway project.

Sean Vargas, PE, LEED AP BD+C, ENV SP

Principal-in-Charge and Sustainability/ Stormwater Lead

PSOMAS

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Traffic/Transportation Engineering and Planning, and Street Lighting



Education

MA/1977/Transportation Planning and Public Policy/ University of California, Berkeley

BS/1974/Civil Engineering/ University of California, Berkeley

Registration

Traffic Engineer/1979/CA #1390

Affiliations

Institute of Transportation Engineers

American Planning Association

Women's Transportation Seminar

Congress for the New Urbanism

Mr. Meyer has managed transportation planning and traffic engineering projects of increasing importance during his 35 years as a transportation consultant. His wide ranging client base includes both the public and private sector, and he is frequently a member of multi-disciplinary teams developing integrated land use and transportation plans.

Mr. Meyer's has extensive experience working on projects in Beverly Hills. He has prepared transportation analyses for environmental documents on projects such as 9900 Wilshire, office developments in the Entertainment Business District, and City Parking Lot D and public works projects on Sunset Boulevard, on Rexford Drive in the Civic Center, and for Camden Drive Special Event Closures.

Other recent projects include the Metro Orange Line Busway Extension; Santa Monica Boulevard Transit Parkway Project and Downtown Los Angeles Transportation Access Plan and New Street Design Standards in Los Angeles; Westside Subway Extension Consensus Building Effort; San Fernando Valley North-South Transit Corridor Study; Ontario Agricultural Preserve Transportation Implementation Plan; and Neighborhood Traffic Management projects in Long Beach, Pasadena, Beverly Hills and San Marino.

For Caltrans, Mr. Meyer has managed projects related to signal design, ramp meter design, telephone communications, CCTV design, and traffic data collection. Mr. Meyer has developed transportation plans for transit oriented developments and new urbanist developments.

Relevant Project Experience

Wilshire Bus Rapid Transit (BRT), City of Los Angeles, CA: The project included reconstruction of two street segments totaling over four miles. Key project stakeholders included the City of Los Angeles Bureaus of Engineering, Street Lighting, and Street Services; Los Angeles Department of Transportation; Metro; County of Los Angeles; City of Beverly Hills; and each of the same franchise utility companies present in the NSMB corridor. Wilshire Boulevard is a similarly diverse, high ADT, economically important and strategic east-west multimodal transportation corridor; it is the most heavily used transit corridor in Los Angeles County.

Metro Orange Line Northern Extension: Project Manager for preparation of alternatives analysis, conceptual engineering and environmental clearance, final design of key elements and preparation of design-build documents for the four-mile extension of the Metro Orange Line north from Canoga/Warner Center to the Chatsworth Metrolink Station. Nine alternatives were screened to two build alternatives and TSM for the EIR. The build alternatives include on-street dedicated bus-only lanes on Canoga Avenue, and an off-street busway alternative on Metro-owned railroad right-of-way parallel to Canoga Avenue. Following award of the design/build contract, served as project liaison during the designbuild phase of the project.





Mid-City Westside Transit Corridor: Principal-in-Charge for transportation analysis of the Wilshire and Expo Corrdors in MIS and EIR phases. Managed before and after studies for Wilshire BRT dedicated peak period lane.

Downtown Los Angeles Access and Circulation Study: Project Manager for a study that analyzed access issues related to the freeway ring around Downtown Los Angeles and circulation within Downtown. A key issue was one-way versus two-way street circulation patterns. New street standards, respective of historic and permanent high-rise buildings, were developed on a block-by-block basis.

Westside Cities Transportation Planning: For six years, served as Project Manager for transportation policy analysis for the cities of Beverly Hills, Culver City, Santa Monica and West Hollywood, providing input to regional policy documents, and developing traffic impact study guidelines, pedestrian safety tool box, taxi licensing program, and other focused studies.

On-Call Traffic Engineering: Principal-in-Charge for on-call contracts for Caltrans Districts 7 and 8. Assignments included Signal Design, Ramp Metering, CCTV, and Fiber Optic Communications Design.

Interstate 5 Interim High Occupancy Vehicle (HOV) Project: Project Manager for the analysis of traffic impacts associated with the interim HOV project on I-5 between Orange County and I-710. Analysis included parallel arterial streets, freeway interchanges and mainline, and both construction impacts and permanent changes in traffic patterns.

Main Street Pedestrian Improvements: Principal-in-Charge for analysis of pedestrian safety improvements along Main Street in the Civic Center area of Santa Monica.

Santa Monica Boulevard Transit Parkway: Project Manager for a Major Investment Study, followed by EIR and Project Report for the reconstruction of Santa Monica Boulevard (SR 2) in West Los Angeles. Two parallel roadways will be reconstructed as a "Classic Boulevard" with bike lanes and transit priority, plus major urban design upgrades and neighborhood traffic management. Consensus on the preferred project was developed through an extensive community outreach effort.

Multi-Modal Planning Studies for San Fernando Valley East-West Transit Corridor Major Investment Study (MIS): Principal-in-Charge for several studies and environmental documents addressing alternate modes in the east-west corridor from North Hollywood to Warner Center. Studies addressed the extension of the Red Line Subway, light rail, and busway alternatives.

Westside Extension Transit Corridor: Project Manager for consensus building effort on the alternatives analysis evaluating extension options for the Metro Purple Line or Metro Red Line "Subways to the Sea."

Anaheim Garden Walk: Project Manager for transportation planning and impact analysis for the retail/entertainment complex across Harbor Boulevard from Disneyland.

Michael Meyer, TE

Traffic/Transportation Engineering and Planning, and Street Lighting

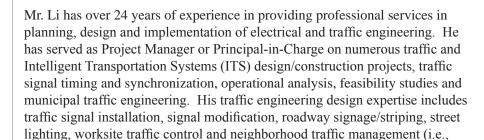


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Traffic/Transportation Engineering and Planning, and Street Lighting



Mr. Li's ITS experience comprises fiber optic communications, closed-circuit television (CCTV), video-detection system (VDS), dynamic message signs (DMS) and highway advisory radio (HAR). He also has vast expertise in traffic signal operations, having assisted many agencies in analysis, retiming and synchronization of traffic signals, both corridor and network wide; and he is highly familiar with various traffic signal systems. His transportation planning expertise includes traffic impact studies, parking studies, transportation master plans, signal warrant analysis and stop warrant analysis. He has also served as City Traffic Engineering Consultant for various agencies, resolving numerous day-to-day traffic engineering issues, including residents' inquiries, plan checking and safety evaluation.

Relevant Project Experience

traffic calming).

Vermont Avenue Arterial Improvement Project, City of Gardena, CA: Project Manager leading a consultant team, including Psomas as a key civil engineering subconsultant, to provide preliminary engineering, design, and construction management of the Vermont Avenue Arterial Improvement Project from Rosecrans Avenue to 182nd Street in the City of Gardena. The project is divided into three phases. For the initial preliminary engineering phase, performed detailed field investigation of the entire corridor to identify deficiencies, and recommended improvements to enhance safety and traffic flow along the corridor. Topographic survey, geotechnical investigation, traffic signal, signing and striping inventory were conducted as part of the field investigation. Upon the City's approval of the Preliminary Design Report (PDR), prepared full PS&E package during the design phase, which includes ADA ramps enhancement, pavement rehabilitation, traffic signal upgrades, signing and striping modifications for the entire 2½ mile corridor. The Iteris Team will also act as the Construction Manager during the construction phase of the project.

Bastanchury Road Two New Traffic Signals, Traffic Signal Interconnect and a New Equestrian Trail Design Project, City of Yorba Linda, CA: Project Manager for design of the installation of two new traffic signals at the intersections of Bastanchury Road/Secretariat Way and Bastanchury Road/ Clydsedale Way, removal of an existing mid-block equestrian crossing signal, installation of two miles of new signal interconnect cables, and construction of a new equestrian trail on Bastanchury Road in the City of Yorba Linda.



Education

BS/1988/Electrical Engineering/ University of Southern California, Los Angeles

Registrations

Registered Electrical Engineer:

1995/CA #14842 2002/AZ #37241 2011/NV #021200

Registered Traffic Engineer/ CA #1763

Professional Traffic Operations Engineer/# 214

Affiliations

Institute of Transportation Engineers - Technical Coordinator

Orange County Traffic **Engineering Council**

Managed a team of both in-house traffic engineering staff and civil engineering subconsultant to complete the PS&E package. Design elements also included new ADA ramps for both intersections, median modification with landscape and irrigation, relocation of an existing "signal ahead" flashing unit, and signing and striping. The project also required close coordination with all utility companies, including Edison for the new service feed to the two new signals.

Katella Avenue Widening at Interstate 5 Undercrossing Project, Anaheim,

CA: Deputy Project Manager and Project Electrical Engineer for design of all electrical facilities for the widening of Katella Avenue at the I-5 freeway undercrossing between Manchester Avenue and Anaheim Way. Electrical plans for this project included City roadway lighting along Katella Avenue, Caltrans soffit lighting under the I-5 freeway bridge, City-owned fiber optic communications, State-owned ramp metering and communications at the I-5 on/off ramps, and traffic signals at both intersections. All project plans and specifications were prepared in conformance with both the City of Anaheim and Caltrans' requirements, and were reviewed and approved by both agencies.

Milliken Avenue Grade Separation Project, Ontario, CA: Project Manager for electrical and traffic engineering design components of the Milliken Avenue Grade Separation Project in the City of Ontario. The project involved reconstructing Milliken Avenue, which intersected Mission Boulevard and the Union Pacific Railroad tracks, to become an overpass above both Mission Boulevard and the tracks. In order to provide access between Mission Boulevard and the newly elevated Milliken Avenue, ramps were constructed along Mission Boulevard to create an elevated intersection with Milliken Avenue. With this new configuration, numerous traffic and electrical engineering design plans were required, including street lighting along both Milliken Avenue and Mission Boulevard, soffit lighting under the newly elevated bridge, fiber-optic communications, modified or new traffic signals at three intersections, as well as signing and striping.

Diamond Bar Boulevard Median Modification Project, City of Diamond Bar,

CA: Project Manager for design of median modifications along Diamond Bar Boulevard at two unsignalized driveways. These were located at the Big Lots shopping center, and at the Diamond Bar Post Office, both adjacent to Grand Avenue. Diamond Bar Boulevard is a major arterial within the City carrying over 50,000 vehicles daily. Vehicles making left turns into these unsignalized driveways had poor line-of-sight for oncoming traffic. Serving as Consultant Traffic Engineer for the City, made a recommendation to modify the medians to improve line-of-sight. Led the design team, including a civil engineering subconsultant, to conduct topographic survey of both intersections and design the median modification by narrowing the width of the medians with channelization, such that vehicles entering the left-turn pockets had a much improved line-of-sight. The design also included the affected landscaping and irrigation, as well as signing and striping.

Bernard Li, EE, TE, PTOE

Traffic/Transportation Engineering and Planning, and Street Lighting



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Debra Gerod, AIA, LEED AP

Landscape Architecture and Urban Design

GRUENASSOCIATES ARCHITECTURE PLANNING INTERIORS

Education

BA/Environmental Design/ University of Colorado, Boulder

Registration

Registered Architect/CA

Affiliations

Member, American Institute of Architects

Board Member, ACE Mentoring Program

Member of the Governance and Nominating Committee, ACE Mentoring Program

Member of the National Affiliate Committee, ACE Mentoring Program

LEED Accredited Professional

The Woman of Excellence Business 2006 Award from the YWCA Pasadena-Foothill Valley Section Ms. Gerod joined Gruen Associates in 1988 and became a Partner in 2002. During her tenure at Gruen Associates, her primary focus has been large-scale, significant civic projects performed in collaboration with preeminent Design Architects. These projects include the Orange County Performing Arts Center designed by Cesar Pelli, the Los Angeles Convention Center designed by James Ingo Freed, the Ronald Reagan Federal Building and United States Courthouse designed by Zimmer Gunsul Frasca Partnership, the Capitol Area East End Complex designed by Johnson Fain Partners, the Fresno United States Courthouse designed by Moore Ruble Yudell, and the United States Embassy in Berlin, also designed by Moore Ruble Yudell. Through her work on these projects, Ms. Gerod has coordinated the development and implementation of over 22 public art installations, including seven major commissions ranging in cost from \$125,000 to \$900,000.

Ms. Gerod has a "hands-on" approach to project management and devotes many hours to training and mentoring staff. Additionally, Ms. Gerod's expertise includes a focus on sustainable design.

Relevant Project Experience

- Mid-City/Exposition Corridor Light Rail Transit Project Design-Build Phase 1, Los Angeles County, CA
- Los Angeles International Airport Central Utilities Plant, Los Angeles, CA
- Los Angeles Union Station Master Plan, Los Angeles, CA
- Ahmanson Theater Proscenium Renovation, Los Angeles, CA
- Dorothy Chandler Pavilion Renovation, Los Angeles, CA
- Santa Monica City Council Chamber, Santa Monica, CA
- Brand Library and Art Center Renovation, Glendale, CA
- Academy Museum of Motion Pictures, Hollywood, CA
- Renee and Henry Segerstrom Concert Hall, Costa Mesa, CA
- Caltrans District 7 Headquarters, Los Angeles, CA
- Los Angeles Convention Center Expansion, Los Angeles, CA
- Los Angeles Convention Center, Convertible Garage/Exhibit Hall
- District Attorney's Office Building and Parking Garage, Riverside, CA
- Los Angeles County Fire District Headquarters, Los Angeles County, CA
- JPL Administration Building and Education Center, Pasadena, CA
- Pacific Design Center, Red Building, Phase 3, Los Angeles, CA
- Capitol Area East-End Complex, Sacramento, CA
- Foley Federal Building and U.S. Courthouse Renovation, Las Vegas, NV
- Ronald Reagan Federal Building and U.S. Courthouse, Santa Ana, CA
- Robert E. Coyle U.S. Courthouse, Fresno, CA
- Jewish Federation Goldsmith Center, Los Angeles, CA
- United States Embassy, Berlin, Germany
- 201 Ocean Avenue Seismic Retrofit/Earthquake Repair, Santa Monica, CA
- Sisk Federal Building and U.S. Courthouse, Fresno, CA
- Van Nuys Airport Seismic Retrofit, Van Nuys, CA
- The Los Angeles Philharmonic Association Offices at the Disney Concert Hall, Los Angeles, CA
- Disney World Headquarters, Burbank, CA





Steve Smith, ASLA

Landscape Architecture and Urban Design

Mr. Smith possesses a strong background in urban and architectural design applications. He has designed and managed several large-scale parks, institutional and commercial projects. In addition, his experience has allowed him to work on various transportation and master planning projects, college campuses, parks, river greenbelts, large-scale housing developments, institutional and health care complexes. He is responsible for project coordination, schematic design, design and production documents, cost estimating, construction administration and review.

Relevant Project Experience

Beverly Hills Gateways and Streetscapes, City of Beverly Hills, CA: Lead Landscape Architect and Designer for the overall Gateway Study. The four sites that were studied included Santa Monica Boulevard at Doheny Drive, San Vicente at Wilshire Boulevard, Olympic Boulevard at Beverly Hills High School, and Wilshire Boulevard at Whittier Drive. The recently completed Wilshire Boulevard Gateway includes steel monument sign pylons, lanterns, classic Beverly Hills shield signs, new planters, walls, landscape plantings and palms in the center median. Construction drawings have been completed on the Doheny-Santa Monica Gateway, which includes a stone-clad wall sign, waterfall, fountain and extensive landscape and layout improvements to this strategic gateway entrance to the City of Beverly Hills.

Carson Street Master Plan Implementation of Public Improvements,

Carson, CA: Project Manager and Senior Landscape Architect, working with the Redevelopment Agency to incorporate sustainable landscape bioswales along the sidewalks and enhanced pedestrian environments which will give this most important street in the City of Carson a boost in attracting new mixed-use development and housing according to the objectives stated in the Carson Street Master Plan.

Rosemead Boulevard Enhancements, Temple City, CA: Project Manager and Senior Landscape Architect responsible for the schematic design, construction documents and construction administration for the street improvements to the three-mile segment of the boulevard. Current plans include sustainable bioswales in new bump-out parkways, multimodal improvements including Class I bike lanes, ADA accessibility, custom bus shelters, seating nodes, public art amenities, gateway signage monuments, new street trees and accent plantings in new and renovated traffic medians.

Pico Boulevard Streetscape Improvements, Los Angeles, CA: Project Manager/Landscape Architect for schematic design, preparation of construction documents, and construction administration for street improvements to a four block segment of Pico Boulevard near downtown Los Angeles that includes gateway markers, street trees, decorative pedestrian crosswalks, street furniture, and public art elements, as well as enhanced pavement, curb ramps (ADA accessibility), pedestrian lighting, bus shelters, wayfinding, benches, trash receptacles, and bike racks.



Education

MLA/California State Polytechnic University, Pomona,

BA/Political Science/Brigham Young University, Provo, Utah

Registration

Registered Landscape Architect/ 1990/CA #4478 | 1983/ID #113

Affiliation

American Society of Landscape Architects





Timothy Hayes, PE

Discipline Integration and QA/QC Manager

PSOMAS

Education

BS/1992/Civil Engineering/ California Polytechnic State University, San Luis Obispo

Registration

Professional Engineer/ 1998/ CA #C58986

Affiliations

American Public Works Association

Women's Transportation Seminar

American Society of Civil Engineers Mr. Hayes has 21 years of experience in planning and design of transportation improvements with a focus on widening of major arterial roadways. Thus, he is adept at identifying and addressing various challenges that arise, including impacts to utilities, upgrading sidewalk and ramps to full ADA compliance, and geometric and drainage modifications to intersections.

He has worked on numerous Preliminary Design Reports for many agencies throughout Southern California. With his experience working on similar projects, Mr. Hayes knows what it takes to achieve timely approvals of a comprehensive preliminary design report.

Relevant Project Experience

Wilshire Bus Rapid Transit (BRT), City of Los Angeles, CA: Project Engineer for pre-design, design and construction for reconstruction of two street segments totaling over four miles. Key project stakeholders included the City of Los Angeles Bureaus of Engineering, Street Lighting, and Street Services; Los Angeles Department of Transportation; Metro; County of Los Angeles; City of Beverly Hills; and each of the same franchise utility companies present in the NSMB corridor. Wilshire Boulevard is a similarly diverse, high ADT, economically important and strategic east-west multimodal transportation corridor; it is the most heavily used transit corridor in Los Angeles County.

BOE On-Call Engineering, City of Los Angeles, CA: Task Manager for on-call engineering services for the design and construction support services for the City of Los Angeles BOE. Responsible for providing design and support services for several projects including the Los Angeles River/Taylor Yard Pedestrian/Bikeway Bridge and Access Project and the Value Analysis Study Report for North Spring Street Bridge Project. Currently serving as the QA/QC manager responsible for reviewing the final design deliverables for the North Spring Street Project.

West Los Angeles Mobility Study, Los Angeles, CA: Lead Technical Engineer responsible for the preliminary engineering and evaluation of the West Los Angeles Mobility Study. The purpose of the planning study was to develop a blueprint for addressing traffic congestion in West Los Angeles in the short and long term. The study, funded by private businesses on the Westside, consisted of a constraints and potentials analysis to evaluate how travel delay could be decreased and travel speeds increased along the major corridors on the Westside, including Wilshire. Preliminary engineering drawings were developed and cost estimates were prepared for the recommended transportation improvements.

White Rock Road Project, Preliminary Engineering Report, 50 Corridor Mobility Partnership: Served as the Project Manager responsible for the preparation of the Preliminary Engineering Report (PER) for the White Rock Road Improvements. The project purpose is to provide parallel capacity to Highway 50 in order to relieve congestion and improve regional traffic circulation in one of the fastest growing areas in the region. In recognition of his outstanding efforts in completing the preliminary engineering report on such an accelerated schedule, Tim received the Eagle Award from Caltrans.



Feasibility Study for Pier B Street Realignment and Improvements, Port of Long Beach, CA: Project Engineer responsible for studying the feasibility of relocating Pier B Street to facilitate the expansion of the 8th Street rail yard, provide continuity between Pier B Street and Carrack Avenue, and provide access to northbound Terminal Island Freeway. The report detailed alternatives, constraints, and utility impacts; environmental issues; right-of-way impacts; and construction cost estimates.

Union Valley Parkway, Santa Maria, CA: Project Manager responsible for the project report and final design to extend and widen Union Valley Parkway. The project involved two miles of new roadway including an intersection with State Route 135. Responsibilities included evaluating multiple interchange configurations at SR 135/UVP, as well as the proposed at-grade intersection with SR 135. The project required close coordination with the City, County, and State.

I-5 Truck and HOV Lane Widening Improvements from SR 14 to Parker Road Interchange, Project Report, Caltrans District 7, Los Angeles County, CA: Design Manager for the PA&ED phase of the I-5 HOV and Truck Lane Improvements. Mr. Hayes was responsible for the preparation of the Preliminary Drainage Report, Storm Water Data Report, Water Quality Study, and Summary Floodplain Encroachment Report. The project included the development of two alternatives for a reduced median width and a full median width alternative. Proposed improvements included widening to the inside and outside of the existing traveled lanes including bridge structure widening or structure replacements.

State Route 55/State Route 22 Interchange Modifications, Orange County Transportation Authority, Orange County, CA: Project Engineer responsible for preparation of the drainage and utility portions of the PS&E to modify the interchange. The drainage work included the preparation of a Hydrology/ Hydraulic Study and Final Drainage Report. The utility work included the preparation of a utility constraints map and report, as well as identification of utility permit/agreement requirements and preparation of necessary applications.

Timothy Hayes, PE

Discipline Integration and QA/QC Manager

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Andrew Gust, PE

Discipline Integration and Constructability

PSOMAS

Education

BS/ 1981/California Polytechnic State University, San Luis Obispo

Registration

Professional Engineer/1984/ CA #38194

Affiliations

American Public Works Association

American Society of Civil Engineers

California State Association of Counties

Construction Management Association of America

Women's Transportation Seminar Mr. Gust has 30 years of construction management and inspection experience in program management, project development, and field construction supervision; specification and estimate development; pre-construction activities including project bid advertising, notice to bidders, and responding to pre-bid inquiries from contractors; plan and specification reviews; and project claims evaluation of numerous roadway, bridge and street infrastructure. His responsibilities have included supervision and direction of engineers, construction crews/contractors, field inspectors, materials testing technicians and survey parties; contract administration; contract compliance and quality assurance of project materials and workmanship; negotiation and issuance of contract change orders; and resolution of contract claims.

Relevant Project Experience

Arena Boulevard/Interstate 5 Interchange Project, Sacramento, CA: As the Resident Engineer/Structures Representative for this \$14 million interchange, Andy was responsible for contract administration and inspection of work. The project involved constructing a freeway overcrossing over eight lanes of Interstate 5, connecting loops and ramps (and corresponding traffic signals), retaining walls, extensive curb, gutter and sidewalk, and a joint utility trench. The project was constructed in order to connect residential and commercial areas to ARCO Arena, providing both a walkable area and a safe bicycle connection over the freeway. The work was within the Caltrans right-of-way and involved Caltrans oversight and involvement. Duties included utility coordination, dust mitigation, public outreach to local businesses and land owners, traffic control (including night work), effective communication with the City Project Manager and Caltrans, and complete contract administration, including materials testing, surveying, submittal review, change order and claim preparation, and project documentation.

Jefferson Boulevard Road Widening, West Sacramento, CA: Resident Engineer for construction management and inspection services for the City of West Sacramento on Jefferson Boulevard, a vital thoroughfare in the central and south portion of the City, which had neared its capacity limits. The project included the widening of the current roadway from two to four lanes, pedestrian facilities, storm drainage, water and sewer mains, traffic signals, landscaping, and a community wall on the west side of Jefferson Boulevard from Lake Washington Boulevard to Devon Avenue. In addition to the construction of a new bridge over the deep-water channel, the steel deck on the existing bridge was modified to improve vehicle traction. Extensive utilities owned and operated by PG&E, SBC, Charter Communications, and the City's water and sewer required relocation throughout the job site.

Caltrans Seismic Retrofit Projects, Cities of Los Angeles, San Jose, and San Francisco, CA: Project Manager for several seismic retrofit contracts with Caltrans in San Jose, San Francisco, and Los Angeles. Project Manager on a utility bridge removal and reconstruction with the City of Daly City. Responsible for assurance of project compliance of field staff in areas of project documentation, quality assurance of field inspection and materials, compliance





with contract specifications, and assistance with contract change orders and claim resolution issues. Responsibilities included supervising staff of up to 20 engineers and field inspectors at six different locations.

Highway 65, Sunset Boulevard Interchange, Placer County, CA: Andy served as the Structures Representative and Assistant Resident Engineer on the \$18 million Highway 65 Sunset Boulevard interchange. This interchange will eliminate Highway 65's last signalized intersection between I-80 and Lincoln. The project includes construction of a six-lane overpass to take Sunset over the highway and will allow for Highway 65 to be widened eventually to eight lanes with auxiliary lanes. The interchange will have a partial cloverleaf design with a circular on-ramp to move westbound Sunset traffic to the highway's southbound lanes, and a circular on-ramp for eastbound motorist on Sunset who want to head north on the highway. The project also includes relocation of a vital 24" main during construction activities which is the sole source of water for properties west of Highway 65.

Caltrans Division of Structures, Sacramento, CA: Senior Bridge Engineer for the Specifications and Estimates Branch, Caltrans Division of Structures. Responsible for constructability reviews, contract plan detailing reviews, and estimate and specification reviews of consultant-designed projects for structure work to be constructed on all publicly owned highways in California. Developed and presented to the first class given to consultant designers on how to properly develop specification and estimate material for consultant designed projects submitted to Caltrans.

Andrew Gust, PE

Discipline Integration and Constructability

PSOMAS

Continued --



Alejandro Angel, PhD, PE

Discipline Integration and QA/QC Manager

PSOMAS

Education

PhD/2008/Civil Engineering (Transportation) /University of Arizona

MS/2002Civil Engineering (Transportation) /University of Arizona

BS/1999/Civil Engineering/ Universidad EAFIT, Colombia

Registrations

Professional Engineer/2008/ CA #72792

Professional Traffic Operations Engineer/2004/AZ #1324

Professional Engineer/2003/ AZ #40203

Affiliations

Institute of Transportation Engineers Alejandro is Vice President of Traffic Engineering for Psomas. He holds MS and PhD degrees in traffic engineering from the University of Arizona and is a Registered Professional Engineer in California and Arizona.

Dr. Angel's experience includes numerous traffic engineering studies, safety evaluations, development of engineering standards and policies; and the planning and design of roadway and highway projects, roundabouts, traffic signal systems and Intelligent Transportation Systems. Alejandro and his team have completed projects in California, Utah, Arizona, Washington, the Middle East and South America. His research has been presented by ASCE, ITE, TRB, and IEEE.

Alejandro's background includes a unique combination of roadway and traffic planning and engineering design, which allows him to clearly identify project constraints and interdisciplinary conflicts.

Relevant Project Experience

Walnut Street Rehabilitation, City of Lomita, CA: The rehabilitation of Walnut Street extended from Pacific Coast Highway to Ebony Lane. Key concerns included speeding, pedestrian safety in the vicinity of Fleming Junior High, and driver confusion at two five-leg intersections. Some of the strategies proposed included a road diet, shortened pedestrian crossing distance, implementation of a High Intensity Activated Crosswalk (HAWK signal), and the reconfiguration of the Bland Place/Walnut Street/257th Street, and the Ebony Lane/Walnut Street/253rd Street intersections.

Anklam Road Widening, City of Tucson, AZ: Project Engineer responsible for this collector roadway widening project, which also involved the construction of improvements for alternative modes of transportation including bike lanes, sidewalks, a pedestrian path, and a pedestrian traffic signal (HAWK) to facilitate access to the Maxwell Middle School. Alejandro developed the roadway and cross-drainage plans, prepared the engineer's estimate, and coordinated with the City of Tucson through the design process.

Cortaro Farms Road, I-10 to Thornydale Road, Pima County Department of Transportation, Pima County, AZ: The goal of this project was to widen a two-mile stretch of Cortaro Farms Road, an arterial road in northwest Tucson, from two to four lanes. Alejandro's responsibilities included the design of horizontal and vertical alignments, preparation of cost estimates, and review of signal and ITS conduit plans for the project. The project also required significant coordination between stakeholders, which included the area residents, Pima County, the Town of Marana, Union Pacific Railroad, and Tucson Electric Power, among others.

Harbor Boulevard and Bastanchury Road Modifications Design-Build, McCarthy Building Companies, Fullerton, CA: Alejandro managed the traffic engineering design of this project, which included the addition of a right turn lane, widening of existing travel lanes on Bastanchury Road, traffic signal modifications, street lighting relocations, and the development of associated signing and pavement markings plans.



Hatillo-Niquia Concession Highway, Province of Antioquia, Medellin,

Colombia: Alejandro served as a Consultant for the State in the concession of a 15-mile urban highway. The existing two-lane highway was widened to a six-lane highway. Specific responsibilities included analyzing financing alternatives and estimating user benefits. A significant amount of interaction with the community was required in order to assess the feasibility of financing alternatives.

Houghton Road, 22nd Street to Valencia Road DCR, City of Tucson, AZ: As Project Manager, Alejandro was responsible for the development of the Design Concept Report and 30% plans for the widening of this six-mile corridor to six lanes. This project included determining design criteria, designing horizontal and vertical alignments and typical roadway sections, and roadway modeling. Also provided were an assessment of right-of-way needs, a drainage analysis, a bridge selection report for the Pantano Wash Bridge, and an analysis of construction phasing. Psomas is currently performing the final design of the three-mile segment from Irvington Road to Valencia Road.

Ninawa Structural Plan, Transportation Evaluation, Northern Iraq: Project Engineer to prepare the structural plan for Ninawa Province in northern Iraq. Services provided include data analysis of existing conditions, generation of alternatives, proposed plan draft, and detailed final plan.

Signal Modification for Highway 1, Laguna Beach, CA: This project consisted of signal design modifications to South Coast Highway (State Route 1) in Laguna Beach. The intersections included in the project were Saint Anns Drive, Anita Street, Oak Street, Brooks Street and Mountain Road. Alejandro was a senior engineer providing quality control and design advice for this project.

Signal Improvements for Pacific Coast Highway, Dana Point, CA: This project consisted of signal design modifications for six intersections along Pacific Coast Highway in Dana Point. The intersections included in the project were Blue Lantern, Ruby Lantern, Violet Lantern, Amber Lantern, Golden Lantern, and Copper Lantern. Alejandro was a senior engineer providing quality control and design assistance for this project.

Alejandro Angel, PhD, PE

Discipline Integration and QA/QC Manager

PSOMAS

– Continued –







Education

MS/Construction Management/ Polytechnical University, Minsk, Belarus

BS/Civil Engineering/ Polytechnic University, Minsk, Belarus

Training Coursework

ASPE National Conference/ Timberline Estimating Software/ CACES Estimating Software/WIN Estimating Software/Primavera P3 Scheduling/Primavera Expedition/Prolog

Registrations

Certified Professional Estimator

General Building Contractor "B" License, California, 1982

Affiliations

Instructor - "Cost Estimating for the General Contractor" - Los Angeles Community College District, 2005-2010

American Society of **Professional Estimators** President of the Los Angeles Chapter #1 1991, 2004-2005

George Elkin, CPE

Cost Control

Mr. Elkin is a Certified Professional Estimator with over 30 years of experience in all phases of construction and project management. He is highly skilled in estimating, scheduling, budget control, and has served as a claims/expert witness. His work specialties include design-to-construction cost estimating, value engineering support, claims support, as well as detailed change order review and negotiation.

Mr. Elkin's cost estimating expertise spans multiple industries with special emphasis on transportation infrastructure. Additional specialty areas include road and highway, heavy civil, structural, architectural, utilities, trackwork, and tunnel.

Relevant Project Experience

Metro Gold Line Eastside Extension Access Project, Los Angeles, CA: Provided streetscape improvements.

2nd and 4th Streets Pedestrian Streetscape and Lighting Improvements, City of Santa Monica, CA: Provided Schematic Design Cost Estimate, Caltrans Review Estimate, and Construction Documents Cost Estimate Add Bid Alternative.

Grand Civic Park Infrastructure Improvements, City of Los Angeles **Department of Public Works, CA:** Building new shade structures, walkway bridge, terraces, children's play area, providing new utility infrastructures and repairing the landscaping of a 12-acre site.

Metro I-405 Sepulveda Pass Widening Project, Design/Build, Los Angeles, CA: Provided estimating support for design and construction phases. Project includes new HOV lane, freeway roadway, retaining and sound walls, replacement bridges and ramps, bike lanes, utility relocation and power infrastructure. Provided realignment of Sepulveda Boulevard and improvements to Sepulveda/Wilshire Intersection.

VE Study I-710 Corridor and Express Lane I-10/I-110, Los Angeles, CA: Metro/Caltrans.

I-710 Corridor South End Utility Relocation, Long Beach, CA: The I-710 project impacts hundreds of underground utilities that are also impacted by adjacent projects proposed by the Port of Long Beach and the City of Long Beach. Furthermore, the project also impacts an active oil field located in the vicinity of downtown Long Beach.

OCTA NB I-405 at Off Ramp to Culver Drive, City of Irvine, CA: Peer review of Engineer's Cost Estimate.

Metro Crenshaw/LAX Transit Corridor, Los Angeles, CA: Extension of existing Metro Exposition Line at Crenshaw and Exposition Boulevards. The Line will travel 8.5 miles to the Metro Green Line's Aviation/LAX Station. The project includes six stations and twp optional stations.





Jeffrey Chess, PE

Subconsultant Coordination and Documentation Production

Mr. Chess is a registered civil engineer with 19 years of experience in transportation and public works engineering. He has prepared and managed civil engineering design and studies, including roadway, grading, and drainage for local roadways to major highways. Prior to joining Psomas, Jeff worked for Caltrans where he gained extensive experience in dealing with environmental aspects of roadway projects including hazardous waste mitigation, BMP implementation and environmental report contribution. He also has ample experience in permitting with most Southern California cities (including Beverly Hills) and counties, as well as many state and local agencies.

Relevant Project Experience

North Santa Monica Boulevard Signal Synchronization, City of Beverly Hills, CA: Assistant Project Manager for the preparation of plans, specifications and cost estimates (PS&E) for traffic signal modification and Americans with Disabilities Act (ADA) upgrades at nine intersections along NSMB between Wilshire Boulevard and Beverly Boulevard. The project included full inventory and mapping of all subsurface utilities within the corridor, design and replacement of controllers and cabinets, transit priority system support, design of the video detection system, as well as detector loops for the transit priority system.

Proposition O Bond Program, City of Los Angeles, CA: Project Manager for select projects under the \$500 million clean stormwater bond program. Project types included multi-benefit stormwater capture projects in roadway and urban park environments. Facilities ranged in complexity from integrated roadway subsurface stormwater capture to purpose built public parks to regional capture, transmission and treatment. Specific projects included:

- Westside Rainwater Park: Regional diversion and runoff capture, new public park, stormwater reuse for subsurface irrigation
- Mar Vista Park BMP Project: Regional diversion and runoff capture, subsurface detention, stormwater reuse for surface irrigation

North Santa Monica Boulevard/Doheny Gateway Project: Project Manager responsible for civil engineering design and specifications of this high profile City gateway project, including grading, accessible path of travel, and coordination of new water service to the project. Collaborated with the landscape architect and traffic engineer to locate project improvements. The design team considered future planned improvements to Santa Monica Boulevard and developed project scope and work limits accordingly. The project required design approval from both the City of Beverly Hills and the City of West Hollywood.

Rexford Drive Intersection Improvements: Project Manager responsible for preparing the Pre-Design Study for reconfiguring the stop controlled intersection of Rexford Drive and the City Hall parking garage entrance. The Pre-Design Study documents the impacts of eliminating the existing turn-around entrance and creating a "T" configuration intersection, and demonstrates feasibility, constraints, and magnitude of construction cost of the improvements required.

PSOMAS

Education

BS/1993/Civil Engineering Building Science/Architectural Engineering /University of Southern California, Los Angeles

Registrations

2001/Professional Engineer/ CA #C61632

Affiliations

American Society of Civil Engineers

Construction Management Association of America

Southern California Development Forum





Jeffrey Chess, PE

Subconsultant Coordination and Documentation Production

PSOMAS

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Psomas coordinated with the traffic engineer in preparation of warrant analyses and incorporated findings into the project recommendations. Psomas is currently preparing PS&E for the project consistent with the pre-design recommendations.

North Santa Monica Boulevard/Crescent Drive Right-of-Way Bollards and Street Closure Plan: Project Manager responsible for preparing the Pre-Design Study for construction of a manually operated counterweighted bollard system in Crescent Drive to provide for temporary event street closure between Santa Monica Boulevard North and Santa Monica Boulevard South. The Pre-Design study examined available bollard systems and outlined subsurface impacts, aesthetics, costs, and appropriateness of each system for the application. Prepared PS&E identifying location of the bollard system, modifications to impacted utility systems, and surface restoration. Coordinated with the traffic engineer in development of a Concept of Operations to manage the change in traffic patterns during street closure, and preparation of signing, striping, and signalization plans. Coordinated with bollard manufacturer for foundation design.

Kinross Avenue Continuation and Parking Structure Improvements Program, Los Angeles, CA: Project Engineer, responsible for paving, grading, stormwater, and roadway design. The improvement program included realignment of Kinross Avenue and widening of Veteran Avenue in addition to the private improvements. Permitting included Los Angeles County and City of Los Angeles. Subconsultants and collaborative consultants included landscape architecture, urban planning, cost estimating, traffic, structural, and electrical engineering.

San Fernando Road Widening at Glendale Freeway, Los Angeles, CA: Project Manager for the traffic study, and preparation of PS&E for this secondary highway project.



R. Travis Deane, PE, GE

Geotechnical Engineering

Mr. Deane has provided geotechnical engineering services in Northern and Southern California, the Pacific Northwest, and the Great Plains since 1992. His experience includes geotechnical investigations and construction monitoring for infrastructure and building projects. Infrastructure projects for private and public agencies include design and construction of new alignments for railroads and roadways and rehabilitation/expansion of existing alignments. His work includes identification and recommendations for mitigation of geologic hazards (e.g., liquefaction, landslides, and soft soils), bridge foundations (shallow, driven piles, and drilled shafts), retaining walls (e.g., gravity, cantilever, solider pile, soil nail, and MSE), and earthwork (excavations, embankments, and subgrade).

Relevant Project Experience

Union Pacific Railroad (UPRR), East Los Angeles Intermodal Yard, Los Angeles, CA: Project Manager for the East Los Angeles Yard, which is one of a dozen intermodal and automotive yards on the UPRR system. The projects consist of reviewing yard distress and providing repair recommendations. This yard has localized areas of pavement distress that are in need of repair and is also looking to redevelop the eastern part of the yard with new pavement sections. Areas of distress at the yard have been identified, a combination of cores through the pavement sections and soil borings in the proposed redevelopment area have been completed, and a design report has been submitted.

Union Pacific Railroad, Los Angeles Transportation Center Yard Modernization, Los Angeles, CA: Project Manager and lead geotechnical engineer for the LATC Yard modernization project east of downtown Los Angeles. Modernization of the existing yard included reconfiguration of the existing gate building, new container and chassis stalls, and 12 working tracks. Proposed facilities on the western portion of the yard included inbound and outbound portals, driver help center, inbound truck canopy, an industrial water treatment plant (IWTP), crane maintenance pads, fuel island, sludge drying bed canopy, a maintenance building, roadability storage, flip pads, a car repair area, and a retaining wall. Proposed facilities on the eastern portion of the yard include a crew shanty, car repair area, and crew change building. Performing field explorations and analyses in support of proposed infiltration of stormwater at the yard.

A switch lead extension is proposed to the east of the LATC Yard. South of the yard, excavation of the northern half of the hillside along Mission Road is anticipated to accommodate a new retaining wall and support tracks. The anticipated length of the new retaining wall is about one-quarter mile and the maximum excavation height is about 30 feet.

Union Pacific Railroad, West Colton Yard Drainage Improvements, Bloomington, CA: Geotechnical Engineer working on drainage recommendations for West Colton Yard. The yard is underlain by slag put in by the railroad to stabilize track conditions, but blocked subsurface drainage. Managed groundwater study to reduce ponding of stormwater within portions

SHANNON & WILSON, INC.

Education

MS/1998/Geotechnical Engineering/University of California, Berkeley

BS/1992/Civil Engineering/ University of the Pacific, Stockton, CA

Registrations

Geotechnical Engineer/2001/ CA #GE2544

Professional Engineer/ Civil/1996/CA #C55469

Professional Engineer/ Civil/2000/WA #37159



R. Travis Deane, PE, GE

Geotechnical Engineering

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of the active railyard. Included completion of infiltration testing to provide recommendations for drainage between tracks and electrically-controlled switches and wayside signals.

Westside Subway Extension Review, City of Beverly Hills, CA: Project Manager for geotechnical review of the Draft Environmental Impact Report (DEIR) for the Westside Subway Extension through Beverly Hills. Provided review comments for seismic hazards including fault rupture and liquefaction, subsidence due to tunneling construction, dewatering issues, noise and vibration during construction and operation of the subway, hazardous waste and materials generated from surrounding properties, possible obstructions during tunneling, hazardous subsurface gases such as methane and hydrogen sulfide, and construction traffic including off-haul of material from tunneling and station excavations. Also supervised the review of fault studies in the nearby Century City area including review of fault trenching at the Beverly Hills High School. Provided review of future investigations during the final environmental and design processes of the project.

Hollywood Forever Infiltration Studies, Hollywood, CA: Project Manager for the design of alternative concepts to dispose of stormwater runoff generated from a new mausoleum addition at the cemetery. The original design consisted of a planter filtration system that substantially reduced the amount of ground space for future burial plots. Working with the Civil Engineer, percolation testing was performed at the site and alternative infiltration designs were developed using a half-round pipe drainage gallery that was installed beneath an existing driveway at the cemetery.



Steven Marvin, PE

Pavement Consulting

Mr. Marvin began his career with Contra Costa County in 1968. In 1972, he joined the engineering staff of Testing Engineers, Inc., and Smith Emery Company in Southern California, specializing in asphalt and soil testing, design and construction quality control. During this period he also served as Quality Control Representative for the reconstruction of the main runway, helicopter landing pads and hangar aprons at the MCAS Helicopter Base in Tustin.

Mr. Marvin left Smith-Emery Company in the fall of 1975 to become Vice President and Project Engineer for LaBelle Consultants. Pavement consulting services during the past three decades have included highway, roadway and airfield pavement design and rehabilitation combined with the unique challenges presented in places such as the oil fields of Peru, the off-shore drilling platforms of Alaska and the runways and taxiways of Diego Garcia in the Indian Ocean. Mr. Marvin oversees operations of the asphalt concrete laboratory, field sampling and testing of roadway, aggregate and subgrade materials, soil stabilization design and evaluation, pavement design, rehabilitation design for existing pavement systems, and complete investigations of material and/or design caused pavement failures.

In December 1985, Mr. Marvin became President of LaBelle-Marvin. He is regularly involved in developing the scope and overseeing ongoing roadway and airport investigations and designs. Included within the investigations are numerous cases involving legal issues relative to materials, design, construction, pavement use and abuse.

Through his career, Mr. Marvin has received honors for Engineer of Merit – 1991 – American Society of Civil Engineer, Orange County; Engineer of the Year – 2001 – American Society of Civil Engineers, Orange County; and Engineer of Merit – 2002 – Orange County Engineering Council.

Relevant Project Experience

- Evaluation and rehabilitation design of over 15,000 lane miles of roadways throughout the Western United States. Rehabilitation designs applied field and laboratory test data, with available technologies for rehabilitation including reconstruction, asphalt concrete and asphalt rubber hot mix overlay, pavement profiling, hot and cold in-place recycling, central plant recycling, polymer binder modification, chemical subgrade modification and stabilization, and pavement reinforcing fabrics and geotextiles
- Rehabilitation design of the roadway network within the City of Anaheim commonly referred to as the "Disney Resort" area. Design required interface with design teams, City of Anaheim, and Disney Corp. with short timelines and ever-changing design goals and criteria.
- Evaluation of the structural capacity of Vandenberg pavements proposed for use by the Space Shuttle.



Education

BSCE/California State University, Long Beach

AA/Orange Coast College

Tau Beta Pi - Engineering Honor Society

Chi Epsilon - Civil Engineering Honor Society

Registration

Civil Engineer/CA #30659

Quality Engineer/CA #5463

Affiliations

American Public Works Association

American Society of Civil Engineers - National Technical Activities Committee/National Committee on Government Affairs/Orange County: Treasurer, Secretary, Vice President and President/Los Angeles: Vice President and President

Asphalt Pavement Association

Asphalt Recycling and Reclaiming Association

Association of Asphalt Paving Technologists

Associated General Contractors

California Society of Civil Engineers - Treasurer

California State Council ASCE - Chairman

Institute for the Advancement of Engineering



Steven Marvin, PE

Pavement Consulting

LM LaBelle Marvin

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- Repaving design for the City of Avalon including characterization of available on-island material sources from existing roadway, island aggregate sources and island material manufacturers. The final design included reuse of existing roadways and import of supplemental aggregate and asphalt cement binder. Resident engineer, construction management, quality control testing and inspection were also provided.
- Design development of rut resistant asphalt concrete mixtures in heavy wheel load and high temperature use environment. Pavement design required consideration of construction logistics, intersection closure duration, material availability and international trucking regulations.
- Recycle/re-use design of asphalt concrete runway at Spokane, Washington impacted by ash from Mt. St. Helens eruption.
- Development of working specifications for use on John Wayne Airport to place additional design requirements for new asphalt concrete pavements.
- Reuse design of contaminated desert sands for rural roadway use.
- Reuse design of contaminated aggregate support materials below existing power plant fuel tanks. Design required characterization of contaminated aggregate for reuse as power plant pavement areas and was based on addition of fine aggregate and/or additional asphalt based liquid bitumen.
- Determine the impacts of offshore drilling and related pipeline improvements on roadways within the Pt. Arguelo region and design mitigation repairs.
- Determine the impacts of railroad rolling stock movement along several hundred miles of roadways in Humboldt County.
- Investigate underground caves and canyons developing beneath the Military Runway non San Nicolas Island.
- Relinquishment Studies for various cities including determination of present conditions including surface grades, crown, cross slope, boundary conditions, structural integrity and maintenance history and development of necessary improvements and/or upgrades prior to acceptance.





Michael Kremer, PLS

Construction Staking

Mr. Kremer has 38 years of experience in surveying and mapping specializes in construction surveying and staking, and also includes land, construction, GPS/geodetic, and boundary survey services. Project typologies, in both private and public markets, includes campus, high-rise, site development, transportation, renewable energy, and residential. His transportation project classification experience ranges from airport runways, bridges, parking lots, road and highways, Transit Oriented Developments, and both heavy and light rail.

As a Psomas project manager, he is responsible for the preparation of scopes of services, budgets and manages the construction services for construction survey and staking services. His cogent pre-planning and management of schedules, regulatory agencies, and the project team is the reason Mr. Kremer takes on some of our most ambitious and complex projects. His expertise includes managing projects in high density settings.

Relevant Project Experience

T-Alley Reconstruction Project, City of Beverly Hills, CA: Team Leader for survey and construction staking for 2,500 LF of street reconstruction and extension, drainage improvements, and rights-of-way.

Oakhurst Drive Sewer Study, City of Beverly Hills, CA: Team Leader for survey and construction staking for 3,137 acres (4.9 square miles) sewer system study to analize capacity, discover deficiencies and develop eight existing land use scenarios.

Civic Center Renovation, City of Beverly Hills, CA: Team Leader for survey and construction staking for layout of landscape features in the Plaza Area.

Beverly Connection, City of Beverly Hills, CA: Team Leader for survey and construction staking for survey and mapping services.

Bridge Improvement Program, North Spring Street Bridge, City of Los Angeles, CA: As Project Manager provided construction staking for the improvements which included seismic upgrade, mitigating traffic congestion, pedestrian and cyclist safety, and maintaining the iconic image of the bridge.

Big Blue Bus Expansion, City of Santa Monica, CA: Team Leader for survey and construction staking and survey exhibits for two building sites for this expansion project at the Big Blue Bus Yard.

Metro Red Line 7th Street Station, City of Los Angeles, CA: Team Leader for survey and construction staking provided entitlement, surveying, subdivision mapping and site engineering services.

Metro Red Line Vermont/Santa Monica Station, City of Los Angeles, CA: Team Leader for survey and construction staking provided entitlement, surveying, subdivision mapping and site engineering services for the project.

PSOMAS

Education

Undergraduate Studies/1992/ Legal Descriptions, Boundary Control and Legal Principals / Rancho Santiago College, CA

GPS /Rancho Santiago College

Registrations

Professional Land Surveyor/ 2008/CA #8425

Affiliations

California Land Surveyors Association

Southern California Development Forum



John Chiappe, PLS

Supplemental Survey and Monument Perpetuation

PSOMAS

Education

BS/ 1992/Survey Engineering/ California State University, Fresno

Registrations

Professional Land Surveyor/ 1996/CA #7230

Professional Land Surveyor/ 1994/HI #8250

Land Court Surveyor/1996/ HI #261

Affiliations

American Association for Geodetic Surveying

American Congress on Surveying and Mapping

California Land Surveyors Association

California Land Surveyors Association/State

Hawaii Land Surveyors Association Mr. Chiappe brings 24 years of experience in surveying and mapping to Psomas. He is responsible for the daily production of survey staff and CAD drafters on major land surveying and mapping projects. Mr. Chiappe specializes in the preparation of transportation surveys, architectural surveys, topographic surveys, GPS surveys, aerial surveys, boundary surveys, utility surveys, right-of-way planning, tract maps and records of survey maps.

Following is a list of recent projects Mr. Chiappe has managed that are transportation related and involve at least a half mile up to several miles of roadway each. This type of survey work typically includes the establishment of the street centerline based on found monumentation along with the resultant street right-of-way. Once the right-of-way has been established, design data is then obtained and referenced to this right-of-way. This design data varies, depending on the project requirements, but will usually include full topography for the street with spot elevations taken in such a manner as to support the design engineers, location of visible signs of utilities merged with record utility plans and the location of other surface-visible features in the right-of-way. A variety of methods are used in the preparation of these survey base maps including aerial mapping, scanning and conventional survey methods, all of which are done internally at Psomas, with the final product delivered in 2D, 3D or any combination in between. Lastly, and more importantly to the State of California, Pre- and Post-Construction Tie Notes are also prepared for all of the centerline monuments (and their respective tie notes) that will be demolished or disturbed during construction.

Relevant Project Experience

Santa Monica Boulevard Street Signalization, City of Beverly Hills, CA: This included survey of eight separate intersections along Santa Monica Boulevard within the City of Beverly Hills.

Beverly Hills Urban Design Project, City of Beverly Hills, CA: This included a survey all of the surface streets within the project area, as well as providing preand post-construction tie-outs on all intersections.

Grand Avenue Project, Los Angeles, CA: Spanning approximately seven acres over three city blocks, this proposed development includes remaking the street itself into an inviting pedestrian space requiring very detailed design data, including providing pre- and post-construction tie outs on all intersections.

Vermont Avenue Arterial Improvements, City of Gardena, CA: This included a 1½ mile survey of Vermont Avenue in support of its redevelopment which included providing pre- and post-construction tie-outs on all intersections.

Bringing Back Broadway, Los Angeles, CA: A detailed survey of Broadway Avenue, from Second Street to Olympic Avenue in downtown Los Angeles, was prepared in support of the revitalization of Broadway Avenue, which included providing pre- and post-construction tie-outs on all intersections.



Bridge Improvement Program, City of Los Angeles, CA: A detailed survey of Spring Street from Sotello Street to Broadway Avenue, which included the Spring Street bridge over the Los Angeles River was prepared in support of the City's bridge improvement program which included providing pre- and post-construction tie outs on all intersections.

Duquesne Avenue Improvement Study, City of Culver City, CA: A detailed survey of Duquesne Avenue between Culver Boulevard and Jefferson Boulevard Street was prepared in support of the Improvement Study which included providing pre- and post-construction tie outs on all intersections.

Higuera Street Bridge Replacement Project, City of Culver City, CA: A detailed survey of Higuera Street spanning Ballona channel was prepared in support of the widening of the current bridge which included providing pre- and post-construction tie-outs on all intersections.

Rosecrans Avenue Arterial Improvements, City of Gardena, CA: This includes a mile and a half survey of Rosecrans Avenue in support of its redevelopment, which includes providing pre- and post-construction tie-outs on all intersections.

Proposition O Projects Implementation, City of Los Angeles, CA: This project involved survey of several miles of surface streets.

Newhall Ranch, Valencia, CA: Project Manager in charge of topographic surveys and constraint mapping for a 12,000 acre, 22,000-unit master planned "new town" being developed by Newhall Ranch Company, a division of Newhall Land and Farming Company. This involved the survey of several miles of surface streets.

Los Angeles Community College District (LACCD), Los Angeles, CA:

The passage of Proposition A by California voters allocated \$1.2 billion for upgrades, restoration, and improvements for the nine Los Angeles Community College District campuses. Psomas has been involved since the beginning of the Proposition A program, providing engineering, survey, and support services to all of the campuses. This involved the survey of several miles of surface streets.

Malibu Unified School District, Santa Monica, CA: Project Manager providing all of the survey support for 15 school campuses within the district boundary, including Santa Monica High School. This support includes transportation surveying, aerial mapping, design surveys, boundary establishments, utility mapping, legal description preparation, and involved the survey of several miles of surface streets.

University of Southern California, University Park Master Plan Aerial Topographic Mapping and Wet Utility Planning, Los Angeles, CA:

Project Manager to prepare an aerial topographic map of the USC campus and surrounding areas. Psomas was responsible for researching, obtaining, and mapping underground wet utility maps dealing with sewer, storm drain, and water lines. Sizes and depths were specifically noted in the record maps. This involved the survey of several miles of surface streets.

John Chiappe, PLS

Supplemental Survey and Monument Perpetuation

PSOMAS

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Kathleen Brady, AICP

Environmental Documentation



Education

BS/1975/Sociology/University of California, Riverside

Registrations/Certifications

American Institute of Certified Planners/2012/No. 8730

Certificate in Management/1981/ University of Southern California

Certificate in Planning and Development/1980/University of California. Irvine Ms. Brady is the Principal of Technical Services with 35 years of experience in the environmental planning field. She has focused her career on environmental impact assessment, transportation projects, and advanced planning programs. Since 1986, Ms. Brady has been a consultant to federal, State, and local agencies, as well as private land developers and other private industry clients. She has managed a host of transportation projects, including the Alton Parkway Extension Project EIR; the Crown Valley Parkway Bridge; the Orange County Transportation Authority Environmental Staff Support Service; the Centennial Corridor Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS); and a large number of local assistance projects for cities in Orange County. Ms. Brady has been involved in other public works projects, including utility improvements, bikeway projects, and airport projects.

Relevant Project Experience

Oso Parkway Roadway Widening Improvements Addendum to Final EIR 467, Unincorporated Orange County, CA: Project Manager as a subconsultant to Psomas, prepared the environmental documentation for the widening of Oso Parkway, for the County of Orange Public Works Department. The project involved the widening of the roadway from four to six lanes and construction of a Class II bikeway. Key issues for the project were the presence of an endangered species on adjacent slopes, interface with Tesoro High School, and widening with Caltrans right-of-way (interchange with RS-241). Initially, it was assumed that a Mitigated Negative Declaration would be prepared for the project. However, based on an evaluation of the impacts and the desire to be able to rely on the previous findings and statement of overriding considerations, an Addendum to a previous Environmental Impact Report (EIR) completed. The EIR had been prepared at the time of the initial phase of construction but had addressed the widening to full arterial standards. By preparing an Addendum, the CEQA process was streamlined.

Bullis Road Rehabilitation Project, Lynwood, CA: Principal-in-Charge for preparation of a Categorical Exemption for improvements to Bullis Road in the City of Lynwood. The project provided roadway improvements, which are of a renovation nature and included new paving; reconstruction of curb and gutters and sidewalk; replacement of regulatory signs; installation of new left-turn pocket; utility line upgrades; LED lighting upgrades; removal and installation of a new gas line; and removal and reconstruction of new landscaped areas and reconstruction of irrigation lines. Drainage and water quality improvements include the construction of two catch basins and use of bio tree wells. Other improvements included the removal of an existing non-historic clock tower, installation of a new Civic Center monument, City Hall electronic sign, and new decorative median island wrought iron fence. Prepared a brief analysis documenting that the project would not result in any impacts and would receive Categorical Exemption, Class 1.





Alton Parkway Extension Environmental Impact Report, Orange County,

CA: Project Manager for the Alton Parkway Extension EIR for the extension of Alton Parkway from Irvine Boulevard to Towne Centre Drive in the cities of Irvine and Lake Forest. The project would enhance circulation by completing the gap in the roadway network and was identified in the 1987 Foothill Circulation Phasing Plan as a critical roadway improvement. The EIR addresses a full range of issues; however, the most critical issues for the project are biological resources, land use, hydrology and water quality, traffic, and visual impacts. As for mitigation, the project provides a critical connection to the Borrego Canyon Wash for a wildlife movement corridor that will connect the reserve area for the Central Orange County Habitat Conservation Plan (HCP) with the Coastal HCP reserve area.

Antonio Parkway Environmental Assessment, Orange County, CA: Project Manager for the preparation of National Environmental Policy Act (NEPA) documentation for the widening of Antonio Parkway from the southern edge of the Ladera Ranch Planned Community boundary to Ortega Highway (SR-74). The project had been environmentally cleared pursuant to the California Environmental Quality Act (CEQA) in 2008. When federal funding became available in 2009, NEPA documentation was required. As part of this process, a Preliminary Environmental Study (PES) was required to determine the appropriate level of NEPA documentation. Caltrans, acting as the federal lead agency, determined an Environmental Assessment (EA) leading to a Finding of No Significant Impact (FONSI) was required. Coordinated the preparation of technical studies in compliance with Caltrans guidelines and prepared the EA consistent with the requirements outlined in the Standard Environmental Reference. Key issues include the presence of a listed species, noise, and cultural resources. The entire process, from submittal of the PES to the Final EA/FONSI, was completed in less than 10 months.

Rosedale Highway (SR-58) CEQA/NEPA Documentation, Bakersfield, CA: Environmental Task Manager for the preparation of environmental documentation pursuant to CEQA and the National Environmental Policy Act (NEPA) for the widening of Rosedale Highway (SR-58) from SR-43 to SR-99. The six-mile segment of roadway traverses the core of Metropolitan Bakersfield, residential areas, and farmland. Caltrans District 6 will process the project through the NEPA Delegation Program. Key issues are expected to be land use, biological resources, air quality, noise, and hazardous materials. The work effort has included the project initiation documents, which were completed in 2009. The Initial Study/Environmental Assessment was completed in 2012.

Centennial Corridor Project Environmental Impact Report/Environmental Impact Statement, Bakersfield and Kern County, CA: Environmental Project Manager for the Centennial Corridor project, which would extend SR-58 from its current terminus at SR-99 to provide an ultimate connection to I-5, a distance of approximately 16 miles. The project involves Project Initiation Documents and the preparation of an EIR/EIS. The project has been divided into three segments for purposes of evaluation and implementation phasing. A full range of technical studies will be prepared to support the EIR/EIS. Key issues include community and economic impacts, cultural resources, visual impacts, noise impacts, and Section 4(f) resources. All the project alternatives would result in displacement of existing land uses. Community interest in the project is extremely high because all the alternatives traverse established neighborhoods.

Kathleen Brady

Environmental Documentation



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Leni Zarate

Underground Utility Districts

PSOMAS

Education

Mello Roos and Special Assessment Financing Training/ University of California, Los Angeles

Fundamentals of Land Secured Financing Training/University of California, Los Angeles

Affiliations

Municipal Managers Association of Southern California

California Society of Municipal Finance Officers

Committee of Assessments, Special Tax and Other Financing Facilities Ms. Zarate has over 22 years of experience in public financing. She has extensive experience in Special District financing formation, annual administration, district maturity, initial bond issuance, refundings, delinquency management, foreclosure, district workout/ restructuring, annual disclosure reporting and information dissemination to the public.

Relevant Project Experience

Water and Sewer Financing, Eastern Municipal Water District, Riverside County, CA: Provided Special Tax Consulting services to Eastern Municipal Water District (EMWD) since 2001 for the formation of 50 Community Facilities Districts financing the construction, purchase, modification, expansion, or improvement/rehabilitation of water and sewer facilities. These services include the issuance of over \$214 million in bonds. This infrastructure was necessary to meet certain increased demands placed upon EMWD as a result of development occurring within the boundaries of the District.

Community Facilities District Infrastructure Financing, City of Santee, CA: As Special Tax Consultant, responsible for the formation of a 217-unit residential Community Facilities District No. 2007-1 (Sky Ranch) by Lennar for the City of Santee. Services included attending meetings with City Staff and hosting educational workshops for City Council, preparing Boundary Maps, and bond sizing pro forma, calculating the initial special tax lien, and determining the appropriate methodology of apportionment. Although Lennar decided not to proceed with the bond issuance, Psomas had extensive meetings with the City Staff, City Council Members and the community to pass the Resolution of Intention and meet all the requirements of the services typically needed for formation.

Annual Administration and Annexation of Two Lighting Districts and City-Wide Sanitation District, City of Lemon Grove, CA: Currently administering the annual tax roll process of approximately 6,732 parcels for the Sanitation District as well as 5,156 parcels for the Lighting Zone L District, both within San Diego County. Both Districts were previously administered by another consulting firm prior to this past year.

Assessment District Infrastructure Financing, Eastern Municipal Water District, CA: Formed Assessment District 19-A. The District funded the construction of a reservoir, a booster station and transmission lines to convey water from existing Rancho California Water District facilities to the new pressure zone being developed in the Assessment District. Water is conveyed via the transmission lines to each benefiting parcel in the Assessment District. The reservoir provides the operational and fire protection storage capacity for the parcels within the Assessment District. Bonds in the amount of \$4,988,209 were issued.

Administration services include, but are not limited to, annual levy, continuing disclosure, and delinquency management for Eastern Municipal Water District, Riverside County Economic Development Agency, Riverside County Flood Control and Water Conservation District, Riverside County Executive Office,





Rancho California Water District, and the cities of Santee, Hemet, Ontario, Indio, Temecula, Murrieta and Riverside, Western Municipal Water District. This administration includes the following:

- Community Facilities District
- Benefit Assessment Districts
- Community Service Area Districts
- Assessment Districts
- Lighting/Landscaping Districts
- Marks-Roos Bond Pooled Districts

Riverside County Economic Development Agency, CA: Currently prepares the annual levy for 65 County Service Areas including County-wide CSA 152. Maintains per parcel information regarding taxation and processes, all taxpayer calls and questions. Also performs an ongoing audit of 431,000 parcels ensuring that all parcels are benefiting from services rendered and assessed using proper methodology. Within the last three years, Psomas has processed 6,845 annexations and prepared approximately 78 Engineer's Reports.

Eastern Municipal Water District, CA: Currently preparing the annual levy for 37 Community Facilities Districts including 7,410 parcels. Administration services include, but are not limited to, budget preparation, annual enrollment of the special tax; maintaining parcel history and data; answering taxpayer questions, calls, and concerns; processing foreclosures; and maintaining ongoing required continuing disclosure.

City of Santee, CA: Prepared a feasibility study and preliminary financing terms for the Fanita Ranch project.

Rancho California Water District, Santa Rosa Watershed, CA: Reviewed water infrastructure costs, benefiting parcels, possible financing mechanisms.

Riverside County Flood Control and Water Conservation District, CA: Audited over 50,000 parcels ensuring correct levying and benefit methodology.

Riverside County Economic Development Agency, CA: Audited 60 Community Service Areas affecting over 400,000 parcels.

Leni Zarate

Underground Utility Districts

PSOMAS

-- Continued --



	ACORD CERTI	FICATE OF LIAF	SII ITV INS		=	DATE (MM/DD/YY)	
ACORD CERTIFICATE OF LIABILI PRODUCER Dealey, Renton & Associates P. O. Box 10550				THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.			
Santa Ana CA 92711-0550			ALILINIII	INSURERS AFFORDING COVERAGE			
INSU	RED		INSURER A: AC	INSURER A: ACE American Insurance Company			
PSOMAS				INSURER B: Travelers Property Casualty Co of Ameri			
555 South Flower Street, Suite 4400 Los Angeles CA 90071			INSURER C:	INSURER C:			
LOS AIGCICS CA 70071			INSURER D:	INSURER D:			
			INSURER E:	INSURER E:			
THE		TED BELOW HAVE BEEN ISSUED					
CER:	TIFICATE MAY BE ISSUED OR TERMS, EXCLUSIONS AND CON	E AFFORDED BY THE AGGREGATE LIMITS	ORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL SCATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. OULCY EFFECTIVE POLICY EXPIRATION				
LTR	TYPE OF INSURANCE	POLICY NUMBER	DATE (MM/DD/YY)	DATE (MM/DD/YY)	LIMIT		
В	GENERAL LIABILITY	630265M676A	10/15/2012	10/15/2013	EACH OCCURRENCE	\$1,000,000	
	X COMMERCIAL GENERAL LIABILITY CLAIMS MADE X OCCUR				FIRE DAMAGE (Any one fire)	\$1,000,000	
	X Contractual				MED EXP (Any one person) PERSONAL & ADV INJURY	\$10,000 \$1,000,000	
	X BFPD, XCU				GENERAL AGGREGATE	\$2,000,000	
	GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	\$2,000,000	
	POLICY X PRO- JECT LOC				Deductible	\$10,000	
В	AUTOMOBILE LIABILITY X ANY AUTO	810265M676A	10/15/2012	10/15/2013	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000	
	ALL OWNED AUTOS SCHEDULED AUTOS				BODILY INJURY (Per person)	\$	
	X HIRED AUTOS X NON-OWNED AUTOS				BODILY INJURY (Per accident)	\$	
					PROPERTY DAMAGE (Per accident)	\$	
	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	\$	
	ANY AUTO				OTHER THAN AUTO ONLY: EA ACC AGG	\$	
В	EXCESS LIABILITY	EX265M676A	10/15/2012	10/15/2013	EACH OCCURRENCE	\$1,000,000	
	X OCCUR CLAIMS MADE				AGGREGATE	\$1,000,000	
					Professional	\$	
	DEDUCTIBLE				Liability is	\$	
	RETENTION \$				Excluded	\$	
В	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	UB6A526643	10/15/2012	10/15/2013	X WC STATU- OTH- TORY LIMITS ER	.1 000 000	
					E.L. EACH ACCIDENT	\$1,000,000	
					E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	\$1,000,000	
A	OTHER Professional Liability Claims Made	G23638381004	10/15/2012	10/15/2013	Per Claim Annual Aggregate Deductible	\$5,000,000 \$5,000,000 \$5,000,000 \$250,000	
DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS General Liability policy excludes claims arising out of the performance of professional services. Independent Contractors Included as respects to General Liability. IBEV040901, Agreement #49-12 PO #12201204, Sanitary Sewer Support Phase 1 City of Beverly Hills is additional insured							
as : Wai	espects to General and Au	to Liability as required by to GL as required by writ	by written contra	ct. Primary ar	nd Non-Contributing	coverage,	
CERTIFICATE HOLDER ADDITIONAL INSURED; INSURER LETTER: CANCELLATION 10 Day notice for Non-Paymnt of Pren							
City of Beverly Hills				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT.			
			AUTHORIZED REF	AUTHORIZED REPRESENTATION OF THE PROPERTY OF T			
AC	DRD 25-S (7/97)			_	@ ACORD Co	ORPORATION 1988	





WORKERS COMPENSATION AND EMPLOYERS LIABILITY POLICY

ENDORSEMENT WC 99 03 76 (A) -

POLICY NUMBER: UB6A526643

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT – CALIFORNIA (BLANKET WAIVER)

We have the right to resover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule.

The additional premium for this endorsement shall be mium.

% of the California workers' compensation pre-

Schedule

Person or Organization

Job Description

FOR WHICH THE INSURED HAS AGREED BY WRITTEN CONTRACT EXECUTED PRIOR TO LOSS TO FURNISH THIS WAIVER

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The Information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective 10/15/2012-13

insured Psomas

Policy No. UB6A526643

Endorsement No Premium

Insurance Company

Countersigned by

DATE OF ISSUE: 10/15/2012-13 ST ASSIGN:

Page 1 of 1



COMMERCIAL GENERAL LIABILITY 630265M676A

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED – WRITTEN CONTRACTS (ARCHITECTS, ENGINEERS AND SURVEYORS)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

 The following is added to SECTION II – WHO IS AN INSURED:

Any person or organization that you agree in a "written contract requiring insurance" to include as an additional insured on this Coverage Part, but:

- a. Only with respect to liability for "bodily injury", "property damage" or "personal injury"; and
- b. If, and only to the extent that, the injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the "written contract requiring insurance" applies. The person or organization does not qualify as an additional insured with respect to the independent acts or omissions of such person or organization.

The insurance provided to such additional insured is limited as follows:

- c. In the event that the Limits of Insurance of this Coverage Part shown in the Declarations exceed the limits of liability required by the "written contract requiring insurance", the insurance provided to the additional insured shall be limited to the limits of liability required by that "written contract requiring insurance". This endorsement shall not increase the limits of insurance described in Section III Limits Of Insurance.
- d. This insurance does not apply to the rendering of or failure to render any "professional services" or construction management errors or omissions
- e. This insurance does not apply to "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the "written contract requiring insurance" specifically requires you to provide such coverage for that additional insured, and then the insurance provided to the additional insured ap-

plies only to such "bodily injury" or "property damage" that occurs before the end of the period of time for which the "written contract requiring insurance" requires you to provide such coverage or the end of the policy period, whichever is earlier.

 The following is added to Paragraph 4.a. of SEC-TION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS:

The insurance provided to the additional insured is excess over any valid and collectible "other insurance", whether primary, excess, contingent or on any other basis, that is available to the additional insured for a loss we cover. However, if you specifically agree in the "written contract requiring insurance" that this insurance provided to the additional insured under this Coverage Part must apply on a primary basis or a primary and noncontributory basis, this insurance is primary to "other insurance" available to the additional insured which covers that person or organization as a named insured for such loss, and we will not share with that "other insurance". But this insurance provided to the additional insured still is excess over any valid and collectible "other insurance", whether primary, excess, contingent or on any other basis, that is available to the additional insured when that person or organization is an additional insured under any "other insurance".

 The following is added to SECTION IV - COM-MERCIAL GENERAL LIABILITY CONDITIONS:

Duties Of An Additional Insured

As a condition of coverage provided to the additional insured:

a. The additional insured must give us written notice as soon as practicable of an "occurrence" or an offense which may result in a claim. To the extent possible, such notice should include:

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Page 1 of 2



COMMERCIAL GENERAL LIABILITY

- How, when and where the "occurrence" or offense took place;
- ii. The names and addresses of any injured persons and witnesses; and
- iii. The nature and location of any injury or damage arising out of the "occurrence" or offense.
- b. If a claim is made or "suit" is brought against the additional insured, the additional insured must:
 - i. Immediately record the specifics of the claim or "suit" and the date received; and
 - ii. Notify us as soon as practicable.

The additional insured must see to it that we receive written notice of the claim or "suit" as soon as practicable.

- c. The additional insured must immediately send us copies of all legal papers received in connection with the claim or "suit", cooperate with us in the investigation or settlement of the claim or defense against the "suit", and otherwise comply with all policy conditions.
- d. The additional insured must tender the defense and indemnity of any claim or "suit" to

any provider of other insurance which would cover the additional insured for a loss we cover. However, this condition does not affect whether this insurance provided to the additional insured is primary to that other insurance available to the additional insured which covers that person or organization as a named insured.

The following is added to the DEFINITIONS Section:

"Written contract requiring insurance" means that part of any written contract or agreement under which you are required to include a person or organization as an additional insured on this Coverage Part, provided that the "bodily injury" and "property damage" occurs and the "personal injury" is caused by an offense committed:

- After the signing and execution of the contract or agreement by you;
- While that part of the contract or agreement is in effect; and
- c. Before the end of the policy period.



COMMERCIAL AUTO 810265M676A

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BUSINESS AUTO EXTENSION ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

GENERAL DESCRIPTION OF COVERAGE – This endorsement broadens coverage. However, coverage for any injury, damage or medical expenses described in any of the provisions of this endorsement may be excluded or limited by another endorsement to the Coverage Part, and these coverage broadening provisions do not apply to the extent that coverage is excluded or limited by such an endorsement. The following listing is a general coverage description only. Limitations and exclusions may apply to these coverages. Read all the provisions of this endorsement and the rest of your policy carefully to determine rights, duties, and what is and is not covered.

- A. BROAD FORM NAMED INSURED
- **B. BLANKET ADDITIONAL INSURED**
- C. EMPLOYEE HIRED AUTO
- D. EMPLOYEES AS INSURED
- E. SUPPLEMENTARY PAYMENTS INCREASED LIMITS
- F. HIRED AUTO LIMITED WORLDWIDE COVERAGE INDEMNITY BASIS
- G. WAIVER OF DEDUCTIBLE GLASS

PROVISIONS

A. BROAD FORM NAMED INSURED

The following is added to Paragraph A.1., Who Is An Insured, of SECTION II – LIABILITY COVERAGE:

Any organization you newly acquire or form during the policy period over which you maintain 50% or more ownership interest and that is not separately insured for Business Auto Coverage. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier.

B. BLANKET ADDITIONAL INSURED

The following is added to Paragraph c. in A.1., Who Is An Insured, of SECTION II – LIABILITY COVERAGE:

Any person or organization who is required under a written contract or agreement between you and that person or organization, that is signed and

- H. HIRED AUTO PHYSICAL DAMAGE LOSS OF USE INCREASED LIMIT
- I. PHYSICAL DAMAGE TRANSPORTATION EXPENSES INCREASED LIMIT
- J. PERSONAL EFFECTS
- K. AIRBAGS
- L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS
- M. BLANKET WAIVER OF SUBROGATION
- N. UNINTENTIONAL ERRORS OR OMISSIONS

executed by you before the "bodily injury" or "property damage" occurs and that is in effect during the policy period, to be named as an additional insured is an "insured" for Liability Coverage, but only for damages to which this insurance applies and only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Section II

C. EMPLOYEE HIRED AUTO

 The following is added to Paragraph A.1., Who Is An Insured, of SECTION II – LI-ABILITY COVERAGE:

An "employee" of yours is an "insured" while operating an "auto" hired or rented under a contract or agreement in that "employee's" name, with your permission, while performing duties related to the conduct of your business.

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Page 1 of 4



COMMERCIAL AUTO

- 2. The following replaces Paragraph b. in B.5., Other Insurance, of SECTION IV - BUSI-**NESS AUTO CONDITIONS:**
 - b. For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autos" you own:
 - (1) Any covered "auto" you lease, hire, rent or borrow; and
 - (2) Any covered "auto" hired or rented by your "employee" under a contract in that individual "employee's" name, with your permission, while performing duties related to the conduct of your business.

However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

D. EMPLOYEES AS INSURED

The following is added to Paragraph A.1., Who Is An Insured, of SECTION II - LIABILITY COV-**ERAGE:**

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

E. SUPPLEMENTARY PAYMENTS - INCREASED LIMITS

- 1. The following replaces Paragraph A.2.a.(2), of SECTION II - LIABILITY COVERAGE:
 - (2) Up to \$3,000 for cost of bail bonds (including bonds for related traffic law violations) required because of an "accident" we cover. We do not have to furnish these bonds.
- 2. The following replaces Paragraph A.2.a.(4), of SECTION II - LIABILITY COVERAGE:
 - (4) All reasonable expenses incurred by the "insured" at our request, including actual loss of earnings up to \$500 a day because of time off from work.
- F. HIRED AUTO LIMITED WORLDWIDE COV-**ERAGE - INDEMNITY BASIS**

The following replaces Subparagraph (5) in Paragraph B.7., Policy Period, Coverage Territory, of SECTION IV - BUSINESS AUTO CONDI-TIONS:

(5) Anywhere in the world, except any country or jurisdiction while any trade sanction, embargo, or similar regulation imposed by the United States of America applies to and prohibits the transaction of business with or

within such country or jurisdiction, for Liability Coverage for any covered "auto" that you lease, hire, rent or borrow without a driver for a period of 30 days or less and that is not an "auto" you lease, hire, rent or borrow from any of your "employees", partners (if you are a partnership), members (if you are a limited liability company) or members of their households.

- (a) With respect to any claim made or "suit" brought outside the United States of America, the territories and possessions of the United States of America, Puerto Rico and Canada:
 - (i) You must arrange to defend the "insured" against, and investigate or settle any such claim or "suit" and keep us advised of all proceedings and actions.
 - (ii) Neither you nor any other involved "insured" will make any settlement without our consent.
 - (iii) We may, at our discretion, participate in defending the "insured" against, or in the settlement of, any claim or "suit".
 - (iv) We will reimburse the "insured" for sums that the "insured" legally must pay as damages because of "bodily injury" or "property damage" to which this insurance applies, that the "insured" pays with our consent, but only up to the limit described in Paragraph C., Limit Of Insurance, of SEC-TION II - LIABILITY COVERAGE.
 - (v) We will reimburse the "insured" for the reasonable expenses incurred with our consent for your investigation of such claims and your defense of the "insured" against any such "suit", but only up to and included within the limit described in Paragraph C., Limit Of Insurance, of SECTION II - LIABILITY COVER-AGE, and not in addition to such limit. Our duty to make such payments ends when we have used up the applicable limit of insurance in payments for damages, settlements or defense expenses.
- (b) This insurance is excess over any valid and collectible other insurance available

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COMMERCIAL AUTO

to the "insured" whether primary, excess contingent or on any other basis.

(c) This insurance is not a substitute for required or compulsory insurance in any country outside the United States, its territories and possessions, Puerto Rico and Canada.

You agree to maintain all required or compulsory insurance in any such country up to the minimum limits required by local law. Your failure to comply with compulsory insurance requirements will not invalidate the coverage afforded by this policy, but we will only be liable to the same extent we would have been liable had you complied with the compulsory insurance requirements.

(d) It is understood that we are not an admitted or authorized insurer outside the United States of America, its territories and possessions, Puerto Rico and Canada. We assume no responsibility for the furnishing of certificates of insurance, or for compliance in any way with the laws of other countries relating to insurance.

G. WAIVER OF DEDUCTIBLE - GLASS

The following is added to Paragraph D., Deductible, of SECTION III – PHYSICAL DAMAGE COVERAGE:

No deductible for a covered "auto" will apply to glass damage if the glass is repaired rather than replaced.

H. HIRED AUTO PHYSICAL DAMAGE – LOSS OF USE – INCREASED LIMIT

The following replaces the last sentence of Paragraph A.4.b., Loss Of Use Expenses, of SECTION III – PHYSICAL DAMAGE COVERAGE:

However, the most we will pay for any expenses for loss of use is \$65 per day, to a maximum of \$750 for any one "accident".

PHYSICAL DAMAGE – TRANSPORTATION EXPENSES – INCREASED LIMIT

The following replaces the first sentence in Paragraph A.4.a., Transportation Expenses, of SECTION III – PHYSICAL DAMAGE COVERAGE:

We will pay up to \$50 per day to a maximum of \$1,500 for temporary transportation expense incurred by you because of the total theft of a covered "auto" of the private passenger type.

J. PERSONAL EFFECTS

The following is added to Paragraph A.4., Coverage Extensions, of SECTION III – PHYSICAL DAMAGE COVERAGE:

Personal Effects

We will pay up to \$400 for "loss" to wearing apparel and other personal effects which are:

- (1) Owned by an "insured"; and
- (2) In or on your covered "auto".

This coverage applies only in the event of a total theft of your covered "auto".

No deductibles apply to this Personal Effects coverage.

K. AIRBAGS

The following is added to Paragraph B.3., Exclusions, of SECTION III – PHYSICAL DAMAGE COVERAGE:

Exclusion 3.a. does not apply to "loss" to one or more airbags in a covered "auto" you own that inflate due to a cause other than a cause of "loss" set forth in Paragraphs A.1.b. and A.1.c., but only:

- a. If that "auto" is a covered "auto" for Comprehensive Coverage under this policy;
- The airbags are not covered under any warranty; and
- c. The airbags were not intentionally inflated.

We will pay up to a maximum of \$1,000 for any one "loss".

L. NOTICE AND KNOWLEDGE OF ACCIDENT OR LOSS

The following is added to Paragraph A.2.a., of SECTION IV – BUSINESS AUTO CONDITIONS:

Your duty to give us or our authorized representative prompt notice of the "accident" or "loss" applies only when the "accident" or "loss" is known to:

- (a) You (if you are an individual);
- (b) A partner (if you are a partnership);
- (c) A member (if you are a limited liability company);
- (d) An executive officer, director or insurance manager (if you are a corporation or other organization); or
- (e) Any "employee" authorized by you to give notice of the "accident" or "loss".

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Page 3 of 4





COMMERCIAL AUTO

M. BLANKET WAIVER OF SUBROGATION

The following replaces Paragraph A.5., Transfer Of Rights Of Recovery Against Others To Us, of SECTION IV — BUSINESS AUTO CONDITIONS:

5. Transfer Of Rights Of Recovery Against Others To Us

We waive any right of recovery we may have against any person or organization to the extent required of you by a written contract signed and executed prior to any "accident" or "loss", provided that the "accident" or "loss" arises out of operations contemplated by

such contract. The waiver applies only to the person or organization designated in such contract.

N. UNINTENTIONAL ERRORS OR OMISSIONS

The following is added to Paragraph B.2., Concealment, Misrepresentation, Or Fraud, of SECTION IV – BUSINESS AUTO CONDITIONS:

The unintentional omission of, or unintentional error in, any information given by you shall not prejudice your rights under this insurance. However this provision does not affect our right to collect additional premium or exercise our right of cancellation or non-renewal.



COMMERCIAL GENERAL LIABILITY ISSUE DATE: 10/15/2012-13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

POLICY NUMBER: 630265M676A

AS REQUIRED BY WRITTEN CONTRACT

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US Condition (Section IV-COMMERCIAL GENERAL LIABILITY CONDITIONS) is amended by the addition of the following:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazards." This waiver applies only to the person or organization shown in the Schedule above.

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Page 1 of 1





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